

LMI4VET



WP 2: Methodological Guide to adapt VET Training Offer to LM Needs

Activity 1: Identify successful LMI/VET Training Tools developed in Europe

Report no. 1 – January 2025



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1. Introduction

1.1. Project Overview

The Labour Market Information for Vocational Education and Training (LMI4VET) project is an initiative designed to strengthen the role of labour market intelligence (LMI) in vocational education and training (VET). The project addresses the challenge of aligning vocational training programs with real labour market needs, ensuring that individuals - especially those from vulnerable backgrounds - receive training that enhances their employability.

A data-driven approach is at the heart of LMI4VET. Many social organizations and training providers, in this project called “Third Sector Education and Training Service Providers (TS_ETSP)” currently lack the necessary tools and knowledge to systematically use labour market information when designing and delivering vocational training programs. This could result in a mismatch between the skills provided in training and the demands of employers. The project seeks to bridge this gap by equipping training institutions with guidelines and digital resources that allow them to make informed decisions about which skills to prioritize and how to structure their courses to maximize employment opportunities for trainees.

LMI4VET is funded under the Erasmus+ programme, the European Union’s flagship initiative for education, training, youth, and sport. The project runs for 24 months, from 1 November 2024 to 31 October 2026, and is led by PROSPEKTIKER, S.A., an organization specializing in labour market forecasting and strategic foresight. In collaboration with five research institutions and five social partners (Third Sector Education and Training Service Providers (TS_ETSP)) from multiple European countries, the project will develop methodological guidelines, interactive digital training tools, and validation mechanisms to ensure the successful adoption of LMI-based strategies in VET planning.

1.2. Work Packages

LMI4VET is structured around several interconnected work packages, each focusing on a specific aspect of integrating labour market intelligence into vocational education and training. The project follows a step-by-step approach that includes research, development, testing, and dissemination of best practices.

A key component of the project is the creation of a methodological guide that will outline how vocational training institutions and social organizations can effectively use LMI to design training programs that match market needs. The guide will contain practical strategies, case studies, and best practices, helping organizations understand which data sources to use, how to analyze employment trends, and how to apply these insights in real-world training settings.

To complement the methodological guide, the project will also develop interactive digital training materials. These include a multi-language online course and an AI-powered chatbot that will provide on-demand guidance and support to training providers. The chatbot will function as



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a virtual assistant, helping trainers and social workers quickly access labour market insights, understand job trends, and make data-informed decisions when advising trainees.

Validation is another critical aspect of LMI4VET. The tools and training materials developed will be tested in multiple European regions to ensure they are practical, effective, and adaptable to different contexts. The final phase of the project will focus on disseminating the results through national conferences, online resources, and direct engagement with key stakeholders in the VET sector.

1.3. Target and Objectives

LMI4VET is specifically targeted at social partners, training institutions, and decision-makers within the VET ecosystem. These groups play a crucial role in designing and delivering vocational training programs, yet they often lack access to structured labour market intelligence that could help them tailor their training to real workforce needs. By providing them with practical tools and resources, the project aims to increase their capacity to plan and adapt training programs based on up-to-date employment trends.

The project has several core objectives, all aimed at enhancing the efficiency and effectiveness of VET systems through data-driven decision-making. One of the primary objectives is to promote inclusion by improving the employability of vulnerable groups, including low- and unskilled employees, long-term unemployed individuals, migrants, and people with disabilities. By equipping training providers with better labour market insights, the project ensures that these groups receive skills that are in demand, increasing their chances of finding sustainable employment.

Another key goal is to align VET curricula with real labour market needs. Many vocational training programs are outdated or lack a strong connection to employer demands, making it difficult for trainees to transition into the workforce. LMI4VET will help bridge this gap by guiding training providers on how to incorporate LMI into curriculum planning and skills development strategies.

The project also aims to enhance the capacity of VET providers to use labour market intelligence as a forecasting tool. Instead of reacting to labour market changes, training institutions will be able to anticipate trends, adjust their training programs proactively, and prepare students for future job market demands.

1.4. Expected Results

By the end of the project, LMI4VET will deliver two major tangible results that will serve as long-term resources for the vocational training sector.

The first key output is a comprehensive methodological guide that will serve as a blueprint for integrating LMI into VET planning. The guide will include step-by-step instructions, practical



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examples, and case studies showcasing successful implementations of labour market intelligence in vocational training programs. It will help social partners and training institutions understand which labour market data is most relevant, where to find it, and how to use it effectively.

The second major outcome is the development of interactive training materials that will help training providers apply the concepts outlined in the methodological guide. The core elements of this training package include:

- A multi-language online course, which will provide structured training on how to interpret and use labour market intelligence in VET planning. The course will be accessible across Europe and tailored to the specific needs of Third Sector Education and Training Service Providers and VET providers.
- An AI-powered chatbot, which will act as an on-demand support tool, offering real-time assistance to training providers, social organizations, and career counselors. The chatbot will be designed to answer questions, provide labour market data, and offer practical recommendations on training planning.

Beyond these tangible results, LMI4VET will contribute to the long-term improvement of VET planning and implementation across Europe. By strengthening the role of labour market intelligence in vocational training, the project will empower educators, improve employment outcomes for trainees, and create a more responsive and dynamic vocational education system.

1.5. Key Definitions: Vulnerable Groups in the Labour Market and Third Sector Education and Training Service Providers (TS_ETSP)

1.5.1. Vulnerable Groups in the Labour Market

Vulnerability in the labour market is a complex concept influenced by economic conditions, social structures, and policy frameworks. While there is no universal definition, many international organizations and researchers agree that vulnerable groups are those who face significant barriers to employment, persistent poverty, and social marginalization. The European Commission, the European Social Fund (ESF), and the European Training Foundation (ETF) define these groups as individuals who experience greater difficulties in accessing and maintaining stable employment compared to the general population.

The term vulnerability is often associated with precarious employment, referring to jobs that are unstable, low-paid, and lack proper regulation. However, some institutions, such as the International Labour Organization (ILO), distinguish between individuals who are already in vulnerable employment and those at risk of becoming vulnerable. This distinction highlights the importance of preventative measures in labour market policies to ensure that workers do not have a transition into precarious conditions.



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In the context of this study, vulnerable groups are defined as groups that face a higher risk of poverty and social exclusion compared to the general population.¹ This definition follows the framework set by the European Commission. Vulnerability is recognized as a complex social phenomenon influenced by a diverse range of factors, which can be categorized into three primary domains: social and cultural aspects including age, gender, ethnicity, and family status, such as caregiving responsibilities. Physical and psychological factors involve disabilities and health constraints that limit workforce participation. Labour market factors relate to qualifications, work experience, and employability, particularly affecting the low-skilled, long-term unemployed, persons with handicaps or those with limited language proficiency. Each of these factors influences the risk of exclusion and barriers to stable employment. Some examples of vulnerable groups are the following:

- People with disabilities often require additional workplace accommodation and specialized training programs to enter and sustain employment.
- Older workers, particularly those over the age of 50, may struggle with digital transformation in the workforce and face age-related discrimination.
- Low-skilled and long-term unemployed individuals frequently encounter difficulties re-entering the job market due to outdated skills or lack of formal education, making retraining and upskilling essential for their employability.
- Young people, particularly those classified as NEETs (not in employment, education, or training), struggle with transitioning into the workforce due to a lack of work experience and limited job-specific skills.
- Ethnic minorities and migrants often face structural barriers such as discrimination, language barriers and difficulties in credential recognition, which makes it harder for them to secure stable employment opportunities.
- Women, especially those with caregiving responsibilities, often experience workplace discrimination and difficulties in balancing employment with family responsibilities.

Vulnerability and exclusion are context-dependent concepts, requiring a flexible and inclusive approach when defining key terms related to target groups and labour market challenges. Given the complexity, the LMI4VET project adopts the following definition. LMI stands for Labour Market Intelligence which refers to the systematic collection and analysis of employment trends, skill demands, and workforce demographics.² This data is used to inform vocational education and training planning, ensuring that training programs align with real labour market needs. VET stands for Vocational Education and Training which encompasses both formal and informal

¹ European Commission (2010): Inclusion of Vulnerable Groups. URL: https://ec.europa.eu/employment_social/2010againstpoverty/extranet/vulnerable_groups_en.pdf (Accessed 09.12.2024).

² European Commission (n.d.): European Skills, Competences, Qualifications and Occupations (ESCO): ESCO for labour market intelligence. URL: <https://esco.ec.europa.eu/en/about-esco/escopedia/escopedia/esco-labour-market-intelligence> (Accessed 05.01.2025).



learning programs designed to equip individuals with job-related skills and competencies.³ These programs play a crucial role in helping vulnerable groups gain the skills necessary to enter and succeed in the labour market. As we will see further during the desktop research phase, finding direct data on the demand for vulnerable groups was challenging. Therefore, the focus was refined to low- and unskilled individuals, as skill levels are commonly reflected in statistical datasets (See [Main Methods 2.1](#)).

1.5.2. Third Sector Education and Training Service Providers (TS_ETSP)

Third Sector Education and Training Service Providers (TS_ETSP) represent a vital component of national VET systems. These organizations operate on a not-for-profit basis and often collaborate with public employment services (PES) to provide vocational education and training. In some countries, the term "social entities" is used to describe these organizations, while in Germany for example they are referred to as "Bildungs- und Beschäftigungsträger (Education and Training Service Provider)". TS_ETSPs play a critical role in delivering inclusive training solutions aimed at integrating marginalized or vulnerable groups into the labour market. Their work is essential for bridging skills gaps and supporting sustainable employment pathways, particularly for individuals who face barriers to labour market entry.

2. Report on Activity 1 in WP 2 and Methodology Applied

The goal of Work Package 2 (WP2) in this project is to develop a methodological guide to adapt VET (Vocational Education and Training) offerings to the needs of the labour market. Activity 1 aims to lay the foundation for creating this guide. To achieve this, desktop research and expert interviews were conducted to gather the necessary information for its development.

Activity 1 focused on identifying information systems that provide up-to-date and relevant data regarding the demand for vulnerable groups in the labour market, with the intention of assessing their potential contribution to the guide. A second component of the activity aimed to identify digital tools applicable to the training of vulnerable groups. This would inform the development of digital tools to be created later in the project. Both of these approaches were carried out through desktop research. Furthermore, since the guide should be closely aligned with the practices of Third Sector Education and Training Service Providers (TS_ETSP), interviews were conducted with project partners from TS_ETSPs. These interviews provided valuable insights into current practices for planning VET training programs. This groundwork will support the development of Activity 2, which involves creating a questionnaire for TS_ETSPs across all participating regions. The questionnaire aims to assess their needs for labour market information in the context of their planning processes.

³ European Commission (2022): Vocational Education and Training Skills for Today and for the Future. URL: <https://op.europa.eu/webpub/empl/VET-skills-for-today-and-future/pdf/KE0621179ENN.pdf> (Accessed 05.01.2025).



This report presents the key findings from the three areas explored in Activity 1. All research and surveys were conducted by the knowledge partners in the five participating regions. The knowledge partner, Goethe University, has compiled and analyzed the results from all participating regions in this report.

2.1. Main Methods

The research process began with desktop search, performed from November 2024 until January 2025. This involved systematically collecting and reviewing publicly available data, statistical reports, and insights from existing LMI systems. The focus was on identifying relevant platforms, understanding their structures, and evaluating their functionalities. The research prioritized information systems first. Key sources included reports from European Centre for the Development of Vocational Training (CEDEFOP), public employment agencies, statistical offices, employer associations, other relevant data providers and Third Sector Education and Training Service Providers (TS_ETSP). Secondly an analysis of digital tools which were applied in training vulnerable groups was conducted.

The third part involved conducting interviews to complement the desktop search with qualitative insights from key stakeholders. The interviews were performed in January 2025. The exact dates can be seen in [Appendix C](#). These interviews aimed to explore practical experiences, challenges, and strategies related to the use of LMI in VET planning.

The initial phase of desktop search focused on gathering information about the demand for vulnerable groups in the labour market or said in other words, jobs available for vulnerable groups. However, it became evident that direct data on the demand for these groups was limited and often restricted to general statistical indicators, as seen on platforms like the Integrated Poverty and Living Conditions Indicator System (IPOLIS)⁴. To broaden the scope, the research encompassed various European and international platforms, including EU institutions such as Eurostat, the Erasmus+ Project database, Eurofound, the European Social Fund, New Horizon, the European Training Foundation, and EURES. Additionally, international organizations such as the OECD and ILO were consulted for broader labour market insights. Additionally searches focused on national and regional data sources. There data sources from Public Employment Service (PES), statistical offices, employer associations and others were under consideration.

Given the challenge of finding direct data on the demand for vulnerable groups, the focus was refined to low- and unskilled individuals, as skill levels are commonly reflected in statistical datasets. This shift allowed for a more systematic exploration of labour demand trends. Subsequently, the research targeted information related to the demand for low- and unskilled employees, utilizing public sector reports, and policy documents. The analysis centered around key terms such as labour market trends, vocational education tools, digital training systems,

⁴ IPOLIS (n.d.): Integrated Poverty and Living Conditions Indicator System. URL: <https://ipolis.tarki.hu/> (Accessed 08.01.2025).



regional employment data, and vulnerable workforce groups. This approach helped refine the scope of research and ensure consistency and depth in the findings.

2.2. Analysis and Documentation

The findings were systematically documented using structured templates. Each labour market information system and digital tool was evaluated based on its purpose, target groups, data collection methods, accessibility, and overall effectiveness in supporting employment and vocational training objectives. Documentation was continuously refined as new information emerged, ensuring that the findings remained accurate and relevant to the project's objectives.

Based on the factsheets collected there was an analysis performed. Of major interest was to find out how useful the different information systems and digital tools could be and for what purposes they could be applied. There were short summaries with results from the analysis written and the relevant factsheets are all organized in the Appendix.

It should be noted that the collection of factsheets represents a selection of examples and not the full field of information systems and digital tools. Within the constraints of time the goal was to collect basic information on the topics. Therefore, the findings represent a broad overview of information systems and digital tools.

Similarly, the interviews that were conducted with TS_ETSPs show only the view of a few stakeholders and may not represent the experiences and practices of all TS_ETSPs in all different regions.

3. Labour Market Information on the Demand for Low- and Unskilled Employees

LMI systems serve as fundamental instruments for tracking employment trends, understanding labour demands, and shaping effective policy responses. This chapter provides a comprehensive and critical analysis of LMI systems across Germany, Spain, Italy, Luxembourg, and Romania, with a focus on low- and unskilled labour dynamics. The analysis evaluates systems across six key data providers: Public Employment Services (PES), Business Associations, Research Organizations and Consulting Agencies, Public Statistical Offices, Private Companies, and Other Public Bodies (See [Appendix A](#) for a full list of the factsheets). Each type of source was examined for similarities, differences, and critical insights, offering a structured understanding of strengths, limitations, and areas for improvement.



3.1. Comparative Analysis of National LMI Systems

- The sources of LMI on the demand for low- and unskilled employees in the labour markets are analyzed along the lines of distinguishing data providers:
 - Public Employment Services
 - Business Associations
 - Research Organizations and Consulting Agencies
 - Public Statistical Offices
 - Private Companies
 - Other Public Bodies

3.1.1. Information Systems from Public Employment Services (PES)

- In general, Public Employment Services (PES) can be effective information sources for labour market information on the demand for low- and unskilled persons.
- They often provide high quality data down to local level.
- The type of available data on the demand for low- and unskilled differs between nations and regions (e.g. vacancies per skill-level, skill structure of occupational groups).
- Sometimes preexisting knowledge is needed to use this data base for the purpose of identifying the demand for low- and unskilled labour. The user must decide in which occupations to search for low- and unskilled job offers.
- Updating cycles differ between the nations/regions and data is often updated quarterly or annual. Therefore, information systems run by PES may be more suitable for observing long-term trends.

Public Employment Services (PES) platforms typically provide data on employment trends, such as employment rates, job vacancies, and unemployment statistics, often broken down by industry/sector, region, and education level. They also offer insights into sectoral demands, highlighting which industries are growing or declining, with a focus on low-skilled sectors. Additionally, regional data allows for regional analysis, and vacancy information is categorized by sector and skill level. Some platforms provide long-term projections to forecast future trends in employment and skill demands, which is useful for planning vocational training. Data on skill gaps helps identify areas for upskilling, while salary and employment type information offer insights into wages and working contract conditions. Regularly updating and simplifying these data sources can improve their accessibility and usefulness for understanding low- and unskilled labour market dynamics.

PES across countries under consideration in this project (Spain, Germany, Luxembourg, Romania, Italy) demonstrate a consistent commitment to comprehensive data collection.



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Platforms like Germany's Federal Employment Agency⁵ and Spain's Lanbide⁶ gather detailed information on employment trends, vacancies, and sectoral demands, disaggregated by factors such as education levels and geographic regions. By offering free public access PES information systems in all considered countries contribute significantly to policy formulation and Vocational Education and Training (VET) strategies.

However, critical differences persist that highlight varying capacities in addressing the nuances of low- and unskilled labour demand. Spain's Futurelan⁷ and SEPE Occupations Observatory⁸ deliver highly granular, forecast-oriented data that offer long-term projections essential for strategic labour market planning. However, their complexity and the advanced statistical understanding required to interpret the data can hinder accessibility, particularly for smaller organizations or regional planners. Statistics of the Federal Employment Agency Germany⁹ emphasizes real-time data, provides sector-specific insights into regional trends and vacancies. However, the data may not always be fully up-to-date due to reporting cycles, which can limit its effectiveness for real-time analysis. While beneficial for immediate labour market responsiveness, this short-term focus risks neglecting long-term structural changes that influence low-skilled labour dynamics. Spain's reliance on long-term projections, while strategic, may fail to address pressing, short-term employment challenges, particularly for vulnerable populations.

Regional focus also shows significant divergence. Spain's Lanbide excels in providing detailed, regional data, supporting regional policy development and labour market planning. Romania's ANOFM¹⁰, however, data categorized by region, sector, salary, and employment type, offering insights into regional labour trends. However, while this data supports broader regional analysis, it may still lack the granularity needed to fully address specific local skill mismatches and low-skilled labour dynamics. The absence of regional granularity risks overlooking localized disparities and labour market needs, particularly in underrepresented or economically challenged regions.

⁵ Bundesagentur für Arbeit (n.d.): Berufe auf einen Blick. URL: <https://statistik.arbeitsagentur.de/> (Accessed 08.01.2025).

⁶ Lanbide (n.d.): Estadísticas. URL: <https://www.lanbide.euskadi.eus/weblan00-estadisticas/es/#ancla5> (Accessed 08.01.2025).

⁷ Landbide (n.d.): FUTURELan. URL: <https://futurelan.eus/es> (Accessed 08.01.2025).

⁸ SEPE (n.d.): Buscador de necesidades formativas de las ocupaciones. URL: <https://sepe.es/HomeSepe/que-es-observatorio/deteccion-necesidades-formativas/buscador-necesidades-formativas.html> (Accessed 08.01.2025).

⁹ Bundesagentur für Arbeit (n.d.): Branchen im Fokus. URL: <https://statistik.arbeitsagentur.de/DE/Navigation/Statistiken/Interaktive-Statistiken/Branchen-im-Fokus/Branchen-im-Fokus-Nav> (Accessed 08.01.2025).

¹⁰ Agenția Națională pentru Ocuparea Forței de Muncă (n.d.): Locuri de muncă vacante. URL: www.anofm.ro/locuri-de-munca-vacante (Accessed 08.01.2025); ANOFM (n.d.): Caută locuri de muncă. URL: <https://mediere.anofm.ro/app/module/mediere/jobs#> (Accessed 08.01.2025).



The divergence between forecast-oriented and real-time data underscores potential misalignments in policy responsiveness. Systems like Romania’s ANOFM, while offering regional job vacancy data, may lack in-depth localized labour market insights, risking the development of generic policy solutions that fail to address specific local needs. Similarly, the absence of cross-border analysis in most systems constrains strategic planning for migrant workforce inclusion, a critical consideration for low-skilled employment sectors. EURES provides cross-border analytics of labour shortages and mobility in Europe and could help closing this gap.¹¹

Overall, while PES systems across these countries share foundational strengths in data collection and free accessibility, their effectiveness is influenced by varying levels of user-friendliness, the frequency of updates, and the ability to address regional specificity, immediate versus long-term trends, and cross-border labour mobility. Many systems require expert knowledge to navigate, limiting practical accessibility for non-specialists. Additionally, the reliance on annual updates may hinder responsiveness to rapid labour market shifts. Addressing these disparities is essential for developing more inclusive and effective labour policies that accurately reflect the complex dynamics of low- and unskilled labour markets ([Appendix A1](#)).

3.1.2. Information Systems from Business Associations

- Business Associations often provide LMI just for one specific sector.
- This may limit the information that can be gathered about the demand for low- and unskilled, but it provides detailed information about the structure of specific sectors, the relevance of low- and unskilled in the sectors under consideration and the sectoral occupational and skill needs.

LMI systems within chambers of commerce and business associations typically provide sector-specific data focused on industries such as manufacturing, logistics, and craftsmanship. They include employment trends, sectoral demands, and workforce composition within these industries, often with regional breakdowns. These systems also often offer insights into job vacancies, salary levels, and skills required for various roles. LMI systems within chambers of commerce and craft as well as business associations across countries share a focus on sector-specific analysis. Italy’s Assolombarda Observatory¹² and Luxembourg’s Chamber of Trades and Crafts¹³ and Federation of Industry¹⁴ prioritize key sectors like manufacturing, logistics, and craftsmanship, with annual reporting ensuring data relevance. While platforms such as Italy’s Excelsior Information System benefit from frequent monthly updates, many chamber-based

¹¹ European Employment Services (n.d.): Labour shortages and surpluses in Europe. URL: https://eures.europa.eu/living-and-working/labour-shortages-and-surpluses-europe_en (Accessed 09.01.2025).

¹² Assolombarda (n.d.): Servizi per le imprese. URL: <https://www.assolombarda.it/> (Accessed 09.01.2025).

¹³ Chambre des Métiers Luxembourg (n.d.): Chambre des Métiers. URL: <https://www.cdm.lu/> (Accessed 09.01.2025).

¹⁴ FEDIL (n.d.): The Voice of Luxembourg's Industry. URL: <https://fedil.lu/fr/> (Accessed 09.01.2025).



systems rely on annual reporting, which, while valuable for tracking long-term trends, may be less effective in capturing short-term labour market shifts. Nonetheless, these sources remain instrumental in aligning workforce training programs with sectoral labour demands.

Nonetheless, critical distinctions exist. Italy's systems are inclusive of low-skilled sectors, addressing logistics, hospitality, and retail. In contrast, Luxembourg's Tomorrow's Skills in Industry Report¹⁵ emphasizes qualified labour, often neglecting unskilled roles. However, some Luxembourg chamber reports, such as those from the Chamber of Employees, specifically target low-skilled workers. Data complexity is another factor: Italy's advanced analytical tools provide depth but can alienate non-expert users, while Luxembourg's simpler tools lack nuance, particularly regarding insights into unskilled sectors.

Furthermore, Luxembourg's data is narrowly focused on traditional industries and craftsmanship. This structural weakness affects policy inclusiveness and limits workforce development strategies. Italy's complex systems, though rich in data, may inadvertently exclude smaller businesses or local government stakeholders due to accessibility barriers ([Appendix A2](#)).

3.1.3. Information Systems from Research Organizations and Consulting Agencies

- Research Organizations and Consulting Agencies provide a wide range of labour market indicators (such as demographic structure, labour force demand, skills demand, educational requirements, etc.).
- The depth of information on low- and unskilled varies between sources.
- One challenge for the LMI by these organization is, that it is more complex and often requires the assistance of professionals with experience in labour market analysis.

Research organizations and consulting agencies contribute substantially to identifying sectoral skill gaps and supporting VET development. Germany's Hessian Skilled and Unskilled Labour Initiative¹⁶ and Italy's Atlante del Lavoro¹⁷ exemplify efforts to address skill disparities for low-skilled workers. While the Hessian Initiative offers detailed regional insights down to the county level, its bi-annual update cycle may limit responsiveness to short-term labour market shifts. Italy's AFOL Metropolitana¹⁸ further aligns training programs with regional demand, promoting localized workforce development. However, Italy's systems like AFOL Metropolitana offer hyper-local data, while Germany's broader regional scope risks oversimplification. Italy's Atlante del Lavoro is methodologically sophisticated but complex, potentially deterring non-expert stakeholders. Germany's systems, though simpler, risk overlooking detailed insights into low-skilled dynamics. Italy's depth in qualification mapping offers structured pathways for upskilling,

¹⁵ FEDIL (n.d.): The Voice of Luxembourg's Industry. URL: <https://fedil.lu/fr/> (Accessed 09.01.2025).

¹⁶ Hessische Berufsprognosen (n.d.): Hessische Fachkräfteinitiative. URL: <http://www.hessische-berufsprognosen.de/> (Accessed 09.01.2025).

¹⁷ Istituto nazionale per l'analisi delle politiche pubbliche (n.d.): ATLANTE del LAVORO e delle QUALIFICAZIONI. URL: <https://www.inapp.gov.it/atlantelavoro/> (Accessed 09.01.2025).

¹⁸ Afol Metropolitana (n.d.): Colleghiamo il Lavoro. URL: <https://www.afolmet.it/> (Accessed 09.01.2025).



a feature missing from Germany's broader forecasts. This absence limits the applicability of data for targeted training development ([Appendix A3](#)).

3.1.4. Information Systems from Public Statistical Offices

- Public Statistical Offices can provide an overview on labour market indicators for low- and unskilled. The information can be obtained in a historical perspective which allows long-term analysis of labour market developments.
- If there is access to microdata, one can get a very detailed characterization of the situation of low- and unskilled in the labour market.
- Often some statistical knowledge is required to use the data (especially the microdata).

Public statistical offices across countries can provide disaggregated data by education level, gender, and region, which is critical for low- and unskilled labour analysis. Often public statistical offices process data on a historical level and their data is updated only on an annual, semi-annual or at best monthly basis. Therefore, these systems react slowly to short-term changes in the labour market. Spain's INE¹⁹ ensures regular quarterly data updates, enhancing data reliability. Spain's INE Microdata offers detailed filtering but demands advanced skills for interpretation, creating accessibility barriers. Basque's Eustat²⁰ excels in regional specificity and gives detailed information about the situation in the labour market for low- and unskilled people. While microdata systems enable deep analysis, their complexity may exclude stakeholders, whereas national data simplicity risks overlooking regional inequalities.

The main challenge in using public statistical offices as information sources is the complexity of the available data. For most statistical systems some statistical knowledge is required and for microdata in particular the help of labour market analysts is needed ([Appendix A4](#)).

3.1.5. Information Systems from Private Companies

- Besides many public sources which provide LMI without costs, private companies also offer these services.
- The main service they provide is up-to-date data extracted from online job ads. In this way they can provide precise data for the regional and local context for TS_ETSPs.
- Cedefop is providing similar information publicly but currently only concentrates on skilled labour.

¹⁹ Instituto Nacional de Estadística (n.d.): Encuesta de población activa. Resultados. URL: <https://www.ine.es/dyngs/INEbase/es/operacion.htm> (Accessed 09.01.2025).

²⁰ Euskal Estatistika Erakundea - Instituto Vasco de Estadística (n.d.): Población en relación con la actividad (PRA). URL: https://www.eustat.eus/bancopx/spanish/id_2307/indiceRR.html (Accessed 09.01.2025).



Private companies like Germany's Jobnet.AG²¹ provide real-time, dynamic data on job vacancies through analysis of job advertisements from online job portals, in newspapers and on company websites. The European Centre for the Development of Vocational Training (Cedefop)²² provides a similar analysis that is publicly available. Unfortunately, the Cedefop data is currently only concentrated on skilled labour and not on low- and unskilled labour. Additionally, Cedefop only provides data on national level.

Platforms like Jobnet.AG specifically target vulnerable groups, contributing to social inclusion and providing precise data for the regional context of TS_ETSPs. Despite these strengths, data source limitations are evident. Private systems rely on available data and job postings, potentially missing insights into informal or unlisted sectors. Additionally, since the structure of online job postings may vary between countries the technology to analyze them needs to be adjusted along the national particularities.

While Jobnet.AG excels in niche job matching, it lacks broader labour market analysis. Private data systems tend to be reactive, focusing on immediate needs rather than strategic, long-term insights. Their reliance on formal data sources may overlook informal or gig-economy trends, particularly relevant for low-skilled employment ([Appendix A5](#)).

3.1.6. Information Systems from other Public Bodies

- Besides the beforehand institutions there are some more information systems, that could provide information on the demand for low- and unskilled.
- Some ministries of labour collect labour market data and present it comprehensively (that lacks the regional perspective) - others run job-platforms that also publish reports about the labour market.
- Often these additional sources lack the level of details required to be useful.

In many countries public institutions, beside PES and Public Statistical Offices also gather, aggregate and provide labour market information. The information systems analyzed here originate from ministries of labour and social security institutions. The LMI systems mostly focus on labour market trends, job search tools, qualifications, and sector-specific labour flows. The platform ClicLavoro by the Ministry of Labour and Social Policies of Italy offers valuable job search tools, company profiles, and labour market insights. However, its reliance on self-navigation may pose challenges for users. Simplifying the interface and providing additional support could improve accessibility. Luxembourg's Interactive Tables on Labour Flows deliver sectoral labour data but lack specificity regarding low-skilled groups. Enhancing data granularity would allow for more targeted analysis, especially in addressing vulnerable labour market groups. Romania's National Register of Professional Qualifications is a centralized database of

²¹ Jobnet.AG (n.d.): Regionaler Jobmonitor. URL: <https://www.jobnet.ag/Produkte/Regionaler-Jobmonitor/> (Accessed 10.01.2025).

²² Cedefop (n.d.): Skills-OVATE. URL: <https://www.cedefop.europa.eu/en/tools/skills-online-vacancies> (Accessed 11.01.2025).



qualifications but requires a sound understanding of classification frameworks. Making the system more intuitive with interactive features could broaden its accessibility. The Ministry of Labour and Social Protection (MLSP) in Romania provides extensive labour market data but some datasets require advanced analytical skills, limiting usability for non-experts. Simplifying data presentation and offering interpretive support would enhance stakeholder engagement. Across these platforms, accessibility and data specificity remain critical concerns. Improving user-centered design, increasing granularity for low-skilled sectors, and ensuring simpler, clearer pathways for data interpretation are essential for enhancing inclusivity and practical utility ([Appendix A6](#)).

3.2. Comparative Analysis of European and International LMI Systems

- Most public international information systems focus on general labour market indicators. Direct information about the demand of low- and unskilled is rarely to find.
- The scope of the data is also mostly concentrated on countries or larger regions. Therefore, they easily enable comparisons of countries and larger regions, but the data level of the publicly available data does not always allow for in-depth analysis.

Labour Market Information (LMI) systems at the European and international level serve as crucial tools for monitoring employment trends, skills demand, and workforce mobility. Unlike national LMI systems, which focus on regional labour markets, international LMI tools standardize and compare data across countries, offering broader insights. However, most public international systems primarily track general labour market indicators, with limited direct information on the demand for low- and unskilled employees. Their data is often aggregated at the country level, facilitating comparisons but lacking the granularity needed for in-depth analysis.

The Key Indicators of the Labour Market (KILM)²³ by the International Labour Organization (ILO) exemplifies this trend. Covering over 180 countries, KILM provides employment, unemployment, and productivity data but lacks specificity regarding low-skilled labour. Similarly, the European Commission's ESCO framework²⁴ classifies skills and occupations across Europe but does not always reflect the fluid nature of emerging or informal job markets. Skills OVATE²⁵, operated by CEDEFOP, analyses online job advertisements across 32 European countries to provide real-time labour market intelligence. While this approach captures evolving occupational demand, it excludes sectors where informal hiring is prevalent, limiting its effectiveness for assessing low-skilled workforce trends. Additionally, the data Skills OVATE

²³ International Labour Organization (n.d.): Key Indicators of the Labour Market (KILM). URL: <https://www.ilo.org/projects-and-partnerships/projects/key-indicators-labour-market-kilm> (Accessed 14.01.2025).

²⁴ European Commission (n.d.): ESCO Framework. URL: https://esco.ec.europa.eu/en/classification/occupation_main (Accessed 14.01.2025).

²⁵ Cedefop (n.d.): Skills-OVATE. URL: <https://www.cedefop.europa.eu/en/tools/skills-online-vacancies> (Accessed 15.01.2025).



publicly provides remains mostly on national level. This limits its effectiveness for regional labour markets. EURES²⁶ facilitates cross-border employment data, helping track labour shortages and surpluses across Europe.

Private-sector LMI systems, such as Lightcast (formerly Emsi Burning Glass)²⁷, aggregate job postings and industry trends, providing detailed labour market analytics. While valuable for employers and policymakers, these subscription-based platforms limit access for public-sector stakeholders and may not fully address social inclusion challenges.

When compared to national LMI systems, European and international platforms offer broad macroeconomic insights but often lack the regionalized depth required for workforce planning. National systems, such as Spain's SEPE or Germany's BA Labour Market Monitor, provide region-specific employment data that aligns more directly with policy and vocational training initiatives. Their ability to track skill shortages at a granular level makes them more actionable for addressing labour market mismatches. A key distinction lies in data standardization versus local relevance. European and international LMI systems harmonize methodologies to ensure comparability across countries, but this often results in a loss of country-specific detail. In contrast, national systems adapt their methodologies to regional economic conditions, producing more relevant insights for regional policymakers. Timeliness is also a differentiating factor—international systems rely on periodic national data submissions, which can cause delays, whereas national systems, particularly those using real-time analytics, better reflect immediate workforce needs ([Appendix A7](#)).

3.3. Conclusions

A consistent challenge across information systems is balancing data depth with usability. Detailed systems offer rich insights but often face accessibility challenges. Another challenge is the data scope. To support regionalized policy responses at least regional data is necessary. While most systems provide data on multiple geographical levels, they are mainly concerned with the national or regional level and even sometimes provide data on the local level.

While European and international LMI systems provide valuable macroeconomic perspectives and support cross-country employment planning, they lack the depth required for targeted workforce interventions. National systems remain more effective for addressing regionalized labour market needs. Bridging the gap between these levels of analysis would require better data integration, enhanced real-time data-sharing, and improved accessibility to ensure that LMI systems serve both broad economic planning and specific labour market interventions effectively.

²⁶ EUROpean Employment Services (n.d.): Labour shortages and surpluses in Europe. URL: https://eures.europa.eu/living-and-working/labour-shortages-and-surpluses-europe_en (Accessed 15.01.2025).

²⁷ Lightcast (n.d.): Workforce Insights To Drive Smart Decisions. URL: <https://lightcast.io/products/data/overview> (Accessed 15.01.2025).



3.4. Recommendations

To enhance the effectiveness and inclusiveness of LMI systems, political programs, data providers, and regional stakeholders must focus on addressing existing gaps and barriers. Several strategic recommendations can guide these efforts.

3.4.1. Recommendations for Policy Makers

Strengthening National and Regional Analysis. A core objective should be to strengthen national and regional analysis by expanding detailed data systems across all countries and their sub-regions. This will enable more precise tracking of regionalized low-skilled labour trends, allowing for targeted policies that address regional needs.

Simplification of Complex Data. Simplifying complex data systems such as Italy's Excelsior and Spain's SEPE is also crucial. These systems should be made more accessible and user-friendly to empower a broader range of users, including regional policymakers, small- and medium-sized enterprises (SMEs) and especially our target entity, the TS_ETSPs.

Integrate Informal Sector Data. Political strategies must prioritize the inclusion of informal sector data, particularly in countries where informal employment plays a significant role in the low- and unskilled labour market. This would provide a more complete picture of employment trends and better inform policy decisions.

Standardize Data Collection. Political frameworks must emphasize the standardization of data collection methodologies across countries and their subregions. This would improve consistency and comparability by harmonizing definitions and tracking of low-skilled labour, enabling better cross-country and cross-region comparisons.

3.4.2. Recommendations for Data Providers

Integrate Real-time Data. Data providers must focus on integrating real-time data, such as job postings and employment trends, to offer more dynamic and timely insights. This is particularly important in rapidly changing sectors where up-to-date information is essential for decision-making.

Enhance Regional Data Granularity. At the regional level, data providers should work on enhancing the granularity of their data. Moving beyond broad national aggregates to capture regional variances will better address specific labour market gaps in different regions. Engaging regional stakeholders in the data validation process can help to ensure that the data accurately reflects regional labour market realities.

3.4.3. Recommendations for TS_ETSP

Align Training Programs with Regional Labour Market Trends: TS_ETSP organizations should collaborate closely with LMI systems (like Italy's AFOL Metropolitana and Germany's Hessian Initiative on Skilled and Unskilled Labour) to ensure their curricula are aligned with the skills



**Co-funded by
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needed by employers in specific regions. Using granular, regional labour market data will help tailor training programs to meet local employment needs, especially in low-skilled sectors. For example, in regions with high demand for logistics workers, specific training programs focused on warehousing, distribution, and e-commerce could be developed more adequately.

Increase Industry Involvement in Curriculum Design: TS_ETSP organizations should actively engage employers and industry representatives in the design and delivery of training programs. This collaboration ensures that the training provided matches the specific needs of employers, particularly in low-skilled sectors. For example, by working with local businesses in hospitality, logistics, or retail, VET organizations can create specialized programs that enhance employability in these industries.

3.4.4. Recommendations for Research Organizations and Consulting Agencies

Deliver Timely and Granular Data: Research organizations should enhance their focus on providing real-time, region-specific insights to support labour market decisions. For example, while Germany's Hessian Initiative on Skilled and Unskilled Labour provides useful data, it often updates only annually. Shifting towards more frequent updates (e.g., quarterly or bi-annually) will allow for faster adaptation to shifts in low-skilled labour dynamics, particularly in rapidly changing sectors such as e-commerce logistics or caregiving.

Simplify Analytical Tools and Reports: Many research platforms, like Italy's Atlante del Lavoro, provide highly sophisticated data, but they are difficult for non-experts to interpret. Research organizations should focus on developing simplified, easy-to-understand summaries, dashboards, and visualizations that make data more accessible to policy makers, local governments, and small businesses. These tools should include actionable insights to facilitate effective decision-making in low-skilled labour market planning.

Develop Forward-Looking Forecasting Models: Research organizations should continue their focus on forecasting labour market trends, as seen in Spain's SEPE Occupations Observatory. However, they should ensure that these forecasts are not overly complex and are accessible to stakeholders across different sectors. This could involve developing simplified versions of reports with key predictions on skill shortages, sectoral shifts, and geographic demand for low-skilled labour, which will enable long-term strategic planning.

Provide Detailed Sectoral Reports: Research organizations should focus on delivering more detailed sectoral analysis, especially for industries that rely on low-skilled workers. Reports from organizations like Italy's Assolombarda Observatory could be expanded to include emerging low-skilled sectors like logistics, retail, and service work. Consulting agencies should also consider developing tools that help identify skill gaps at a more granular level, breaking down the data by job types and geographic regions, so that training programs can be tailored more effectively.

Include Informal Sector Data: Low-skilled workers are often employed in the informal economy, which is harder to track using traditional methods. Research organizations and consulting agencies should aim to integrate data on informal and gig economies into their reports. This



would ensure that labour market policies are inclusive of all workers, even those in non-traditional, temporary, or unregistered roles, which are particularly prevalent among low-skilled populations.

Develop Cross-Border Labour Market Insights: Research organizations should also enhance cross-border analysis of labour mobility, particularly in low-skilled sectors. The movement of workers across borders within the EU is crucial for low-skilled employment, and insights into these patterns can help VET organizations better align training with migrant labour needs and local opportunities.

Engage with Regional and Local Stakeholders: Research organizations should seek regular feedback from local stakeholders, including businesses, VET providers, and regional policymakers, to ensure that their data and recommendations are aligned with on-the-ground realities. By understanding local needs and challenges, research organizations can tailor their reports and strategies to address the specific needs of low-skilled workers and regional labour markets.

3.4.5. Recommendations for European and International Information Providers

Enhance Focus on Low-Skilled Employment in Labor Market Data Collection. European and international information providers should increase their focus on low-skilled employment when gathering and presenting labor market data. By dedicating more resources to capturing the specific needs and challenges of low-skilled workers, these organizations can offer more inclusive and targeted insights. This approach could serve as a model for national and regional information providers, encouraging them to tailor their data collection methods to better reflect the realities of low-skilled employment, ultimately informing more effective policies and interventions.

Enhance Data Coverage for Low-Skilled Workers. European and international LMI providers should expand their data collection efforts to better capture employment trends for low-skilled workers. Current systems often focus on general labour market indicators, overlooking specific challenges faced by vulnerable groups. By integrating more granular data on low-skilled employment, job mobility, and skills development, policymakers and training institutions can develop targeted interventions that address workforce gaps more effectively.

Improve Standardization While Maintaining National Flexibility. Harmonizing data collection methodologies across countries is essential for ensuring consistency and comparability. However, standardization should not come at the expense of national specificity. International information providers should adopt flexible data models that allow national systems to input regionally relevant labour market insights while maintaining a cohesive framework for cross-country analysis.

Integrate Real-Time Labour Market Insights. To enhance responsiveness to labour market shifts, international providers should incorporate real-time job market data into their platforms. Systems such as CEDEFOP's Skills OVATE have demonstrated the value of analyzing online job



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postings to identify emerging trends. Expanding these capabilities and integrating them with national LMI sources would improve forecasting accuracy and workforce planning.

Enhance the Accessibility and Relevance of Cross-Border Labour Market Data. While EURES provides valuable cross-border labour market information, its usability for low- and unskilled employees remains limited due to lower mobility in these groups. Instead of solely expanding data collection, international LMI providers should focus on refining how existing data is structured and presented to better serve this segment. This could involve improving job matching algorithms, tailoring mobility guidance to reflect realistic opportunities for low-skilled workers and integrating support services that facilitate access to employment in neighboring regions. Strengthening these aspects would help ensure that cross-border LMI is more actionable and beneficial for all workers, regardless of skill level.

Improve Accessibility and Usability of LMI Platforms. Many European and international LMI platforms require significant technical expertise to navigate, limiting their practical application for non-specialist stakeholders. Developing user-friendly dashboards, simplified data visualizations, and interactive tools will make these systems more accessible to policymakers, employers, and training institutions. Ensuring that data is presented in a clear and actionable format will enhance its utility in shaping labour market strategies.

Align Data Frameworks with Emerging Labour Market Trends. The rapid evolution of digital technologies, automation, and green economies is reshaping job markets across Europe. International LMI providers should integrate forward-looking analysis and predictive modeling to anticipate future workforce demands. By aligning data frameworks with these emerging trends, LMI systems can better support workforce planning and adaptation to economic transformations.



4. Digital Training Tools for Vulnerable Groups

In this chapter digital tools applied for skills development of vulnerable groups are presented. It is a selection of tools under consideration which have proved in practice that they are functional in planning training and teaching vulnerable groups in VET programs. The digital tools are categorized into two areas: Skills Development Tools (See [Appendix B1](#) for a full list of the factsheets) and Career Development Tools (See [Appendix B2](#) for a full list of the factsheets). These tools vary in their objectives, pedagogical-didactical approaches, accessibility, and certification. While some platforms focus on structured, industry-aligned learning, others emphasize on general skills-building or overall social integration. Regional distinctions also play a crucial role in shaping these tools, with Germany, Spain, Luxembourg, Italy and Romania each offering different models for skill acquisition and professional growth.

Although these tools can be used in a wide range of learning and professional contexts, accessibility remains a key challenge. Language barriers often limit usability for non-English and no native speakers, despite most tools offering at least partial English support. Additionally, many low-skilled or unskilled individuals lack the foundational digital literacy needed to navigate online learning platforms. This creates a paradox where those who stand to benefit the most from skills development tools may struggle to access them. Consequently, the effectiveness of these tools is closely tied to how well they address the needs of vulnerable groups. For digital learning to be truly inclusive, these tools must be complemented by foundational training programs that bridge knowledge gaps and enable broader participation in the workforce.

4.1. Comparative Analysis of Digital Tools by Functional Themes

- The different digital tools are distinguished along the lines of functional themes.
- Two main groups of digital tools could be identified: **Skill Development Tools** and **Career Development Tools**.
- Skill Development Tools are distinguished into five categories:
 - Foundational Skills
 - Occupational Skills
 - Future Skills
 - Digital Skills
 - Language Skills
- Career Development Tools mainly focus on skill assessment.

4.1.1. Foundational Skills

Foundational skills tools focus on literacy, numeracy, and primary education, serving individuals with limited education, school-aged learners, and vulnerable groups. Germany offers two key



platforms: VHS Lernportal²⁸ and ANTON²⁹. VHS Lernportal is designed for adult learners, especially migrants, providing basic literacy and German language courses to support workforce integration. It is a free platform that combines online learning with blended classroom environments, ensuring accessibility in multiple languages. In contrast, ANTON caters to younger learners, offering an interactive and gamified approach to subjects such as math, science, and German language learning for students in grades one to ten. While it is highly engaging for children, its suitability for adult learners remains limited.

These tools play an essential role in addressing educational barriers that prevent low-skilled individuals from entering the workforce. However, they assume a basic level of digital literacy, which can still be an obstacle for some users. To maximize their impact, these tools must be integrated into structured training programs that teach both foundational skills and basic digital competencies ([Appendix B1.1](#)).

4.1.2. Occupational Skills

Occupational skills tools provide sector-specific training, vocational education, and certification preparation. Germany and Spain lead in this category, with Prozubi³⁰ and Experiencia Fundae³¹ as prominent examples. Prozubi, developed in Germany, is a structured learning platform designed specifically for sales and retail trainees. It follows the Chamber of Commerce (Industrie- und Handelskammer (IHK)) examination curriculum, ensuring that learners receive the exact knowledge required for certification. However, access to its content requires payment, which may limit its reach.

Experiencia Fundae, developed in Spain, presents a broader and more accessible approach. It offers free courses covering various professional fields, including IT, logistics, and business management. Unlike Prozubi, which is tightly linked to a single professional certification, Experiencia Fundae is more inclusive, targeting SMEs, self-employed individuals, and the unemployed. Despite the benefits of occupational tools, limited digital literacy and language accessibility remain barriers for vulnerable individuals. Some users may require additional guidance or blended learning support to fully engage with these platforms and transition into employment ([Appendix B1.2](#)).

4.1.3. Future Skills

Future skills tools focus on equipping learners with digital literacy, problem-solving abilities, and soft skills necessary for the evolving job market. Germany's Future Skills Journey³² exemplifies

²⁸ Deutscher Volkshochschul-Verband e.V. (n.d.): VHS Lernportal. URL: <https://www.vhs-lernportal.de/www/9.php#/www/home.php> (Accessed 13.01.2025).

²⁹ Solocode GmbH (n.d.): ANTON. URL: <https://anton.app/de/> (Accessed 13.01.2025).

³⁰ Prozubi GmbH (n.d.): PROZUBI. URL: <https://prozubi.de/> (Accessed 15.01.2025).

³¹ Fundación Estatal para la Formación en el Empleo (n.d.): Experiencia Fundae. URL: <https://experienciafundae.es/> (Accessed 13.01.2025).

³² Stifterverband für die Deutsche Wissenschaft e.V. (n.d.): Future Skills Journey. URL: <https://future-skills-journey.de/> (Accessed 16.01.2025).



this category, providing an open-access platform that encourages self-directed learning. It covers a broad spectrum of skills, including data literacy, democracy, and ethical considerations in digital technology. Unlike occupational skills tools, which are tied to specific industries, Future Skills Journey takes a competency-based approach, allowing users to explore new areas of knowledge without formal assessments or certification.

While these tools are essential for lifelong learning and adaptability, they assume that users already have a certain degree of digital competency. This may exclude low-skilled individuals who lack the foundational knowledge needed to engage with self-directed digital learning platforms. To increase accessibility, future skills tools should incorporate more structured support mechanisms, such as tutorials or guided learning pathways ([Appendix B1.3](#)).

4.1.4. Digital Skills

Digital skills tools are designed to improve technical competencies, digital literacy, and cybersecurity knowledge. Spain, Luxembourg, and Romania have developed different models to address digital skill gaps within various workforce segments. Fundae Ilunion³³, based in Spain, provides specialized digital training for professionals in the social economy sector. This initiative ensures that cooperatives, social enterprises, and non-profits can enhance their digital competencies, making it a sector-specific tool rather than a general digital literacy platform.

42 Luxembourg³⁴ takes a more intensive approach. As a peer-to-peer coding school, it operates on a gamified, project-based learning system. Unlike traditional digital skills courses, 42 Luxembourg does not have instructors, relying instead on collaborative learning and practical coding exercises. Its focus on software development, artificial intelligence, and cybersecurity makes it suitable for career changers and individuals seeking long-term digital expertise.

Romania's ACSOL eLearning Toolkit³⁵ offers a different perspective by targeting low-skilled workers in the social care and arts sectors. Unlike 42 Luxembourg, which is designed for high-tech professions, ACSOL aims to improve digital literacy among workers in non-technical fields. It includes interactive e-learning modules that align with European digital skills frameworks, ensuring that participants gain practical knowledge applicable to their industries. Although all three tools focus on digital competencies, their primary distinction lies in their target audience. Many low-skilled workers may struggle with initial engagement due to limited prior experience with digital tools, emphasizing the need for preparatory digital literacy training ([Appendix B1.4](#)).

³³ Ilunion (n.d.): Cursos Fundae ILUNION para economía social. URL: <https://economiasocial.fundae.es/cursos> (Accessed 17.01.2025).

³⁴ 42 Luxembourg (n.d.): 42 Luxembourg. URL: <https://42luxembourg.lu/> (Accessed 16.01.2025).

³⁵ ACSOL Project (n.d.): ACSOL eLearning Toolkit. URL: <https://bcomm.ro/acsol/> (Accessed 17.01.2025).



4.1.5. Language Skills

Language skills tools are essential for social and professional integration, particularly for migrants and asylum seekers. Luxembourg’s Language Lab³⁶ is a key example, providing free access to Rosetta Stone software for learning English, French, or German. This program is exclusively available to refugees, asylum seekers, and low-income residents, ensuring that those in vulnerable situations can improve their language skills for employment and daily life.

While the Language Lab program is highly beneficial, users still require basic digital navigation skills to make full use of the platform. This highlights a broader issue: language learning tools alone are not enough if users lack foundational literacy or digital competence. Bridging these gaps through integrated learning programs would enhance their effectiveness ([Appendix B1.5](#)).

4.1.6. Career Development Tools

Career Development Tools focus primarily on skill assessment, career exploration, and labour market alignment rather than direct skill acquisition. These tools help users evaluate their competencies, identify career opportunities, and align their educational and professional paths with industry demands. Unlike Skill Development Tools, which focus on building competencies in specific areas, Career Development Tools assess existing skills and provide personalized career guidance.

LabLab³⁷, developed by Regione Lombardia in Italy, is a career orientation tool aimed at high school, university, and vocational training students. It provides career exploration resources, real-world work simulations, and networking opportunities. The platform integrates an interactive learning approach, connecting students with industry professionals through thematic workshops and mentorship programs. LabLab is fully digital, free to access, and structured around career simulations and market-aligned career path guidance.

TalentHub³⁸, also from Italy, is an interactive career assessment tool developed in collaboration with Jobiri, a career coaching startup. It provides personalized career recommendations, real-time labor market insights, and mentorship opportunities. TalentHub serves students, job seekers, and professionals looking for career reorientation by offering a skills assessment module, job market trends analysis, and professional networking tools. The platform emphasizes data-driven career planning, helping users navigate career transitions effectively. Similarly, ExcelsiOrienta³⁹, managed by Unioncamere in Italy, supports high school and university students in career orientation. The platform offers career guides, entrepreneurship resources, and self-assessment quizzes. It features OrientaGame, a gamified quiz designed in collaboration with the University of Bologna to help students discover their skills and career

³⁶ Digital Inclusion (n.d.): Language Lab. URL: <https://digital-inclusion.lu/language-lab/> (Accessed 17.01.2025).

³⁷ Regione Lombardia (n.d.): LabLab. URL: <https://lablab.regione.lombardia.it/> (Accessed 20.01.2025).

³⁸ Jobiri (n.d.): Talent Hub. URL: <https://www.talenthub.coach/> (Accessed 22.01.2025).

³⁹ Unioncamere (n.d.): ExcelsiOrienta. URL: <https://excelsiorienta.unioncamere.it/> (Accessed 21.01.2025).



interests. ExcelsiOrienta focuses on connecting students with educational opportunities that align with labor market needs.

Career Development Tools play a critical role in workforce integration, lifelong learning, and career adaptability. These tools help students and young professionals choose educational and career pathways that align with labor market needs. They also support job seekers and career changers in understanding their skills, strengths, and potential career opportunities. For policymakers and training institutions, career development tools provide real-time labor market data that help shape effective workforce policies and educational reforms. By standardizing skills assessments and career guidance frameworks, these tools facilitate international job mobility, ensuring that workers can transition between industries and regions with greater ease. Digital platforms for career planning and skill assessment enhance employability, professional growth, and market responsiveness. Their integration with labor market assessments, and interactive learning methodologies ensure that users receive tailored career insights and skill development opportunities ([Appendix B2.1](#)).

4.2. Comparative Analysis of International Digital Tools

Internationally, tools such as Value My Skills⁴⁰ and the OECD Skills Profiling Tool⁴¹ provide skill assessments and career development resources. Value My Skills is an interactive tool that helps individuals identify and assess their transferable skills, offering career planning support and job mobility strategies. The OECD Skills Profiling Tool evaluates occupation-specific, foundational, and noncognitive skills, generating a personalized skill profile and career recommendations. Both tools are freely accessible online and support users in aligning their competencies with job market demands. However, they rely on self-assessment, which may require additional career counseling to ensure accuracy ([Appendix B2.2](#)).

4.3. Conclusions

While all tools aim to improve employability and learning outcomes, their effectiveness depends on factors such as target audience, certification offerings, and regional policies. One key challenge is accessibility, particularly for low-skilled or vulnerable individuals, who may struggle with language barriers and digital literacy gaps. Although many tools, such as VHS Lernportal and ACSOL eLearning Toolkit, provide user-friendly and multilingual options, others may still be difficult to navigate for individuals with limited prior experience in digital learning environments.

To ensure these tools are inclusive, training programs must be designed to complement digital learning platforms. By offering foundational support in basic literacy, digital skills, and guided learning, individuals with limited prior education can fully engage with digital learning resources

⁴⁰ Unionlearn (n.d.): Value My Skills. URL: https://www.unionlearn.org.uk/value_my_skills/ (Accessed 21.01.2025).

⁴¹ OECD (n.d.): Skills Profiling Tool. URL: <https://oecd-skillsprofilingtool.org/skills-profile> (Accessed 21.01.2025).



and improve their career prospects. Digital tools hold enormous potential, but their true impact will be realized only when accessibility challenges are actively addressed.

4.4. Recommendations

4.4.1. Recommendations for Governments and International Organizations

Expand Publicly Funded Digital Training Initiatives. Governments should increase funding for free and open-access digital learning platforms, ensuring that vulnerable groups can access training without financial barriers. Expanding initiatives like Spain's Experiencia Fundae would allow broader coverage of occupational fields and foundational skills, making digital learning more inclusive.

Enhance Digital Literacy as a Prerequisite. Many vulnerable individuals struggle with digital tools due to limited literacy. Governments should integrate basic digital training into education and workforce programs to ensure learners can effectively navigate online platforms. Local partnerships with libraries and community centers can provide additional hands-on support.

Promote Inclusive Language Accessibility. Digital learning tools must accommodate diverse linguistic backgrounds to reach migrants and refugees. Policymakers should support the development of multilingual training platforms, incorporating AI-powered translation tools, subtitles, and accessible text-to-speech features to improve usability.

Develop Standardized Certification for Digital Learning. Without recognized certification, digital training has limited value in the job market. Governments and industry stakeholders should collaborate to align digital learning credentials with national and international qualification frameworks. Establishing a trusted verification system would improve employer confidence in online certifications.

Encourage Cross-Border Collaboration in Digital Learning. Labour mobility requires training that is recognized across borders. International organizations like the OECD, CEDEFOP, and the European Commission should promote collaborative digital learning programs that ensure consistency in skills recognition across regions.

4.4.2. Recommendations for Data Providers and Training Institutions

Develop User-Friendly Platforms for Low-Skilled Learners. Digital tools should be designed with accessibility in mind. Simple navigation, interactive tutorials, and mobile-friendly interfaces can make learning platforms more user-friendly for individuals with limited digital experience. Incorporating guided learning assistants or chatbot support can further improve usability.

Utilize Labour Market Data for Adaptive Learning Pathways. Training tools should integrate real-time labour market data to align skills development with industry demand. AI-driven recommendations can help learners identify relevant courses and career opportunities, ensuring that digital training remains practical and employment-focused.



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Create Hybrid Learning Models Combining Digital and In-Person Support. Online learning alone may not be sufficient for vulnerable groups. Blended models that include mentoring, career counseling, and practical training sessions can improve engagement and retention. Community learning centers and industry partnerships should provide hands-on experience to complement digital learning.

Improve Data Collection on Digital Training Participation and Outcomes. Tracking participation and employment outcomes is essential to refining digital training programs. National and regional data providers should monitor completion rates, learner demographics, and job placement success to ensure training tools remain effective and relevant.



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5. Current Practices and Experiences in Planning Training in Applying Data or Information on the Labour Market Demand for Vulnerable Groups

5.1. Current Practices and Experiences

Planning of training and implementation vary significantly across countries, influenced by funding structures, data availability, and institutional priorities. In Germany, strict funding frameworks limit flexibility in training planning, as the PES and the regional governments determine training needs in their funding schemes. Beyond these frameworks, labour market data from PES, reports from regional authorities and research institutes, and insights from private data companies and TS_ETSP associations supplement decision-making. In Italy, TS_ETSPs operate largely without empirical data, relying on cooperation with trade associations, knowledge sharing, and intuitive decision-making. Some organizations maintain internal observatories, but these are rarely data-driven.

In Spain, PES funding dictates training decisions, leaving TS_ETSPs with little room for independent planning. When alternative funding is available, more strategic decisions can be made based on job seeker skills, employer needs, and public statistics. Similarly, in Romania, the National Employment Agency (ANOFM) plays a key role in training planning by publishing job vacancies and analyzing labour market trends. Training decisions are also influenced by direct input from individuals seeking qualifications and employers with specific skill demands. Luxembourg follows a mixed model, where funding partially dictates course topics and target groups. The Ministry of Labour, PES, and companies contribute labour market data, supplemented by expert knowledge, field observations and migration statistics.

5.2. Institutional and Financial Constraints

5.2.1. Funding Structures and Their Impact

Funding mechanisms shape training programs significantly. In many countries, the framework conditions shape the planning process. Limited budgets and strict frameworks imposed by the PES or the (regional) governments leave little room for maneuver, constraining TS_ETSPs in adapting training programs to evolving labour market needs. In Germany and Spain, PES-driven funding leaves little autonomy for TS_ETSPs, while alternative public funding in Spain allows for greater flexibility. Luxembourg and Romania exhibit more hybrid funding approaches, integrating public and private sources.

5.3. Sources and Accessibility of Labour Market Data

5.3.1. Statistical and Real-Time Data Sources

PES-generated labour market statistics form the primary data source in Germany, Spain, and Romania. Italy relies on indirect sources such as employer feedback, while Luxembourg



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integrates migration data with employment figures. Private data companies and sectoral observatories also provide supplementary insights.

5.3.2. Networks and Industry Collaborations

While some countries rely on structured data, others depend on professional experience and industry insights. In Italy, word-of-mouth and employer feedback drive training decisions. Luxembourg balances expert knowledge and field observations with public institutional data. Spain and Romania incorporate employer interactions into planning processes, ensuring real-time labour market responsiveness.

5.4. Addressing Data Gaps and Enhancing Training Relevance

5.4.1. Improving Data Accessibility and Predictive Analysis

Across countries, the need for better-integrated labour market intelligence is clear. Italy highlights the necessity of stronger employer engagement and predictive data analysis tools. Spain stresses the importance of linking skills with job positions, as companies often prioritize personal attributes over specific skills when hiring low-skilled workers. Luxembourg echoes the demand for improved labour market data to better align training with employment needs.

5.4.2. The Role of CEDEFOP Online Job Ad Analysis

Opinions on CEDEFOP's Skills Ovate platform vary. In Germany, existing data sources meet most needs, but an aggregated platform would be useful. The job ads in Germany do not contain the same amount of information than in other countries. Therefore, the analysis of job ads is of limited value. Italy sees benefits in real-time labour market insights, trend analysis, and employer engagement but notes biases in job postings, short-term focus, and variability in job descriptions. Spain finds such tools valuable for identifying company needs and justifying training programs when applying for public funding. However, concerns over complexity and data reliability remain.

5.4.3. Evaluation of Current Training Planning Models

Real-time labour market data holds significant promise for training planning but must be handled carefully to ensure inclusivity and representativeness. Many low-skilled jobs are not formally advertised, meaning reliance on job postings may exclude informal employment trends. Additionally, training institutions often lack the expertise to fully utilize digital labour market data, emphasizing the need for improved data literacy.



5.5. Recommendations

5.5.1. Recommendations for Policymakers

Increasing Training Autonomy. Policymakers should grant TS_ETSPs greater flexibility in adapting training programs to emerging labour market needs. A rigid, top-down approach limits the ability of regional and local training providers to respond dynamically to changing job market conditions, particularly for low-skilled and vulnerable workers.

Improve Funding Mechanisms. Funding should be structured to allow for real-time responses to employment shifts. This means reducing bureaucratic delays in reallocating resources based on urgent labour market trends. A combination of long-term funding for structural initiatives and short-term, adaptable grants would improve responsiveness.

Expand Data Collection Scope. Many training programs fail to reflect actual employment conditions due to gaps in data on informal employment. Policymakers must work to integrate informal sector trends into official statistics, ensuring that workforce development initiatives address the full scope of labour market realities.

Enhance Employer Engagement in Training Design. Governments should facilitate stronger collaboration between businesses and training institutions. This ensures that training curricula are aligned with current industry needs, reducing the risk of skills mismatches that contribute to persistent unemployment.

5.5.2. Recommendations for Data Providers

Enhance Accessibility. Labour market intelligence platforms must be designed with usability in mind, ensuring that non-expert stakeholders - such as training providers and local policymakers - can easily navigate and apply data insights. Data visualization tools, dashboards, and user-friendly interfaces are essential to democratizing access to information.

Improve Job Ad Analysis Methodologies. Current job advertisement analysis tools are limited in scope, often overlooking informal job postings and undervaluing skill requirements for low-skilled positions. Data providers should refine methodologies to capture a broader spectrum of employment trends, ensuring that insights reflect real-world hiring practices beyond online job boards.

Strengthening Data Literacy Through Training. Many TS_ETSPs and training institutions lack the expertise to interpret and apply complex labour market data effectively. Investing in ongoing training initiatives will enhance statistical literacy among key stakeholders, allowing them to leverage data insights for more informed decision-making.

Integrate Cross-Border Labour Market Data. With increasing labour mobility across Europe, data providers must incorporate cross-border employment trends into national and regional LMI systems. This is particularly important for migrant and low-skilled workers, who often face barriers due to fragmented information systems.



6. Surplus of a Comparative Analysis of Regional Situations

The analysis in the preceding chapters highlights the diversity of LMI systems, digital tools, and training approaches used to support low- and unskilled employees. These differences stem from variations in national and regional structures, economic conditions, and policy frameworks. While some countries have developed centralized, highly detailed LMI systems, others rely on broader or fragmented data sources, impacting their ability to implement targeted training programs. This diversity presents both challenges and opportunities. By studying different national and regional approaches, policymakers and training providers can identify innovative solutions that have already been successfully applied elsewhere and adapt them to their own contexts.

A key takeaway is that evidence-based VET for vulnerable groups must consider both regional and national conditions. The structure of labour markets, regulatory environments, and funding mechanisms all influence how training programs are designed and delivered. However, learning from other regions can enhance the effectiveness of existing strategies. In particular, adopting best practices from regions with well-developed LMI systems can improve the responsiveness and efficiency of training programs. The insights gained from this comparative analysis will inform the next steps in developing guides and tools that better support low-skilled workers in accessing relevant training and employment opportunities.

A comparative analysis of different regions reveals significant structural and methodological differences. Labour markets operate under distinct national and regional policies, economic structures, and institutional frameworks. Some countries emphasize strong public-sector involvement in workforce development, while others rely on market-driven approaches. The level of government coordination, availability of funding, and engagement with social partners all shape how training for low-skilled workers is implemented. The scope and granularity of LMI data also vary widely. Some regions have comprehensive systems with real-time labour market data, detailed skill assessments, and predictive analytics, while others rely on outdated or less detailed statistics. The accessibility of this data differs as well, with some countries offering open-source platforms while others restrict access to policymakers and researchers. Additionally, digital tools for labour market analysis and training range from sophisticated platforms with AI-driven recommendations to simpler databases providing general employment trends. Some regions integrate LMI with job-matching services and career guidance, while others lack interactive or user-friendly tools. These variations affect how effectively low-skilled individuals can navigate the job market and access relevant training opportunities.

Given these differences, cross-national collaboration presents a significant opportunity to improve LMI systems and training strategies. Sharing best practices and aligning data collection methodologies can enhance the effectiveness of training programs. Regions with well-established LMI systems can provide models for those with less developed frameworks. Standardizing key labour market indicators across borders can also improve the comparability of data, making it easier to design training programs that align with workforce demands. Increased cooperation among countries and



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regions fosters knowledge exchange and policy innovation. Collaborative efforts can help create integrated digital platforms that provide consistent labour market insights across multiple regions. Additionally, pooling resources for research and data collection can reduce costs while improving the overall quality of labour market analysis. Strengthening partnerships between governments, employers, and training institutions on a European or international level can lead to more coordinated strategies for addressing skills shortages, particularly among vulnerable groups.

This comparative analysis underscores the value of both regional adaptation and cross-border learning in improving VET strategies for low-skilled workers. By leveraging insights from different systems, policymakers can develop more inclusive and data-driven approaches to workforce development, ensuring that vulnerable individuals receive the training necessary to access stable employment opportunities.



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Acknowledgments

We thank all our knowledge partners for their work and support in creating this report.

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Appendix A: Factsheets on Information Systems

A1: Information Systems from Public Employment Services (PES)

Sources from Germany

General information	
Name	Statistics of the Federal Employment Agency Germany - Occupations Database Statistik der Bundesagentur für Arbeit - Berufe auf einen Blick (https://statistik.arbeitsagentur.de/)
Organization & Financing	<ul style="list-style-type: none"> • The platform is run and financed by the German PES • The PES is financed by the German government
Target groups	<ul style="list-style-type: none"> • The platform can be used by policy makers, companies, institutions and individuals.
Duration	<ul style="list-style-type: none"> • Data is continuously updated, but may not always be up-to-date depending on the reporting cycles. • Mainly the annual averages are shown.
Accessibility & User-friendliness	<ul style="list-style-type: none"> • Free online access • Since the statistics database is handling different labour market related aspects, the users can have trouble finding information relevant for them. • After that the data is easy to read and extract.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • The platform connects a wide range of data regarding occupational groups, that are presented as graphics and tables. • For example: age distribution, sex, number of foreigners, qualifications, income averages, unemployment, vacancies.
Filter options	<ul style="list-style-type: none"> • Regions, occupational groups, skill level
Demand related information	<ul style="list-style-type: none"> • For each occupational group and region we are able to get data on the demand of low- and unskilled.
Evaluation	
	<ul style="list-style-type: none"> • The filter options are enabling us to get a very detailed perspective on the need for low- and unskilled people and the structure of occupation groups. • Since only annual averages are depicted the data could at least give orientation for planning VET.



General information	
Name	Statistics of the Federal Employment Agency Germany - Sector Focus Statistik der Bundesagentur für Arbeit - Branchen im Fokus https://statistik.arbeitsagentur.de/DE/Navigation/Statistiken/Interaktive-Statistiken/Branchen-im-Fokus/Branchen-im-Fokus-Nav.html
Organization & Financing	<ul style="list-style-type: none"> The platform is run and financed by the German PES
Target groups	<ul style="list-style-type: none"> The platform can be used by policy makers, companies, institutions and individuals.
Duration	<ul style="list-style-type: none"> Data is continuously updated but may not always be up-to-date depending on the reporting cycles.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free online access Since the statistics database is handling different labour market related aspects, the users can have trouble finding information relevant for them. After that the data is easy to read and extract.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> The data contains information about the top ten occupational groups regarding: Employees and Vacancies (Categorized by the German Economic Sector Classification oriented on the ISIC standard). <ul style="list-style-type: none"> The occupational groups are similar the ESCO-3 categorization. It is available on national, regional and district level.
Filter options	<ul style="list-style-type: none"> Geographic scale, region, skill-level, sector and occupational group
Demand related information	<ul style="list-style-type: none"> The filter option for skill-level makes it possible to see the occupational groups with the most demand for low- and unskilled on regional level.
Evaluation	
<ul style="list-style-type: none"> Since it is only showing the top ten occupational groups there may be information missing. This information can be gathered through checking the background data, but that is not as easy and requires additional effort. To use this data in planning VET it may be necessary to identify the demanded occupations for low- and unskilled within these occupational groups, since the occupational groups are not further differentiated. The platform is quick to use and intuitive. The available data could provide first directions for planning VET. 	



Sources from Spain

General information	
Name	Contract statistics from Lanbide (Basque Employment Service) (https://www.lanbide.euskadi.eus/weblan00-estadisticas/es/#ancla5)
Organization & Financing	<ul style="list-style-type: none"> Published by Lanbide - Basque Employment Service with Social Security data Lanbide, the Basque Employment Service, is mainly financed through the Basque Government and European funds
Target groups	<ul style="list-style-type: none"> Anyone interested in labour market information
Duration	<ul style="list-style-type: none"> Monthly and annual statistics
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free Easy to use. There is a list that allows you to choose the most convenient statistics, and then, using drop-down menus, the data selection is made
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> There are statistics at the municipal, regional, provincial and Basque Country level. All data are then published based on the main sociodemographic variables (including level of education and occupational group) It allows us to know what the hiring for people with a training level has been up to compulsory studies (studies of the first stage of secondary school with a school graduate)
Filter options	<ul style="list-style-type: none"> occupational groups, geographic scale
Demand related information	<ul style="list-style-type: none"> It allows us to know what the hiring has been for occupational groups 5, 7, 8 and 9 It allows us to know the weight that each occupational level has in the hiring of a territory, its disaggregation by gender, type of contract and type of working day. It also allows us to know the weight that people hired with a low level of training have on the total number of people hired, disaggregated by gender, type of contract and type of working day.
Evaluation	
<ul style="list-style-type: none"> It allows us to know the weight that each occupational level has in the hiring of a territory, its disaggregation by gender, type of contract and type of working day. It also allows us to know the weight that people hired with a low level of training have on the total number of people hired, disaggregated by gender, type of contract and type of working day. We believe that many of the people who work in TS_ETSP do not have sufficient knowledge of official classifications that are used in statistics (in this case CNO) so a small qualification for these people would be interesting. The methodological guide could be a good space for this. 	



General information	
Name	Futurelan Lanbide (https://futurelan.eus/es)
Organization & Financing	<ul style="list-style-type: none"> Published by Lanbide Lanbide, the Basque Employment Service, is mainly financed through the Basque Government and European funds
Target groups	<ul style="list-style-type: none"> Anyone interested in labour market projections
Duration	<ul style="list-style-type: none"> Updated annually
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free Easy to use. Data is presented as graphics and scales.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> The tool allows you to descend up to two digits from the official classification of CNO occupations. For each occupation, the tool returns employment projections until 2035, its annual evolution, the needs for the evolution of the activity and for replacement, needs disaggregated by sex, sector and training level. It also allows the information to be disaggregated by the main training levels, and in the case of intermediate and higher vocational training and university level, the tool disaggregates the information by the fields of knowledge (health, arts, law...) returning the same result described above.
Filter options	<ul style="list-style-type: none"> sex; sector; training level; fields of knowledge
Demand related information	<ul style="list-style-type: none"> With this tool we will be able to know in detail the opportunities of a specific occupation, also disaggregated by training levels, where we would combine the two concepts that interest us in the project (occupation groups 5, 7, 8 and 9 and lower training levels). In addition to the opportunities, we will be able to know whether or not there is a disadvantage, how these opportunities are going to be distributed (gender, activity and training level) as well as knowing the necessary skills for people to be employed in that occupation, very valuable information when it comes to guiding people.
Evaluation	
<ul style="list-style-type: none"> The information is very valuable, but normally TS_ETSP workers do not have great knowledge of official classifications or terms used in labour market analysis. A small qualification would be necessary for these people to enable them to make relevant queries 	



General information	
Name	Statistical analysis of job offers published on Lanbide (https://www.lanbide.euskadi.eus/estadistica/ofertas-de-empleo-registradas-en-lanbide-durante-el-2024/weblan00-content/es/)
Organization & Financing	<ul style="list-style-type: none"> Published by Lanbide Lanbide, the Basque Employment Service, is mainly financed through the Basque Government and European funds
Target groups	<ul style="list-style-type: none"> Anyone interested in labour market information
Duration	<ul style="list-style-type: none"> Monthly updated Monthly and annual analysis of job offers
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free It provides information on the weight of occupational groups or different levels of training in job offers published by the Basque Employment Service
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> It allows you to have an overview of the offers published in the employment service, as well as to know the weight of occupational groups 5, 7, 8 and 9 in job offers. It also allows us to know the weight of job offers that do not require qualifications
Filter options	/
Demand related information	<ul style="list-style-type: none"> It allows us to have an approximate picture of the offers aimed at the occupational groups that interest us (5, 7, 8 and 9) and of the job offers that do not require training beyond secondary level
Evaluation	
<ul style="list-style-type: none"> A tool that gives general information about job offers. It is not possible to draw great conclusions with these data but it is good to know them to get an idea of the weight of the job offers of the interest groups 	



General information	
Name	Analysis of the SEPE (Servicio de Público de Empleo Estatal - State Public Employment Service) Occupations Observatory https://sepe.es/HomeSepe/que-es-observatorio/deteccion-necesidades-formativas/buscador-necesidades-formativas.html
Organization & Financing	<ul style="list-style-type: none"> Published by SEPE (Servicio de Público de Empleo Estatal - State Public Employment Service) The State Public Employment Service (SEPE) is mainly financed through taxes paid by Spanish taxpayers. These funds are collected through the tax system and are allocated to the SEPE budget, which is administered by the Ministry of Labour, Migration and Social Security. In addition, the SEPE receives funds from the European Union, especially the European Social Fund (ESF), which supports employment, training and social security programmes
Target groups	<ul style="list-style-type: none"> Anyone interested in occupation-specific information on the behavior of that occupation in the labour market
Duration	<ul style="list-style-type: none"> Annual update. It does not mean that all the reports are updated every year, but that the list of occupations analyzed is updated, based on those with the best job prospects in the short-medium term
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free and there is a search engine on the page or also the option to consult the list of all the occupations analyzed. By clicking on the eye, you can access the training needs
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> The SEPE Observatory of Occupations carries out the prospection and detection of training needs of the production system based on the identification of occupations that in the short and medium term offer better job prospects. The aim is to detect possible training gaps in order to anticipate future qualification needs. For each occupation analyzed, the training needs in technical-professional skills and the needs in transversal skills (language, digital, normative, etc.) are presented. <ul style="list-style-type: none"> This tool provides information on training guidance. Once we have identified the occupations where we want to direct the person, with this tool we can guide them to training that is really valued to exercise that occupation. It is up-to-date information on what the production system is asking for
Filter options	/
Demand related information	<ul style="list-style-type: none"> Information for the orientation of training valued in each occupation
Evaluation	
<ul style="list-style-type: none"> It is necessary to have a knowledge of the national classification of occupations since occupations are defined with the official nomenclature. 	



- It would be appropriate to give a little training, perhaps in the methodological guide on the national classification of occupations

General information	
Name	Analysis of the SEPE (Servicio de Público de Empleo Estatal - State Public Employment Service) Occupations Observatory https://sepe.es/HomeSepe/que-es-observatorio/deteccion-necesidades-formativas/buscador-necesidades-formativas.html
Organization & Financing	<ul style="list-style-type: none"> • Published by SEPE (Servicio de Público de Empleo Estatal - State Public Employment Service) • The State Public Employment Service (SEPE) is mainly financed through taxes paid by Spanish taxpayers. These funds are collected through the tax system and are allocated to the SEPE budget, which is administered by the Ministry of Labour, Migration and Social Security. In addition, the SEPE receives funds from the European Union, especially the European Social Fund (ESF), which supports employment, training and social security programmes
Target groups	<ul style="list-style-type: none"> • Anyone interested in occupation-specific information on the behaviour of that occupation in the labour market
Duration	<ul style="list-style-type: none"> • Annual update. It does not mean that all the reports are updated every year, but that the list of occupations analysed is updated, based on those with the best job prospects in the short-medium term
Accessibility & User-friendliness	<ul style="list-style-type: none"> • Free • There is a search engine on the page or also the option to consult the list of all the occupations analysed. • By clicking on the eye, you can access the training needs
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • The SEPE Observatory of Occupations carries out the prospection and detection of training needs of the production system based on the identification of occupations that in the short and medium term offer better job prospects. The aim is to detect possible training gaps in order to anticipate future qualification needs. • For each occupation analysed, the training needs in technical-professional skills and the needs in transversal skills (language, digital, normative, etc.) are presented. <ul style="list-style-type: none"> ○ This tool provides information on training guidance. Once we have identified the occupations where we want to direct the person, with this tool we can guide them to training that is really valued to exercise that occupation. • It is up-to-date information on what the production system is asking for
Filter options	/



Demand related information	<ul style="list-style-type: none"> Information for the orientation of training valued in each occupation
Evaluation	
<ul style="list-style-type: none"> It is necessary to have a knowledge of the national classification of occupations since occupations are defined with the official nomenclature. It would be appropriate to give a little training, perhaps in the methodological guide on the national classification of occupations 	



Sources from Luxembourg

General information	
Name	Interactive dashboard on job vacancies - ADEM Stats Tableau interactif des chiffres-clés sur les offres d'emploi (https://adem.public.lu/fr/marche-emploi-luxembourg/statistiques/chiffres-clés-adem.html)
Organization & Financing	<ul style="list-style-type: none"> This table is run and financed by the Luxembourg PES (ADEM- Agence pour le développement de l'emploi)
Target groups	<ul style="list-style-type: none"> Job seekers; Employers; Policy makers; Society
Duration	<ul style="list-style-type: none"> The available data covers the period from January 2014 to the most recent month available (M-1)
Accessibility & User-friendliness	<ul style="list-style-type: none"> Available online for free Only in French This user-friendly interactive board is accompanied by a video tutorial, which provides a comprehensive overview of its functionality. The information is presented in graphical form, facilitating effective visualization and comprehension. Additionally, a monthly press release is available, offering a concise summary.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> This table illustrates the number of job vacancies declared to ADEM by sector of activity (NACE code) and by occupation (ROME code). <ul style="list-style-type: none"> Employers in Luxembourg are legally obliged to declare job vacancies to ADEM. A sub-distinction can also be made according to whether the job offer concerns an employment measure, a temporary job or another form of employment (neither a measure nor a temporary job).
Filter options	<ul style="list-style-type: none"> Activity sector; occupation; type of employment contract (employment, temporary work, measure)
Demand related information	<ul style="list-style-type: none"> The table enables the identification of the sectors and occupations in which demand for labour is high. It can also be used to analyze changes in job vacancies by sector/occupation over time. The focus of information is not oriented towards the low-skilled or unskilled. In order to gather information on demand related to low and unskilled, it is necessary to select a list of occupations in which these individuals are employed.
Evaluation	
<ul style="list-style-type: none"> This tool provides regular updates on changes in the number of vacancies by occupation and sector. It enables users to identify which sectors and occupations are most in demand and which are facing a labour shortage (via the stock of job vacancies). The tool is relatively straightforward to use. Since it does not target low-skilled individuals directly, users must select occupations, which can be time-consuming. The nomenclature used is the ROME code and not the ISCO nomenclature. 	



- The information it contains is likely to be partial, as it only covers job vacancies declared to ADEM. However, the obligation to declare jobs to ADEM is not always respected.

General information	
Name	Future skills initiative: Sectoral studies (https://adem.public.lu/fr/employeurs/futureskills.html)
Organization & Financing	<ul style="list-style-type: none"> • ADEM in partnership with the Ministry of Labour and the Union des entreprises luxembourgeoises
Target groups	<ul style="list-style-type: none"> • Job seekers; Employers; Policy makers; Society
Duration	<ul style="list-style-type: none"> • 2021-2023
Accessibility & User-friendliness	<ul style="list-style-type: none"> • The studies can be downloaded free of charge from the ADEM website. Videos explaining the results are also available. • The studies include visual elements (graphs, tables, diagrams). The results are also popularized through videos available online.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • In order to gain a better understanding of the skills gap, ADEM is carrying out analyses of occupations and skills at sectoral level. Sectoral studies covering 10 sectors (finance, industry, construction, accommodation and food service activities, commerce, transport and logistics, crafts, social work, health and care, IT) have been carried out on the basis of ADEM data and the expertise of employers' organizations. These studies provide: <ul style="list-style-type: none"> ○ key figures on the sector, ○ a summary of the trends impacting the sector ○ an analysis of shortage, growth and emerging occupations ○ a list of the skills in demand in job vacancies in the sector • The quantitative data from ADEM is supplemented by expert insights. The information collected covers: <ul style="list-style-type: none"> ○ the distribution of occupations within the sector, ○ the most in-demand occupations, ○ occupations with shortages or surpluses of candidates, ○ and the requirements in terms of professional experience, qualifications, and language skills. ○ Information is also available on the sought-after skills (both transferable and technical) and possible career transitions between different occupations.
Filter options	<ul style="list-style-type: none"> • Activity sector, Occupation
Demand related information	<ul style="list-style-type: none"> • These studies do not specifically target low or unskilled workers. However, they provide valuable insights into in-demand and emerging occupations, which can help guide training programs offered by TS_ETSP. Information on required skills and qualification requirements is also available.



Evaluation

- These studies can be used by TS_ETSP to guide their training programmes in specific sectors. The studies help to identify sought-after skills, offer pathways to support reskilling and upskilling, and analyze emerging occupations, as well as those in shortage or surplus. They are useful for TS_ETSP when providing training related to a specific industry, but less relevant for TS_ETSP offering cross-disciplinary training. A constraint pertains to the frequency with which these studies are updated. Not all activity sectors are covered.



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Sources from Romania

General information	
Name	National Employment Agency Agenția Națională pentru Ocuparea Forței de Muncă (ANOFM) (www.anofm.ro/locuri-de-munca-vacante; https://mediere.anofm.ro/app/module/mediere/jobs#)
Organization & Financing	<ul style="list-style-type: none"> ANOFM is a public employment service functioning under the coordination of the Ministry of Labour and Social Protection in Romania. It is funded by the Romanian government and European structural funds.
Target groups	<ul style="list-style-type: none"> To facilitate job placement by providing an updated job vacancy database and employment mediation services, connecting job seekers with employers across Romania. Job seekers (both skilled and unskilled), employers, policymakers, employment agencies, and workforce development institutions.
Duration	<ul style="list-style-type: none"> Continuously active as the national employment service provider in Romania.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Publicly accessible, listing real-time job vacancies. Some services, such as personalized job counseling, may require registration. The main ANOFM platform and mediation portal both offer structured job listings with multiple filtering options.
Structure of data and demand related information	
Structure of Data	<ul style="list-style-type: none"> Job vacancies categorized by region, sector, salary, and employment type. Includes details such as job description, required qualifications, and employer information. Aligns with national and European employment classification frameworks.
Filter options	<ul style="list-style-type: none"> region, sector, salary, and employment type
Demand Related Information	<ul style="list-style-type: none"> Sectors: Includes opportunities in agriculture, construction, manufacturing, hospitality, retail, and domestic work. Occupational Groups: <ul style="list-style-type: none"> Offers jobs for both high-skilled professionals and low-skilled workers. Includes positions that require little to no prior experience or formal education. Special focus on apprentices, interns, persons with disabilities and graduates. Others: <ul style="list-style-type: none"> Provides vocational training and reskilling programs for job seekers. Employers are legally required to register job vacancies within 5 days of becoming available.
Evaluation	



Pros:

- Comprehensive and regularly updated job listings.
- Free access to job seekers and employers.
- Covers a wide range of job sectors and experience levels.
- Mediation platform enhances job search efficiency with advanced filtering.
- Offers additional services such as career counseling and vocational training.

Cons:

- Some job postings may lack detailed information.
- Navigation may be challenging for users unfamiliar with the platform.
- Limited integration with private sector job platforms.

Recommendation

- Best suited for job seekers looking for government-listed vacancies.
- Employers can use the platform to fulfil legal requirements for job postings.
- Useful for policymakers tracking employment trends, but may require supplemental data sources for a complete labour market analysis.
- The mediation platform is particularly useful for job seekers looking for specific criteria-based job searches.



A2: Information Systems from Business Associations

Source from Italy

General information	
Name	Assolombarda – Osservatorio del Mercato del Lavoro (Labour Market Observatory) (https://www.assolombarda.it/)
Organization & Financing	<ul style="list-style-type: none"> Managed by Assolombarda, the main association of industrial companies in Lombardy, part of Confindustria (General Confederation of Italian Industry). Supported by regional and national business associations and collaborations with research institutions.
Target groups	<ul style="list-style-type: none"> Companies and employers seeking workforce insights. Training institutions (TS_ETSP) and universities to align education with labour market needs. Public policymakers designing employment policies. Job seekers and workers looking for professional guidance.
Duration	<ul style="list-style-type: none"> Ongoing, continuously updated.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Reports and analyses available for free on the website. Some detailed data and consulting services may be reserved for member companies. Reports are well-structured and business-oriented. Requires some familiarity with economic and labour data for full comprehension.
Structure of Data and demand related information	
Structure of Data	<ul style="list-style-type: none"> Economic sectors and industries: labour market insights categorized by sector and geographical area. Occupational groups: job profiles and employment trends by profession and skill level. Skills and qualifications: identification of key competencies and emerging job roles. Employment dynamics: hiring trends, job turnover, unemployment rates, and workforce demographics. Uses ISTAT (Italian National Institute of Statistics) labour force classifications, sector-specific regional employment data, and integrates ESCO and other European standards
Filter options	<ul style="list-style-type: none"> Possible to analyze demand for entry-level and unskilled positions, particularly in sectors like manufacturing, logistics, and services. Reports focus on skill shortages and workforce requalification needs.
Demand related information	<ul style="list-style-type: none"> Sector: Strong focus on manufacturing, logistics, construction, retail, and personal services. Occupational Groups: Machine operators, warehouse workers, hospitality staff, construction labourers, and administrative assistants. Other: Reports often discuss employability challenges for low-skilled workers, identifying training needs and upskilling opportunities.
Evaluation	



- Offers detailed insights into workforce trends, helping training providers align courses with industry needs.
- Highlights skill shortages and sector-specific demands, guiding vocational training investments.
- Helps companies and policymakers develop requalification programs for unskilled workers.
- Some reports are business-focused, making them less accessible to training providers and policymakers.
- Data is aggregated, which may limit insights into specific unskilled labour market segments.

Recommendation

- When: to be used periodically to track labour market shifts and update training programs accordingly.
- By whom: training centers, employment services, companies, and regional policymakers.
- With the help of labour market analysts, business associations, and vocational training experts.



General information	
Name	Excelsior Information System (https://excelsior.unioncamere.net/)
Organization & Financing	<ul style="list-style-type: none"> The project is promoted by Unioncamere (the Italian Union of Chambers of Commerce, Industry, Crafts, and Agriculture) in collaboration with the Italian Ministry of Labour and Social Policies and co-financed by the European Union.
Target groups	<ul style="list-style-type: none"> The system is aimed at students, job seekers, institutional policymakers in the field of training policies, and training operators at various levels.
Duration	<ul style="list-style-type: none"> The project has been active since 1997 and continues to operate with monthly surveys.
Accessibility & User-friendliness	<ul style="list-style-type: none"> The data and resources are freely accessible through the official website, upon request via a form. The platform is user-friendly, offering interactive tools such as dashboards, online databases, and publications to facilitate access to information.
Structure of Data and demand related information	
Structure of Data	<ul style="list-style-type: none"> The Excelsior Information System collects data from businesses operating in the industrial and service sectors with an annual average of at least 0.5 employees. The agricultural sector, public administration, professional firms, and non-profit entities are excluded. Branches/Sectors: focuses on industrial and service sectors. Occupational Groups: analyzes different professional profiles and roles within the surveyed sectors. Qualification/Skills Level: assesses the educational background and skill sets required for various occupations. <ul style="list-style-type: none"> Soft and hard skills required by employers. Experience level preferred by companies. Standards Applied: Based on ISCO classification.
Filter options	<ul style="list-style-type: none"> Geographic scale, sectors and occupations, including those requiring low or no formal qualifications. <ul style="list-style-type: none"> Jobs that require no formal education or only basic skills. Short-term employment trends for low-skilled workers. Sectors with high demand for unskilled labour, such as hospitality, logistics, or construction.
Demand related information	<ul style="list-style-type: none"> Sectors: Industries such as construction, manufacturing, tourism, and certain service sectors exhibit a higher demand for low- and unskilled labour. Occupational Groups: Roles commonly sought after include manual labourers, assembly line workers, cleaners, and other elementary occupations that do not require advanced qualifications. Other: The Excelsior Information System's data indicates that a significant portion of immigrant employees are recruited without prior experience, often filling positions that are less attractive to the native population.



Evaluation

- The data helps pinpoint sectors and occupations with a high demand for low- and unskilled labour, enabling targeted training programs.
- Insights into specific skills required allow for the development of customized training modules that enhance employability.
- The extensive and detailed nature of the data may be overwhelming for users without specialized analytical skills.
- While the data is available, navigating and extracting relevant information might require guidance.

Recommendation

- **When:** Utilize this information during the planning and development phases of training programs to ensure alignment with current labour market demands.
- **By whom:** training providers, vocational education institutions (TS_ETSP), policymakers, and organizations supporting vulnerable groups.
- **With the help of:** Collaboration with labour market analysts, data specialists, and industry experts can facilitate the effective interpretation and application of the data.



Sources from Luxembourg

General information	
Name	Report “ Tomorrow's skills in industry. Results of a survey of industrial companies in the Grand Duchy of Luxembourg ” - Edition 2024 Rapport « Les qualifications de demain dans l'industrie. Résultats d'une enquête réalisée auprès des entreprises industrielles du Grand-Duché de Luxembourg » – Edition 2024 (https://fedil.lu/fr/)
Organization & Financing	<ul style="list-style-type: none"> • Annual report only in French done by FEDIL, Chambre de commerce, House of Training, Ministère de la Recherche, Maison de l'orientation, ADEM • Founded in 1918, FEDIL is a multisector business federation giving a voice to industrials and entrepreneurs, fostering Luxembourg's economy.
Target groups	<ul style="list-style-type: none"> • The report first documents Industry (main data on the sector at national level, specific initial education and continuing training) and results of an annual survey which aims to have a view on technical, digital and administrative profiles sought over a two-year period. • The aim of the survey is twofold: <ul style="list-style-type: none"> ○ to guide young people and their parents towards vocational orientation that corresponds market needs in the field studied; ○ to provide information to public authorities and training professionals to ensure between the needs of companies and the training courses. • In addition, the study partners want to gain a better understanding of companies' skills needs, as to be able to develop the continuing training market in a targeted way.
Duration	<ul style="list-style-type: none"> • Annual documentation on jobs in industry and survey on needs (79 pages in 2024)
Accessibility & User-friendliness	<ul style="list-style-type: none"> • Free access of the publication on website • High user friendliness
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • Detailed jobs and type of diploma sought over a two-year period in terms of creation or replacement by 5 categories of jobs: jobs of construction, jobs of industry, jobs of transport, jobs of administration support and jobs of IT support
Filter options	<ul style="list-style-type: none"> • Only by 5 big categories of jobs: jobs of construction, jobs of industry, jobs of transport, jobs of administration support and jobs of IT support
Demand related information	<ul style="list-style-type: none"> • No information on demand for unqualified worker: at least DAP diploma (36% of the total of the diploma levels sought).
Evaluation	
Useful because	
<ul style="list-style-type: none"> • annual and covers a large part of employees in the industry; • in line with a suitable sectoral approach of the issue of skills needs; 	



- with new partners as ADEM (public employment service) with a standard classification comparable with ADEM data;
- easy to understand because short and simple.

But:

- only annual; only Industry; only in French;
- low response rate of 16% (only 109 firms from 667; low response rate usual in Lux and as cited in publication: special low response rate due certainly by lack of predictability in a context with inflation and slowdown in construction and in business investment;
- comparison with ADEM not consistent.



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General information	
Name	Reports of the Chamber of Trades and Crafts <ul style="list-style-type: none"> ● Report “Key figures for the crafts sector” / Rapport “<i>Chiffres-clés de l’Artisanat</i>”, Chambre des Métiers, 2023 (annual report with key data on craftsmanship) ● Interactive dashboards on firms and employees ● Report “Need for workforce and skills in the craft industry: Findings and policy proposals” / Rapport “Besoin en main-d’œuvre et en compétences dans l’Artisanat : Constats et propositions politiques”, Chambre des Métiers, Février 2023 and in 2019 (26 pages, regular survey on labour force needs in craftsmanship)
Organization & Financing	<ul style="list-style-type: none"> ● The Chamber of Skilled Trades and Crafts (Chambre des Métiers - CDM). ● The CDM represents craftsmanship, a central pillar of Luxembourg's economy and society (8,944 firms, 20% of total and 107,144 jobs (employees, independents and “conjoint-aidant”), 21% of total).
Target groups	<ul style="list-style-type: none"> ● The main target group of the CDM are its members (skilled craft professionals, commercial and industrial businesses which operate a crafts workshop). <ul style="list-style-type: none"> ○ It also provides its members with training and qualifications (apprenticeships, advanced training certificates, training for adults), advice and support for the creation and transfer of businesses, as well as assistance and advice in legal, economic, technological and European matters.
Duration	<ul style="list-style-type: none"> ● Annual report with focus on labour force needs ● Annual update of interactive dashboards ● Report on results of survey in 2019 and 2023
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Annual report, update of interactive dashboards and results of survey published on website for free. ● Report easy to read, same format each year ● Dashboards are easy to use with a user guide
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> ● Annual report: <ul style="list-style-type: none"> ○ Number of firms by legal status, by firm size, number of employees by residence country and nationality, by gender and age, number of apprenticeship, number of “brevet de maîtrise” ● Interactive dashboards: <ul style="list-style-type: none"> ○ Number of firms each year from 1990 by activity sector, detailed occupation and legal status (individual, ...) ● Report on survey on jobs and skills needs: <ul style="list-style-type: none"> ○ Needs by date, by detailed occupation, by level of diploma (included unqualified) ○ Difficulties to find skills match, to find suitable trainings, to retain workforce ○ Training and domains needs



<p>Filter options</p>	<ul style="list-style-type: none"> ● Number of firms each year from 1990 by activity sector, detailed occupation and size of firms ● For all employees: Number of employees from 1990 by activity sector, detailed occupation and size of firms ● Number of employees from 1990 by activity sector, detailed occupation and gender ● Number of employees from 1990 by activity sector, detailed occupation and nationality ● For crossborders: number of employees from 1990 by activity sector, detailed occupation and nationality
<p>Demand related information</p>	<ul style="list-style-type: none"> ● Interactive dashboards: <ul style="list-style-type: none"> ○ Very detailed occupation identifies low or unqualified jobs ● Report on survey labour force needs: <ul style="list-style-type: none"> ○ Qualifications sought by craft companies for replacement and creation including unqualified (27%)
<p>Evaluation</p> <p>Useful because:</p> <ul style="list-style-type: none"> ● for all craftsmanship and in line with a suitable sectoral approach of the issue of skills needs ● easy to understand because short and simple ● website with tool for accessibility ● acceptable response rate of the survey in 2023: about 42% of total jobs <p>But:</p> <ul style="list-style-type: none"> ● only annual ● only craftsmanship ● only in French 	



General information	
Name	Report: Profile of the minimum wage population Rapport: Portrait de la population au salaire minimum https://www.csl.lu/app/uploads/2023/10/20231012_ssm_complet_web.pdf
Organization & Financing	<ul style="list-style-type: none"> Chambre des salariés (Chamber of employees)
Target groups	<ul style="list-style-type: none"> One of the Employees' Chamber's objectives is to produce informative publications on matters relating to the world of work. Employees; Society
Duration	<ul style="list-style-type: none"> The report has been published in 2023
Accessibility & User-friendliness	<ul style="list-style-type: none"> The document is available to download at no cost from the internet. This well-structured report includes information presented in tables and graphics. Nevertheless, the report is quite long, as there are a number of issues in relation to the social minimum wage.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> This report provides statistics on the characteristics of minimum wage earners, including their sociodemographic characteristics and the sectors in which they work. It also allows for the distinction between qualified and unqualified minimum wage earners.
Filter options	<ul style="list-style-type: none"> Distinction between skilled and unskilled employees on the minimum social wage.
Demand related information	<ul style="list-style-type: none"> Low and un-skilled are targeted in this report
Evaluation	
<ul style="list-style-type: none"> This report is useful for knowing the sector of activity in which unqualified minimum wage earners are employed. However, the available information is limited to the sectoral level, with no data at the occupational level. Additionally, the data is too aggregated (NACE at the one-digit level) to effectively guide the training offer. Limitation related to the frequency of updates to this study. This report can be used to gain a better understanding of the characteristics of jobs held by unskilled workers. However, it is important to note that it should be used in conjunction with other, more precise sources of information on the demand for unskilled labour. 	



A3: Information Systems from Research Organizations and Consulting Agencies

Sources from Germany

General information	
Name	Labour market and career forecasts until 2030 - Hessian Skilled Workers Initiative Arbeitsmarkt und Berufsprognosen bis 2030 - Hessische Fachkräfteinitiative (http://www.hessische-berufsprognosen.de/)
Organization & Financing	<ul style="list-style-type: none"> • The project is managed by the Hessische Fachkräfteinitiative, with the Institute for Economic, Labour, and Culture (IWAK) at Goethe University Frankfurt responsible for conducting the analyses. • The initiative is financed by the Hessian Ministry for Labour, Integration, Youth, and Social Affairs.
Target groups	<ul style="list-style-type: none"> • Regional stakeholders such as local economic development agencies, policymakers, businesses, and educational institutions within Hesse
Duration	<ul style="list-style-type: none"> • The project commenced in July 2022 and is ongoing, with projections extending to 2030. • Updated annually
Accessibility & User-friendliness	<ul style="list-style-type: none"> • Free online access • No easy read/ sign language, only German • User friendly web page • Regional dossiers can be downloaded.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • The data is accessible through downloadable dossiers on state and regional level. <ul style="list-style-type: none"> ○ Regional labour market indicators. ○ Information on the Development of regional labour market and professional forecasts up to 2030. • Interactive maps that show the regional demand of occupational groups and skill levels until 2030.
Filter options	<ul style="list-style-type: none"> • Occupational groups, skill levels, regions
Demand related information	<ul style="list-style-type: none"> • Forecasts on projected labour market demand for specific occupational groups and low- and unskilled employees.
Evaluation	
<ul style="list-style-type: none"> • The information on the future demand of low- and unskilled could help planning VET. • The detailed information on the single regions provides a complex picture of the structure of the regional labour market. • Web page not accessible for needs of certain people with disabilities (no easy read, sign language) and non German speakers. 	



Sources from Italy

General information	
Name	PoliS-Lombardia (Regional Institute for Policy Support of Lombardy) (www.polis.lombardia.it)
Organization & Financing	<ul style="list-style-type: none"> Established by the Lombardy Region, PoliS-Lombardia is a public entity operating under regional law. It was formed through the merger of ARIFL (Regional Agency for Education, Training, and Labour) and Éupolis Lombardia.
Target groups	<ul style="list-style-type: none"> Policymakers, researchers, regional government bodies, training institutions (TS_ETSP), and industry stakeholders.
Duration	<ul style="list-style-type: none"> Established in 2018 and currently active.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Reports and research outputs are available on the official website Some resources may require institutional access. The platform provides structured reports, data visualizations, and interactive tools for policy analysis interpretation may require expertise
Structure of Data and demand related information	
Structure of Data	<ul style="list-style-type: none"> Covers multiple policy areas, including employment, education, economic development, and innovation. Analyzes labour market trends, training needs, and workforce development strategies Evaluates skills demand and educational requirements for various economic sectors. Aligns with regional, national, and European classification frameworks.
Filter options	<ul style="list-style-type: none"> Regional and sectoral analysis of labour market trends. Policy areas such as education, skills, and economic development. Data-driven insights into public administration and governance.
Demand related information	<ul style="list-style-type: none"> Sectors: Focus on labour market policies affecting industries such as construction, services, and manufacturing. Occupational groups: Studies workforce trends, skills mismatches, and policies for integrating low-skilled workers. Provides insights for upskilling initiatives and vocational training programs.
Evaluation	
<ul style="list-style-type: none"> Offers in-depth policy analysis to support regional decision-making. Provides insights into labour market needs and workforce planning. Supports public and private institutions in developing training strategies. The complexity of the data may require expert interpretation. Some reports and datasets may not be fully accessible to the general public. 	
Recommendation	
<ul style="list-style-type: none"> Best suited for policymakers, researchers, and institutions involved in regional planning. 	



- Should be used in conjunction with national and EU labour market intelligence for a comprehensive view.
- Collaboration with labour market analysts and training providers can enhance the usability of PoliS-Lombardia's insights.



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General information	
Name	AFOL Metropolitana – Osservatorio Mercato del Lavoro (Labour Market Observatory) (https://www.afolmet.it/)
Organization & Financing	<ul style="list-style-type: none"> Managed by AFOL Metropolitana, a public agency for training, orientation, and employment in the Metropolitan City of Milan. It operates with funding from Lombardy Region, local municipalities, and the European Social Fund (ESF).
Target groups	<ul style="list-style-type: none"> Training institutions (TS_ETSP, universities etc.) Job seekers and workers Enterprises and employers Public administrations and policymakers
Duration	<ul style="list-style-type: none"> Ongoing, continuously updated.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free access to reports and analysis on the website Some services may require registration or institutional access. The platform provides clear and structured reports but requires some expertise in labour market data analysis for in-depth use
Structure of Data and demand related information	
Structure of Data	<ul style="list-style-type: none"> Sectors and industries: analysis of labour demand per economic sector. Occupational groups: classification of job profiles and professional roles. Skills and qualifications: evaluation of skills required by companies. Employment trends: data on unemployment, NEETs, and hiring forecasts. Uses ISTAT (Italian National Institute of Statistics) classifications, regional employment standards, and European frameworks like ESCO.
Filter options	<ul style="list-style-type: none"> Reports can be filtered by qualification levels, offering insights into job opportunities for low-skilled workers and vulnerable groups
Demand related Information	<ul style="list-style-type: none"> Sectors: Includes logistics, hospitality, retail, manufacturing, and personal care services, where unskilled labour is most in demand. Occupational Groups: Covers roles such as warehouse operators, cleaning staff, food service workers, and basic production roles. Other: Special reports focus on training pathways for unskilled workers and policies to improve their employability
Evaluation	
<ul style="list-style-type: none"> Provides up-to-date labour market data to align training programs with real job opportunities. Helps training institutions design courses for low-skilled workers in high-demand sectors. Identifies skill gaps and suggests training priorities. Some data require interpretation by experts, making it less accessible for non-specialists. Information is mainly focused on the Milan metropolitan area, which may limit its relevance for broader regional applications. 	
Recommendation	
<ul style="list-style-type: none"> When: to be used regularly to update training offers based on labour market changes. 	



<ul style="list-style-type: none"> ● By whom: training centers, employment services, policymakers, and companies. ● With the help of labour market analysts or institutional partnerships for deeper insights. 	
General information	
Name	Atlante del Lavoro e delle Qualificazioni (Labour and Qualifications Atlas) (https://www.inapp.gov.it/atlantelavoro/)
Organization & Financing	<ul style="list-style-type: none"> ● Developed and managed by INAPP (Italian National Institute for Public Policy Analysis) with the support of the Italian Ministry of Labour and Social Policies.
Target groups	<ul style="list-style-type: none"> ● Training institutions and vocational education providers (TS_ETSP). ● Employment services and policymakers. ● Companies and industry associations. ● Individuals seeking career guidance.
Duration	<ul style="list-style-type: none"> ● Continuously updated as part of national labour market policies.
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Free access through the official website, with structured databases and downloadable resources. ● Designed with a structured and hierarchical classification, allowing easy navigation through occupational sectors and qualification frameworks.
Structure of Data demand related information	
Structure of Data	<ul style="list-style-type: none"> ● Branches/Sectors: covers all economic sectors, from industry to services. ● Occupational Groups: organizes professions into hierarchical levels based on tasks, skills, and qualifications. ● Qualification/Skills Level: maps required skills and formal qualifications, integrating national and European classification systems. ● Standards Applied: aligns with ESCO and the Italian Qualification Framework (QNQ).
Filter options	<ul style="list-style-type: none"> ● Search by sector, qualification level, and specific skills. ● Identify occupations requiring low or no formal education. ● Compare skill requirements between different professions.
Demand related information	<ul style="list-style-type: none"> ● Sectors: High demand in construction, hospitality, retail, logistics, and personal care services. ● Occupational Groups: Includes warehouse workers, cleaners, agricultural labourers, and caregiving roles. ● Other: The tool provides insights into upskilling opportunities, helping unskilled workers transition into more stable employment.
Evaluation	
<ul style="list-style-type: none"> ● Provides clear occupational descriptions and required competencies, helping training providers align their courses with labour market needs. ● Supports career guidance by linking jobs to necessary qualifications. ● Helps identify upskilling opportunities for workers in vulnerable situations. ● The classification system might be too technical for users without prior experience in labour market analysis. 	



- Requires interpretation by professionals to translate data into practical training programs.

Recommendation

- Best used by training institutions, employment services, and career counselors.
- Should be combined with labour market intelligence reports to ensure relevance.
- Guidance from labour market analysts or policymakers can improve usability for vocational training.



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A4: Information Systems from Public Statistical Offices

Sources from Spain

General information	
Name	Results of the Eustat survey „Population in Relation to Activity“ (PRA) (https://www.eustat.eus/bancopx/spanish/id_2307/indiceRR.html)
Organization & Financing	<ul style="list-style-type: none"> Published by Eustat - Basque Institute of Statistics (Instituto Vasco de Estadística) Eustat, the Basque Institute of Statistics, is an autonomous body of the Basque Government. It is attached to the Department of Economy and Finance, which means that its funding comes from the budget of the Basque Government
Target groups	<ul style="list-style-type: none"> Anyone interested in labour market information
Duration	<ul style="list-style-type: none"> Quarterly and annual statistics
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free Easy to use. There is a "Data Bank" section where you click and display a series of statistics. The list is consulted and the operation you want to consult is clicked and a variable selection screen is accessed. In this case, we would select the statistical operations of "level of education" or "level of studies completed", which will allow us to know data on the population according to academic level
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> Allows you to consult data by historical territories of the Basque Country, by quarter and year
Filter options	<ul style="list-style-type: none"> The variable "level of education" or "level of studies completed" allows you to select the value "primary studies or less". This group includes people who do not know how to read or write, people who know how to read and write but have not finished any type of studies, Early Childhood Education, Primary Education, primary studies such as elementary and middle school, Primary Education and similar studies.
Demand related information	<ul style="list-style-type: none"> It allows us to know the weight that each occupational level has in the hiring of a territory, its disaggregation by gender, type of contract and type of working day. It also allows us to know the weight that people hired with a low level of training have on the total number of people hired, disaggregated by gender, type of contract and type of working day.
Evaluation	
<ul style="list-style-type: none"> It allows us to know the situation in the labour market in which the group with lower levels of education finds itself, and to make a comparison with higher levels of education. Activity, unemployment and employment rates are essential elements to know the employment situation of a specific group 	



General information	
Name	Statistic data from the National Institute of Statistics' (INE) Labour Force Survey (EPA) https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&idp=1254735976595#_tabs-1254736195129
Organization & Financing	<ul style="list-style-type: none"> Published by the National Institute of Statistics (INE) The National Institute of Statistics (INE) is an autonomous administrative body, with legal personality and its own assets. It is attached to the Ministry of Economic Affairs and Digital Transformation through the Secretary of State for the Economy and Business Support. Therefore, its funding comes from the budget of the central government of Spain.
Target groups	<ul style="list-style-type: none"> Anyone interested in labour market information
Duration	<ul style="list-style-type: none"> Quarterly and annual statistics
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free On the results page of the INE's EPA statistical operation, there is an option that allows you to consult data by Autonomous Communities. Within these statistics, for the sections on population, active, employed and unemployed, it is possible to filter the data by "level of education attained"
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> For the analysis of the general population, the active, employed and unemployed population, it is possible to consult the data by level of completed studies. Disaggregates the information by: illiterates, incomplete primary education, primary education and first stage of secondary education
Filter options	/
Demand related information	<ul style="list-style-type: none"> It allows us to know which is the population of working age, active, employed and unemployed with low levels of training
Evaluation	
<ul style="list-style-type: none"> It provides an overview of the labour market for this group. With microdata we would obtain much more detailed information 	



General information	
Name	Microdata from the National Institute of Statistics' (INE) Labour Force Survey (EPA) https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&idp=1254735976595#_tabs-1254736030639
Organization & Financing	<ul style="list-style-type: none"> Published by the National Institute of Statistics (INE) The National Institute of Statistics (INE) is an autonomous administrative body, with legal personality and its own assets. It is attached to the Ministry of Economic Affairs and Digital Transformation through the Secretary of State for the Economy and Business Support. Therefore, its funding comes from the budget of the central government of Spain.
Target groups	<ul style="list-style-type: none"> Anyone interested in labour market information but with minimal statistical knowledge. It is necessary to know how to filter, extract frequencies, carry out weightings, calculate rates...
Duration	<ul style="list-style-type: none"> Quarterly statistics
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free It is necessary to download the database from the website of the statistical institute. Data is downloaded for Spain as a whole. Along with the database, an excel sheet is downloaded with specifications about the data and variables in the database. With a statistical program such as SPSS, or even with excel (with a .csv file), filters and selections are made to obtain the data we need. It allows all kinds of filters, for example: territory, age, gender, academic level, activity, occupation, type of working day, type of contract... Minimum knowledge of statistics is needed
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> Allows you to consult data by historical territories of the Basque Country, by quarter and year It allows all kinds of filters, for example: territory, age, gender, academic level, activity, occupation, type of working day, type of contract... It is recommended that at the beginning of everything the entire database is filtered based on the territory you want to consult. In this case, it could be filtered by historical territory or even province
Filter options	/
Demand related information	<ul style="list-style-type: none"> A precise characterization of the situation in the labour market of the group with minimum levels of education can be obtained. An accurate characterization of people in a particular occupational group could also be obtained (5, 7, 8 and 9)
Evaluation	
<ul style="list-style-type: none"> Having a minimum knowledge of statistics and the use of a statistical program or excel is the best option. It allows us to carry out the filtering that we think is necessary and allows 	



us to obtain the data that is really needed. The level of disaggregation that is obtained with this tool is not given by any other

- This is a tool for labour market analysts, so it could be complicated for workers to TS_ETSP its management, so a small qualification for these people would be interesting. The methodological guide could be a good space for this.



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A5: Information Systems from Private Companies

Sources from Germany

General information	
Name	Regional labour monitor - Jobnet AG Regionaler Jobmonitor - Jobnet AG (https://www.jobnet.ag/Produkte/Regionaler-Jobmonitor/)
Organization & Financing	<ul style="list-style-type: none"> ● Private enterprise Jobnet.AG is providing the service. ● The information system is only a part of the offerings of Jobnet.AG. It can also serve as a Job-Market and for job applications.
Target groups	<ul style="list-style-type: none"> ● The tool is designed for public clients (employment agencies), chambers of commerce, training providers, and other stakeholders in the labour market seeking detailed regional employment data.
Duration	<ul style="list-style-type: none"> ● Founded 2014. ● Promises up-to-date data.
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Commercial product, no specific information on pricing ● User friendly web page, only German, no easy read/sign language
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> ● The database collects job advertisements from online job portals, newspapers and company web-pages. <ul style="list-style-type: none"> ○ The data can be accessed for small regional levels. ● Web-based user interface <ul style="list-style-type: none"> ○ Filtering tool for specific sectors ○ Tool for creating graphs and tables
Filter options	<ul style="list-style-type: none"> ● Specific sectors, regions, occupational groups
Demand related information	<ul style="list-style-type: none"> ● Regional job offerings in specific occupational groups/low- and unskilled give insight into real labour market demand.
Evaluation	
<p>Pros:</p> <ul style="list-style-type: none"> ● The detailed database can provide TS_ETSPs with precise up-to-date information for their regional context. It provides an overview of the demand for low- and unskilled and is used in practice. <p>Cons:</p> <ul style="list-style-type: none"> ● Bias in Job listings might cause a prioritization of high-skill listings, limited representation of vulnerable groups. ● The labour market demand reflected on job platforms may not accurately represent the broader market conditions. ● Web page not accessible for needs of certain people with disabilities (no easy read, sign language) or with little German skills 	



A6: Information Systems from other Public Bodies

Sources from Italy

General information	
Name	ClicLavoro Click for work (https://www.cliclavoro.gov.it/)
Organization & Financing	<ul style="list-style-type: none"> Managed by the Italian Ministry of Labour and Social Policies.
Target groups	<ul style="list-style-type: none"> Job seekers (including young people, unemployed individuals, and vulnerable groups). Companies looking for workers. Public and private employment services. Training institutions and vocational education providers (TS_ETSP).
Duration	<ul style="list-style-type: none"> Continuous, regularly updated.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free access through the website, with online tools for job searching, applications, and career support. Designed for easy navigation, offering a search engine for job postings, company profiles, training programs, and application tracking
Structure of Data and demand related information	
Structure of Data	<ul style="list-style-type: none"> Job Offers: classified by sector, location, and required qualifications. Training Opportunities: courses and certifications linked to labour market needs. Labour Market Reports: insights into employment trends and in-demand skills. Support Services: information on unemployment benefits, internships, and mobility programs.
Filter options	<ul style="list-style-type: none"> Search by job sector, qualification, region, and type of contract. Company and employer profiles to explore hiring organizations. Tools to match job seekers with vacancies based on their skills and qualifications.
Demand related information	<ul style="list-style-type: none"> Sectors: Highlights entry-level opportunities in hospitality, retail, logistics, agriculture, and construction. Occupational Groups: Jobs for low-skilled workers such as warehouse staff, cleaners, assistants, and customer service roles. Other: Provides training recommendations to help workers transition to higher-skilled positions.
Evaluation	
<ul style="list-style-type: none"> Directly connects job seekers and employers. Includes training opportunities to help low-skilled workers improve employability. Provides labour market insights to understand which jobs are in demand. The platform mainly relies on self-navigation, which may be challenging for some users. Limited personalized guidance for vulnerable job seekers. 	



Recommendation

- Best used by job seekers, career counselors, and vocational training providers.
- Should be complemented with personalized job coaching for vulnerable individuals.
- Public employment services could help users navigate and take full advantage of the platform.



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Sources from Luxembourg

General information	
Name	Interactive tables on labour flows Tableaux interactifs relatifs aux flux de main-d'œuvre (https://adem.public.lu/fr/marche-emploi-luxembourg/statistiques/statistiques/igss/Tableaux-interactifs-flux-emploi.html)
Organization & Financing	<ul style="list-style-type: none"> • Inspection Générale de la Sécurité Sociale (Social security)
Target groups	<ul style="list-style-type: none"> • Policy makers; Society
Duration	<ul style="list-style-type: none"> • 2009-On going; Annual growth
Accessibility & User-friendliness	<ul style="list-style-type: none"> • The document is available to download at no cost from the internet. • The table is interactive, allowing the user to define the reference period, the activity sector, the age and the country or nationality of the workforce.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • The table presents information regarding the dynamism of the Luxembourg labour market. It can be utilized to identify sectors that are characterized by net job creation. • The following information is available for each activity sector: <ul style="list-style-type: none"> ○ the number of new recruits ○ the number of ended contracts ○ the net creation of employment
Filter options	<ul style="list-style-type: none"> • Sector of activity, gender, age, country of residence and nationality
Demand related information	<ul style="list-style-type: none"> • The focus of information is not oriented towards the low-skilled or unskilled. However, this population can be targeted via activity sector (NACE 1 digit).
Evaluation	
<ul style="list-style-type: none"> • This table can be utilized by TS_ETSPs to ascertain information regarding the sectoral dynamics of the labour market. It enables us to identify the sectors experiencing the highest levels of recruitment and those creating the most jobs. • However, the information appears to be too aggregated (NACE at 1 digit) to provide precise guidance for the development of training provision for individuals with limited skills. Furthermore, it should be noted that this table does not target individuals with a low level of skill and is not available by occupation. 	



Sources from Romania

General information	
Name	National Register of Professional Qualifications Registrul Național al Calificărilor Profesionale (RNCP) www.anc.edu.ro/rncp
Organization & Financing	<ul style="list-style-type: none"> Managed by the National Authority for Qualifications (ANC), a public institution under the Romanian government, with funding from national and European sources. The register provides a centralized and structured database of professional qualifications recognized in Romania's education and vocational training systems.
Target groups	<ul style="list-style-type: none"> Students, job seekers, employers, policymakers, educational institutions, training providers, and professional organizations.
Duration	<ul style="list-style-type: none"> Continuously active as part of the Romanian national qualifications system.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Publicly accessible online platform. Qualification information is available for free. Some advanced features may require familiarity with the national qualifications framework and ESCO. Provides a structured catalog of qualifications with filtering options. Navigation may require knowledge of technical educational terminology. Some qualifications are in provisional approval stages and may require updates.
Structure of Data and Accessibility	
Structure of Data	<ul style="list-style-type: none"> Includes qualifications from both initial and continuous vocational training. Categorized by title, educational domain, qualification code, CNC (National Qualifications Framework) level, and EQF (European Qualifications Framework) level. Provides information on required competencies, workload (credits), certification bodies, and the corresponding diplomas or certificates.
Filter options	<ul style="list-style-type: none"> Search by qualification title, qualification level (CNC/EQF), and ISCED classification. Filtering by sector, required competencies, and recognition status (fully approved or provisional).
Demand related information	<ul style="list-style-type: none"> Sectors: <ul style="list-style-type: none"> Covers multiple economic sectors, including construction, healthcare, manufacturing, IT, and services. Recognizes qualifications for vocational and technical professions relevant to low-skilled workers. Occupational Groups: <ul style="list-style-type: none"> Qualifications are mapped to specific occupations and industries. Includes entry-level qualifications for unskilled and semi-skilled labour.



	<ul style="list-style-type: none"> ● Other: <ul style="list-style-type: none"> ○ Supports workforce upskilling and reskilling initiatives. ○ Aligns with European standards to ensure qualification recognition in the labour market.
<p>Evaluation</p>	
<p>Pros:</p> <ul style="list-style-type: none"> ● Centralized and authoritative database for professional qualifications. ● Ensures alignment with national and European qualifications frameworks. ● Publicly accessible with detailed qualification descriptions. ● Facilitates recognition of professional competencies for employment. <p>Cons:</p> <ul style="list-style-type: none"> ● Some qualifications may be in provisional approval stages. ● Navigation requires understanding of classification frameworks. ● Limited interactive tools for personalized qualification recommendations. 	
<p>Recommendation</p>	
<ul style="list-style-type: none"> ● Best suited for students, job seekers, employers, and policymakers needing information on recognized qualifications. ● Useful for educational institutions and training providers designing accredited courses. ● Should be used alongside labour market data and employment trends for a comprehensive workforce planning approach. 	



General information	
Name	Ministry of Labour and Social Protection (MLSP) Ministerul Muncii, Familiei, Tineretului și Solidarității Sociale www.mmuncii.ro
Organization & Financing	<ul style="list-style-type: none"> Funded by the Government of Romania To develop and implement labour and social protection policies, monitor labour market trends, and ensure social welfare.
Target groups	<ul style="list-style-type: none"> Job seekers, employers, policymakers, researchers, and the general public.
Duration	<ul style="list-style-type: none"> Established in 1920; currently active.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Publicly accessible reports and data through official websites. Some databases may require institutional access. Provides structured data and reports.
Structure of Data and Accessibility	
Structure of Data	<ul style="list-style-type: none"> Employment statistics, unemployment rates, wage data, job vacancies, and social protection metrics. Categorized by sectors, regions, and demographic groups. Aligned with national and European classification frameworks.
Filter options	<ul style="list-style-type: none"> Search by industry, occupation, region, and demographic characteristics. Analysis of employment trends, wage levels, and social benefits.
Demand related information	<ul style="list-style-type: none"> Sectors: Covers all economic sectors. Occupational Groups: <ul style="list-style-type: none"> Data is mapped to specific occupations and industries. Includes Low-skilled workers, seasonal labourers, and entry-level positions. Other: <ul style="list-style-type: none"> Provides vocational training and upskilling programs. Supports social inclusion initiatives.
Evaluation	
Pros: <ul style="list-style-type: none"> Comprehensive data on employment and social protection. Supports evidence-based policymaking. Accessible to various stakeholders. Cons: <ul style="list-style-type: none"> Some data may be outdated or limited in scope. Complex datasets may require specialized knowledge to interpret. 	
Recommendation	
<ul style="list-style-type: none"> Suitable for policymakers, researchers, and organizations involved in labour and social policy. Should be used alongside other national and international labour market data for comprehensive analysis. 	



A7: Information Systems from European or International Organizations

Sources from Public Organizations

General Information	
Name	ILO - Key Indicators of the Labour Market (KILM) (https://www.ilo.org/projects-and-partnerships/projects/key-indicators-labour-market-kilm)
Organization & Financing	<ul style="list-style-type: none"> Organization: The KILM is produced by the International Labour Organization (ILO), a specialized agency of the United Nations that promotes social justice and fair labour standards globally Financing: The KILM is financed through the ILO's core budget, which is contributed by its member states. It may also receive additional funding for specific data-gathering initiatives or reports
Target groups	<ul style="list-style-type: none"> policy makers, researchers, academics, labour market analysts, and other stakeholders involved in economic planning, labour market development, and social protection policies
Duration	<ul style="list-style-type: none"> Data Coverage Period: KILM provides labour market data from 1980 to the most recent available year. It is updated periodically, but the frequency of updates can vary depending on data availability from national statistical offices Ongoing/Long-Term Project: KILM is a long-term data collection effort, continuously updated and maintained by the ILO
Accessibility & User-friendliness	<ul style="list-style-type: none"> KILM is publicly available through the ILO website The ILO website offers a user-friendly interface with options to download the data in different formats (CSV, Excel, etc.) Data can also be visualized in charts, making it easier to understand trends
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> Indicator Set: KILM compiles 18 key labour market indicators, covering areas like employment, unemployment, labour force participation, wages, and productivity. These indicators are presented at national levels across 180+ countries International Comparisons: The data is structured in a way that allows for cross-country comparison, providing insights into how labour markets differ across regions and income levels Time Series: KILM offers time series data, meaning users can track the evolution of labour market trends over several decades
Filter options	<ul style="list-style-type: none"> country, region, income group, specific years or ranges of years
Demand related information	<ul style="list-style-type: none"> Indirect Demand Indicators: data points, such as unemployment and participation rates provide indirect insights into labour demand for vulnerable groups
Evaluation	



- The data can be applied to analyze labour market trends for vulnerable groups like women, youth, migrants, and people with disabilities, although it is not specifically segmented for these groups
- some statistical knowledge may be required to interpret the data effectively
- available in English
- not accessible to people with certain disabilities (no easy read, reader, sign language)



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General Information	
Name	Skills OVATE (https://www.cedefop.europa.eu/en/tools/skills-online-vacancies)
Organization & Financing	<ul style="list-style-type: none"> Published by Cedefop (European Centre for the Development of Vocational Training) The State Public Employment Service (SEPE) is financed by European Union funds
Target groups	<ul style="list-style-type: none"> Anyone interested in knowing information about the skills that are most in demand in the national or regional labour market
Duration	<ul style="list-style-type: none"> Quarterly update To show up-to-date labour market and skills trends, Skills-OVATE presents data for the last 4 available quarters and is updated four times a year. Yearly averages for key variables are available via Cedefop's skills intelligence platform.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free Skills-OVATE offers detailed information on the jobs and skills employers demand based on online job advertisements (OJAs) in 32 European countries. The Skills OVATE dashboards do not contain all the job advertisements we collect. Many online job ads portals do not provide a stable data feed over time; to ensure comparable time series, job ads from these portals are excluded from Skills OVATE.
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> Skills-OVATE provides information on occupations, skills and regions based on international classifications: ISCO-08 for occupations, NACE rev. 2 for sectors and NUTS-2 for regions. There are two ways to display information on skills: via ESCO version 1 or O*Net. It contains several tabs with different analyses (by occupations, sectors, skills...). It also contains specific thematic tabs on the digital and green transition.
Filter options	<ul style="list-style-type: none"> Occupational groups, countries,...
Demand related information	<ul style="list-style-type: none"> It can be an interesting tool when we need to compare information from different countries in Europe It is also interesting to see the impact of the main transitions (digital and green) on the skills of professionals
Evaluation	
<ul style="list-style-type: none"> The portal is in English, so it may be a limitation for some users, taking into account the profile with which we work in the project It offers general information, it does not break down the data by occupational levels or training levels 	



General information	
Name	Labour shortages and surpluses in Europe (https://eures.europa.eu/living-and-working/labour-shortages-and-surpluses-europe_en)
Organization & Financing	<ul style="list-style-type: none"> • EUROpean Employment Services (EURES) • EURES is a European Commission program to support cross-border labour market mobility (employees and employers).
Target groups	<ul style="list-style-type: none"> • EURES is responsible for informing and advising employees on job opportunities and living and working conditions in the European Economic Area. • Jobseekers; Employers
Duration	<ul style="list-style-type: none"> • Annual report available online since 2016
Accessibility & User-friendliness	<ul style="list-style-type: none"> • Information is available to download at no cost from the internet • Interactive tools; maps
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> • The dashboard is based on data collected for the European Labour Authority, EURES report on labour shortages and surpluses 2023, which compiles administrative data from public employment services (PES) and data from other sources as submitted by the EURES National Coordination Offices. • Statistics are available for 10 occupational groups and 409 occupations
Filter options	<ul style="list-style-type: none"> • Countries; occupational groups; individual occupation
Demand related information	<ul style="list-style-type: none"> • The focus of information is not oriented towards the low-skilled or unskilled. This population should be targeted via unskilled occupations.
Evaluation	
<ul style="list-style-type: none"> • This tool swiftly identifies the occupation groups and occupations that are in shortage or in surplus in Luxembourg. Occupations can be studied both at an aggregate level and at a more detailed level. However, no information is given on the intensity of the shortage or the surplus. • This tool allows European comparisons. 	



General information	
Name	ESCO (https://esco.ec.europa.eu/en/classification/occupation_main)
Organization & Financing	<ul style="list-style-type: none"> Published by the European Commission
Target groups	<p>Since it's official publication in July 2017, a diverse range of stakeholders are interested in ESCO for a variety of use cases. The main categories of ESCO stakeholders are:</p> <ul style="list-style-type: none"> Public employment services Private employment services Job portals Education institutions (universities, secondary schools, etc.) Social partners IT Application developers HR departments of companies/organizations Ontology management companies Career advisors European institutions/bodies National/Regional/Local public administrations Researchers and statisticians International organizations
Duration	<ul style="list-style-type: none"> ESCO needs to be continuously improved to remain an added value for the labour market and the education and training systems, as new emerging occupations and skills are regularly requested by employers and changes in curricula and in terminology are also regularly introduced in education and training programmes. Last update: 2024 (May) - ESCO v1.2 ONLINE <ul style="list-style-type: none"> New occupations, skills and knowledge concepts; New alternative labels and hidden terms added, 18 types of quality improvements performed, Inclusion of national sign languages.
Accessibility & User-friendliness	<ul style="list-style-type: none"> ESCO (European Skills, Competences, Qualifications and Occupations) is the European multilingual classification of Skills, Competences and Occupations. ESCO works as a dictionary, describing, identifying and classifying professional occupations and skills relevant for the EU labour market and education and training. Those concepts and the relationships between them can be understood by electronic systems, which allows different online platforms to use ESCO for services like matching jobseekers to jobs on the basis of their skills, suggesting trainings to people who want to reskill or upskill etc. ESCO provides descriptions of 3,039 occupations and 13,939 skills linked to these occupations, translated into 28 languages ESCO can be downloaded free of charge in all 28 ESCO languages. To enhance user experience, ESCO offers a user-friendly approach for downloading the classification.
Structure of data and demand related information	



Data structure	<ul style="list-style-type: none"> • There are 3 sections: <ul style="list-style-type: none"> ○ Occupations ○ Skills ○ Qualifications • When you access Occupations you can find 3,039 occupations classified in 9 major groups. • For every 4 digit occupation, there is a list of tasks • For every 5 digit occupation, there is a list of Essential Skills and Competences, Essential Knowledge, and Optional Skills and Competences and Optional Knowledge
Filter options	/
Demand related information	<ul style="list-style-type: none"> • It can be an interesting tool to understand the occupations when employers do not give details about what the job consists of. • It is a valuable tool to understand what the job is about and to plan the training.
Evaluation	
<ul style="list-style-type: none"> • All TS_ETSPs should be aware of this source of information 	



Sources from Private Organizations

General Information	
Name	Lightcast (https://lightcast.io/products/data/overview)
Organization & Financing	<ul style="list-style-type: none"> Organization: Lightcast (formerly known as Emsi Burning Glass) Financing: Lightcast operates as a for-profit company and is funded through subscription-based services
Target groups	<ul style="list-style-type: none"> Primary Target Group: businesses, educational institutions, workforce development organizations, and policymakers who need actionable labour market insights Vulnerable Groups: Although Lightcast is designed for organizations making data-driven decisions, its tools can indirectly help analyze labour market trends for vulnerable groups (e.g., unemployed individuals, low-income workers, people with disabilities, etc.) by providing data on skill gaps, job demand, and market opportunities Additional Target Groups: Career counselors, job seekers, researchers, and economic development professionals can also benefit from Lightcast's tools by accessing labour market trends and skill requirements
Duration	<ul style="list-style-type: none"> Lightcast continuously updates its data from multiple sources, including job postings, resumes, and official labour statistics, offering real-time insights into labour market trends
Accessibility & User-friendliness	<ul style="list-style-type: none"> Lightcast is a subscription-based service, so access is limited to organizations and individuals who purchase a subscription user-friendly interface Lightcast provides training resources, tutorials, and customer support to help users get the most out of the platform not accessible to people with certain disabilities (no easy read, sign language, reader etc.)
Structure of data and demand related information	
Structure of data	<ul style="list-style-type: none"> Insights at the level of specific job roles, industries, regions, and skills Time Series: Lightcast allows for the tracking of labour market trends over time, with data updated regularly, making it suitable for longitudinal analysis
Filter options	<ul style="list-style-type: none"> Location (global to regional and city-level), industry & Job Role, Time Period, Skill & Educational qualifications
Demand related Information	<ul style="list-style-type: none"> Job Demand Insights: Lightcast provides a comprehensive view of job demand through job postings, hiring trends, employer needs, and skills in demand across industries and regions for vulnerable groups Labour Market Trends: The platform highlights labour market gaps by identifying mismatches between the supply of available workers and employer demand Skills Gap Analysis: One of the core features of Lightcast is its ability to identify skill gaps in the workforce by analyzing the demand for certain



	competencies in job postings compared to the availability of these skills in the labour force
Evaluation	
<ul style="list-style-type: none"> • Strong tool for analyzing labour market trends and understanding job demand across industries and regions • Since Lightcast relies on data from job postings and resumes, there may be some limitations regarding the representation of informal or non-digital job markets • Access can be expensive for small organizations or individual job seekers 	



Appendix B: Factsheets on Digital Training Tools

B1: Skills Development Tools

B1.1: Foundational Skills

Examples from Germany

General information	
Name	VHS Lernportal (https://www.vhs-lernportal.de/wws/9.php#/wws/home.php) Adult Education center learning portal
Organization & Financing	<ul style="list-style-type: none"> Created by DigiOnline GmbH for the German Adult Education Association (Deutscher Volkshochschul-Verband e.V.). Run by the German Adult Education Association (Deutscher Volkshochschul-Verband e.V.) Funded by the Federal Ministry of Education and Research.
Target groups	<ul style="list-style-type: none"> Teachers who can use the platform in multiple ways <ul style="list-style-type: none"> In addition to courses Blended-learning-settings For virtual courses Individuals for self-learning <ul style="list-style-type: none"> persons with little German language skills persons with missing basic school skills (elementary/secondary)
Duration	<ul style="list-style-type: none"> Since 2018 and ongoing Fully implemented and developed Gets expanded regularly
Accessibility & User-friendliness	<ul style="list-style-type: none"> Registration necessary, but no costs The website is structured clearly and available in 21 languages A German audio output is provided for each element on the website Many courses require some German language skills
Structure	
Objective	<ul style="list-style-type: none"> The tool is clearly designed as an addition to education and training programs, since it is not possible to get certificates through it. There are different courses that are designed to prepare for speaking German in specific occupational fields, finishing secondary school or the naturalization test.
Structure	<ul style="list-style-type: none"> The tool provides the users with a wide range of courses for different topics. In these courses the users can select single lessons that contain a set of selectable assignments. The platform can also be used as a learning-management system for teachers, who can communicate through the platform with the participants. The platform connects its online content with face-to-face teachings and shows possibilities to find classes in the vicinity of the users.
Didactical	<ul style="list-style-type: none"> In the courses a combination of text, pictures, audio and video content



<p>approach</p>	<p>is used to facilitate the lessons.</p> <ul style="list-style-type: none"> • Assignments can be solved through selecting correct answers, writing them or drag-and-drop pictures in the right field. • The system gives direct feedback after finishing one assignment and it is possible to get feedback by the teacher directly.
<p>Quality Standards</p>	<ul style="list-style-type: none"> • The content of the courses is based on the curriculum framework of the German Adult Education Association, the curriculum framework of the Federal Office for Migration and Refugees, the education standards of the Standing Conference of the Ministers of Education and Cultural Affairs and the Digital Competence Framework 2.0 of the European Commission.
<p>Digitalization & Implementation</p>	<ul style="list-style-type: none"> • The platform is completely web-based and accessible and optimized for usage on different devices and screens. • Additionally there is a smartphone application for the language courses. It allows the users to download single lessons, so they can use it without a steady internet connection.
<p>Contents</p>	
<p>Topics</p>	<ul style="list-style-type: none"> • learning to speak and write German (A1 to B2) • German for occupation (healthcare, professional driver, logistics, hotel and catering) • literacy and numeracy in general and for work • Digital skills • easy-to-read information about news, politics and health
<p>Evaluation</p>	
<ul style="list-style-type: none"> • The platform is accessible and clearly structured. The wide range of available languages make the tool especially suitable for vulnerable groups that have difficulties with the German language. • The flexible structure of the tool allows for the use in different settings. As a tool to manage a whole physical or virtual class, for blended-learning settings or for individual self learning. 	



General information	
Name	ANTON - Lernplattform für die Schule (https://anton.app/de/)
Organization & Financing	<ul style="list-style-type: none"> ● Free, digital learning platform that supports pupils from 1st to 10th grade in various subjects. ● ANTON was launched by solocode GmbH in 2016. ● The development of ANTON was partly co-funded by the EFRE (“Europäischer Fonds für regionale Entwicklung”), enabling the platform to be made available to schools and pupils at no cost. ● “ProFIT-Programm der Senatsverwaltung für Wirtschaft, Energie und Betriebe” supported the development of the technology platform on which ANTON is based. ● Although the basic functions of the app are free, ANTON offers additional functions for a fee, such as offline learning via the “ANTON-Plus” subscription.
Target groups	<ul style="list-style-type: none"> ● Pupils (from 1st to 10th grade, partly upper secondary level and preschool), teachers, schools, families, self-learners.
Duration	<ul style="list-style-type: none"> ● Since 2016 and ongoing. ● Internet access necessary, offline mode only available with the “ANTON-Plus” subscription (10 Euros/month).
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Registration is necessary, but no costs - except for the “ANTON-Plus” subscription. ● ANTON covers a wide range of subjects, including math, German, English, science and music. ● The app is available in German, English (UK/US), French, Spanish, Portuguese (BR).
Structure	
Objective	<ul style="list-style-type: none"> ● ANTON teaches 14 subjects (German, maths, English, natural sciences, geography, biology, chemistry, physics, history, German as a second language (DaZ), music, later also French, Italian, Russian, Ukrainian) for grades 1-10 of all school types in the form of exercises and interactive explanations.
Structure	<ul style="list-style-type: none"> ● ANTON focuses on playful and interactive learning to deepen understanding of the learning content ● The learning philosophy is game-like and includes a reward system with stars and trophies that students can receive as they progress. <ul style="list-style-type: none"> ○ Stars are obtained from the standardized tasks, trophies are obtained from the tests at the end of the respective learning topics. For six of these stars and trophies, the student receives a coin. Students can use the coins to play video games in ANTON and design and personalize their avatars.
Didactical approach	<ul style="list-style-type: none"> ● The app uses interactive exercises that convey the learning material in the form of games and practical tasks. ● ANTON adapts to the user’s learning level. The exercises and tasks become more difficult or easier depending on the student’s progress.



	<ul style="list-style-type: none"> ● Students can regularly check their progress and receive direct feedback on their answers. ● The app uses a reward system where students receive points or medals for achieving learning goals.
Quality Standards	<ul style="list-style-type: none"> ● The contents of the ANTON-Lernapp are created by experts in the respective fields. Educators and subject teachers who are familiar with the curricula and the learning needs of pupils are involved in the development of the learning materials. ● ANTONS learning content is based on the curricula of the various federal states in Germany. This ensures that the learning content corresponds to the official curriculum. ● The app is updated regularly to ensure that it meets the latest requirements and changes in the education sector. This includes both content adjustments and technical improvements. ● ANTON continuously receives feedback from teachers, parents and pupils. This feedback is incorporated into the further development of the app and helps to constantly improve the quality of the content and functions. ● There are regular reviews and tests of the learning content to ensure that it is correct and understandable.
Digitalization & Implementation	<ul style="list-style-type: none"> ● The app is available for both Android and iOS devices and can also be used via the web browser. ● The offline mode is only available with the “ANTON-Plus” subscription (10 Euros/month).
Contents	
Topics	<ul style="list-style-type: none"> ● Depending on the subject and the corresponding curriculum of the federal state.
Evaluation	
<ul style="list-style-type: none"> ● As the learning app/platform that can only be accessed via a user account, nothing can be said about the user-friendliness of the ‘front end’. ● The app is free, can be used on various devices and is available in different languages. Thus, it is a good learning tool not only for students, but also for young low-/unskilled self-learners. ● Nevertheless, ANTON is an app for pupils - thus, not all subjects covered by ANTON might be necessary to learn for someone who is no longer of school age. <ul style="list-style-type: none"> ○ It also remains to be clarified whether the app would be available for (low-/unskilled) adult self-students at all. ○ Furthermore, as the app uses interactive exercises that convey the learning material in the form of games and practical tasks, it might not be suitable for ‘older’ low-/unskilled persons. 	



B1.2: Occupational Skills

Example from Germany

General information	
Name	Prozubi (https://prozubi.de/)
Organization & Financing	<ul style="list-style-type: none"> ● Prozubi is an online learning platform that was founded in 2013 by three Master's students at Leuphana University Lüneburg. ● u-form Verlag, a partner of the Chamber of Industry and Commerce/"Industrie- und Handelskammer" (IHK), which offers learning materials for the IHK intermediate examination and the IHK final examination for all sales occupations, has invested in Prozubi back in 2014. ● Depending on the exam to be taken, learning packages or individual exam topics can be purchased via the online store for a fee and with different durations.
Target groups	<ul style="list-style-type: none"> ● Trainees in sales occupations. <ul style="list-style-type: none"> ○ At present, the focus is still on sales trainees, but trainees in industrial-technical occupations can also make use of some of the available learning packages. ● Companies that supervise trainees in sales occupations.
Duration	<ul style="list-style-type: none"> ● Since 2014 and ongoing. ● Internet access required for use, content only available online via the platform.
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Prozubi is available only in German. ● For trainees: <ul style="list-style-type: none"> ○ A registration is necessary to make use of the purchased content. ○ There is a 30 days free access option (with just a limited number of videos and exercises available). ○ The learning content must be purchased in the online shop and is then available online via the platform depending on the selected duration (1, 3, 6 or 12 months). ○ The price is paid once, there is no subscription system. ● For companies: <ul style="list-style-type: none"> ○ 'Company packages' are offered to accompany the trainees during their training and prepare them for the examination. ○ To receive such a package, companies must contact Prozubi (by telephone or in writing).
Structure	
Objective	<ul style="list-style-type: none"> ● The tool is designed to prepare trainees in sales occupations for the IHK examination (final or intermediate examination).
Structure	<ul style="list-style-type: none"> ● The entire content is divided into exam topics, modules and lessons. Each exam topic is divided into several modules and each module consists of several lessons.



	<ul style="list-style-type: none"> ● Each lesson contains a learning video that summarizes the topic of the lesson in 3-8 minutes. Each video is followed by a short quiz with questions that are designed exactly like the questions in the IHK exam. ● Learning takes place with learning videos, exercises, quizzes and additional “Prozubi-Plus-Aufgaben”.
Didactical approach	<ul style="list-style-type: none"> ● Exactly the knowledge required for the IHK-exams is taught. ● Various forms are used to present the content: Videos, quizzes, exercises. ● It provides an overview of what has already been learned and what still needs to be learned. ● The “Azubi-Starterpaket” contains basic modules on correct behavior, difficulties during the training period etc.
Quality Standards	<ul style="list-style-type: none"> ● All content is created strictly according to the specifications of the IHK and the IHK-AkA examination catalogue. ● In addition, current IHK examinations are constantly analyzed in order to adapt the learning content accordingly.
Digitalization & Implementation	<ul style="list-style-type: none"> ● The platform is completely web-based and accessible on different (mobile) devices and screens; an app is available. <ul style="list-style-type: none"> ○ It is possible to download and print some additional “Prozubi-Plus-Aufgaben”.
Contents	
Topics	<ul style="list-style-type: none"> ● Various topics, all based on the IHK exam conditions for the different vocational trainings in the field of sales occupations.
Evaluation	
<ul style="list-style-type: none"> ● Prozubi is aimed exclusively at trainees in sales occupations/or companies with trainees in sales occupations who want to take an IHK exam. ● In addition, the website, platform and learning materials are only available in German and are not free of charge. ● Therefore, Prozubi is less suitable for the further training of vulnerable groups, such as low-skilled or unskilled workers. 	



Example from Spain

General information	
Name	Experiencia Fundae (https://experienciafundae.es/)
Organization & Financing	<ul style="list-style-type: none"> Developed and financed by the Fundación Estatal para la Formación en el Empleo (Fundae), eFundae is supported by NextGenerationEU recovery funds to promote accessible, high-quality training for employment in Spain.
Target groups	<ul style="list-style-type: none"> Trainers SMEs Workers Self-employed Social economy workers Young Unemployed
Duration	<ul style="list-style-type: none"> Since 2021 and ongoing Fully implemented and developed Gets expanded regularly
Accessibility & User-friendliness	<ul style="list-style-type: none"> Courses are structured into thematic modules, each with an estimated duration, enabling learners to plan their educational journey according to their personal and professional commitments. Designed with user accessibility in mind, eFundae features an intuitive interface compatible with various devices, including desktops, tablets, and smartphones. The platform adheres to inclusive design principles, ensuring that individuals with different abilities can navigate and benefit from the resources available. Video: https://youtu.be/w1Cplyj3cwA
Structure	
Objective	<ul style="list-style-type: none"> The primary goal of eFundae is to facilitate continuous professional development by providing innovative, accessible, and free digital learning resources, thereby contributing to the digital transformation and competitiveness of the Spanish workforce.
Structure	<ul style="list-style-type: none"> There are two main sections: <ul style="list-style-type: none"> Digitalizate: https://experienciafundae.es/digitalizate/1, where you can access free training resources provided by large companies (e.g. Google, Accenture, IBM) thanks to agreements signed with Fundae and the collaboration of the Spanish PES. Platform eFundae https://www.efundae.es/: where you can access courses either by skills (Entrepreneurship and business management, Innovation and technology, Strategy and sustainable management and Transversal skills) or by areas (Programming, Design, Video Games, Sustainability and Environment and data analysis and management)
Didactical approach	<ul style="list-style-type: none"> eFundae employs a learner-centered approach, combining multimedia resources, interactive exercises, and practical projects. This methodology



	encourages active learning and real-world application of skills, enhancing both engagement and retention.
Quality Standards	<ul style="list-style-type: none"> The platform's courses align with national and European training frameworks, ensuring that the content meets high-quality standards and is recognized across professional sectors.
Digitalization & Implementation	<ul style="list-style-type: none"> Utilizing advanced technologies, eFundae delivers a seamless e-learning experience. The platform supports interactive content, real-time progress tracking, and provides certificates upon course completion, facilitating the integration of new skills into professional profiles.
Contents	
Topics	<ul style="list-style-type: none"> eFundae covers a broad spectrum of topics to address the evolving needs of the labour market.
Evaluation	
<ul style="list-style-type: none"> eFundae distinguishes itself as a comprehensive and user-centric learning platform, offering a wide array of courses tailored to the current demands of the labour market. Its commitment to accessibility, quality, and practical application makes it a valuable resource for individuals and organizations aiming to enhance their professional capabilities and adapt to the evolving digital landscape. 	



B1.3: Future Skills

Example from Germany

General Information	
Name	Future Skills Journey (https://future-skills-journey.de/)
Organization & Financing	<ul style="list-style-type: none"> Financed by: European Union, Bundesministerium für Bildung und Forschung, Stifterverband, NEOCOSMO
Target Groups	<ul style="list-style-type: none"> Beginners in the field of future skills
Duration	<ul style="list-style-type: none"> Available unlimitedly; course durations: 2 to 8 hours
Accessibility & User-friendliness	<ul style="list-style-type: none"> Free of charge, user account necessary Future Skills Journey is free and openly accessible to all interested users. The platform is designed to be user-friendly, with clear navigation and structured learning paths that help users easily find relevant courses. Content is divided into different competency areas, including digital, classic, and transformative skills, allowing learners to choose according to their interests and needs. Additionally, the platform offers support for universities and schools looking to integrate Future Skills into their teaching.
Structure	
Objective	<ul style="list-style-type: none"> Facilitation of users' future skills on a low-threshold level
Structure	<ul style="list-style-type: none"> Divided into several courses ("journeys") consisting of different types of digital input (videos, articles, etc.)
Didactical Approach	<ul style="list-style-type: none"> Self-learning
Quality Standards	<ul style="list-style-type: none"> Lecturers are highly academic and professionalized (trustworthy)
Digitalization & Implementation	<ul style="list-style-type: none"> Future Skills Journey is an online learning platform offering a wide range of digital educational resources such as videos, interactive modules, podcasts, and quizzes to enhance user engagement. The platform is hosted online and accessible from various devices, ensuring flexibility for learners. Users can navigate through structured learning journeys tailored to different skill levels and areas of interest. The platform supports universities and schools in embedding Future Skills content into curricula.
Contents	
Topics	<ul style="list-style-type: none"> Data literacy, digital competences, democracy, ethical aspects of data use
Evaluation	
<ul style="list-style-type: none"> Useful because it implements important competencies for everyday office use 	



- No, it is not difficult to use
- No physical certificates; facilitated skills might only be relevant for a small portion of low- and unskilled persons
- Recommended for low- and unskilled persons who are technically and digitally interested and might seek a career in computer-related fields



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B1.4: Digital Skills

Example from Spain

General information	
Name	Fundae Ilunion Courses for Social Economy (https://economiasocial.fundae.es/cursos)
Organization & Financing	<ul style="list-style-type: none"> This initiative is a collaborative effort between the State Foundation for Employment Training (Fundae) and ILUNION, aiming to provide free, high-quality training resources. The program is supported by public funds, including contributions from the European Union and the Spanish Ministry of Labour and Social Economy.
Target groups	<ul style="list-style-type: none"> The courses are specifically designed for individuals and organizations within the social economy sector, including cooperatives, mutual societies, foundations, associations, and social enterprises seeking to enhance their digital competencies and overall productivity.
Duration	<ul style="list-style-type: none"> Each course varies in length, typically ranging from a few hours to several days, allowing participants to engage at their own pace. The content is regularly updated to reflect emerging trends and technologies relevant to the social economy.
Accessibility & User-friendliness	<ul style="list-style-type: none"> The training is delivered online, providing flexibility and accessibility to accommodate diverse schedules and learning preferences. The platform is designed to be user-friendly, ensuring easy navigation and access to course materials. It is optimized for various devices, including desktops, tablets, and smartphones, enabling learners to access content from any location.
Structure	
Objective	<ul style="list-style-type: none"> The primary goal is to empower social economy entities by enhancing their digital skills, thereby improving operational efficiency, fostering innovation, and promoting sustainable growth within the sector.
Structure	<ul style="list-style-type: none"> The curriculum encompasses a range of topics pertinent to the social economy, organized into thematic modules. Each module includes interactive lessons, practical exercises, and assessments to reinforce learning outcomes.
Didactical approach	<ul style="list-style-type: none"> Blended learning methodology, combining theoretical knowledge with practical application. Includes multimedia content, real-world case studies, and collaborative projects to facilitate comprehensive understanding and skill development.
Quality Standards	<ul style="list-style-type: none"> All courses are developed and reviewed by experts in the field, ensuring alignment with current industry standards and practices.
Digitalization & Implementation	<ul style="list-style-type: none"> The platform includes advanced digital tools to deliver content effectively, including cloud-based applications, interactive simulations, and secure digital certification upon course completion.



Contents	
Topics	<ul style="list-style-type: none"> ● Cybersecurity: Understanding the importance of protecting sensitive data and maintaining user privacy. ● Digital Content Creation: Techniques for producing engaging and effective digital materials. ● Digital Signature and Public Administration Procedures: Utilizing digital signatures to streamline administrative processes securely. ● Productivity Enhancement with Microsoft 365: Leveraging Microsoft 365 tools to improve document management and professional communication. ● Collaborative Work with Cloud Tools: Strategies for effective teamwork using cloud-based applications. ● Troubleshooting Basic Technical Issues: Skills to identify and resolve common technical problems independently. ● Trends in Digital Technology Usage: Insights into current and future digital technologies to boost efficiency and productivity in social economy entities.
Evaluation	
<ul style="list-style-type: none"> ● It is quite unique to count on specific courses for the social economy organizations. ● It addresses critical skill gaps, enabling entities to navigate the complexities of the digital landscape effectively. ● There are many practical tools. 	



Example from Luxembourg

General information	
Name	42 Luxembourg (https://42luxembourg.lu/)
Organization & Financing	<ul style="list-style-type: none"> ● Réseau d'écoles 42 (1ere création à Paris en 2013) ● 2022 in Luxembourg ● Digital learning hub (under the authority of the Ministry of National Education, Children and Youth)
Target groups	Individuals for self-learning <ul style="list-style-type: none"> ● Over the age of 18 ● No diploma or prerequisites are necessary ● Coding experience are not required
Duration	<ul style="list-style-type: none"> ● Since 2022 in Luxembourg ● Fully implemented
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Registration is necessary, but no costs ● Open 24/7
Structure	
Objective	<ul style="list-style-type: none"> ● Develop technical skills ● Develop soft skills (team working, responsibilities, ...) ● Long-term integration into the labour market ● Reduce the digital skills gap
Structure	<ul style="list-style-type: none"> ● Two parts: <ul style="list-style-type: none"> ○ Common core: learning the fundamentals of software engineering (generally 12-18 months) ○ Specialization (e.g. AI, mobile or web development, cybersecurity)
Didactical approach	<ul style="list-style-type: none"> ● Peer-to-peer learning ● Peer-to-peer evaluation ● Project-based approach ● Learning by doing ● Learn to learn ● Principles of gamification (the program is built on levels) ● No formal classrooms or teachers ● Research and teach yourself knowledge to gain valuable skills
Quality Standards	<ul style="list-style-type: none"> ● Information not available on the website
Digitalization & Implementation	<ul style="list-style-type: none"> ● On-site ● Full-time program ● Duration between 18 months and 5 years
Contents	
Topics	<ul style="list-style-type: none"> ● Coding ● Software development ● Adaptation and innovation in digital technologies



	<ul style="list-style-type: none">• AI
Evaluation	
<ul style="list-style-type: none">• According to the Ecole 42 website, 'as soon as their initial work placement is completed, two-thirds of our students are offered their first permanent contract'.	



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Example from Romania

General information	
Name	ACSOL eLearning Toolkit (https://bcomm.ro/acsol/)
Organization & Financing	<ul style="list-style-type: none"> Developed within the ACSOL Project, funded by the European Union's Erasmus+ Programme.
Target groups	<ul style="list-style-type: none"> Low-skilled workers in the social care and arts & culture sectors. Vocational Education and Training (VET) providers supporting digital upskilling. Organizations seeking to improve digital competencies among their workforce.
Duration	<ul style="list-style-type: none"> Since 2022, Developed within the ACSOL Project timeframe, with long-term accessibility. Developed under the ACSOL Project, designed to enhance digital skills among low-skilled workers and improve VET training methods.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Publicly accessible online learning platform. Free of charge. Available in five languages: English, Spanish, Romanian, German, and Italian. Provides self-paced learning through structured interactive e-learning modules. Accessible anytime, anywhere, with user-friendly navigation. Designed for both individual learners and trainers in VET institutions.
Structure of the tool	
Objective	<ul style="list-style-type: none"> To increase the digital skills of low-skilled workers in social care and arts & culture sectors, helping them adapt to new job market demands.
Structure of the tool	<ul style="list-style-type: none"> Modular E-Learning System: Digital skill-building lessons organized by sector. Customized Learning Paths: Users can select training based on their profession. Practical Application: Real-world examples and interactive exercises. Guided Learning Support: Designed for self-study but can be integrated into formal VET programs.
Didactical approach	<ul style="list-style-type: none"> The ACSOL Toolkit combines digital literacy training with sector-specific needs. It follows a competency-based learning model, integrating hands-on exercises, case studies, and real-world applications.
Quality standards applied	<ul style="list-style-type: none"> Developed with input from sector experts, VET trainers, and policy-makers. Aligns with European digital skills frameworks and lifelong learning principles. Based on scientific research and best practices in adult learning.
Digitalization & Implementation	<ul style="list-style-type: none"> Fully digital, accessible from any device with internet connectivity. Ideal for self-paced learning by individual users.



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	<ul style="list-style-type: none"> ● Can be integrated into VET curricula for structured training programs. ● Useful for organizations and HR departments aiming to upskill employees.
<p>Contents of the tool</p>	
<p>Topics covered</p>	<ul style="list-style-type: none"> ● Introduction to Digital Skills: Why digital skills are essential in today’s workplace. ● Basic Digital Skills: Foundations of using digital tools effectively. ● Client-Centered Digital Tools: Applications specific to the social care and arts & culture sectors. ● Innovation and Digital Transformation: How to integrate digital skills into professional development.
<p>Evaluation</p>	
<p>Pros:</p> <ul style="list-style-type: none"> ● Sector-specific focus ensures training is relevant to real-world job demands. ● Free and multilingual, making it widely accessible. ● Provides flexible, self-paced learning, adaptable to different skill levels. ● Supports career progression and lifelong learning. <p>Cons:</p> <ul style="list-style-type: none"> ● Requires basic digital literacy to access and navigate. ● May lack interactive guidance compared to traditional classroom settings. ● Some users may need external support to fully implement learning in the workplace. 	
<p>Recommendation</p>	
<ul style="list-style-type: none"> ● During career upskilling programs for low-skilled workers. ● As part of VET training curricula to integrate digital skills development. ● When organizations seek to improve digital readiness among employees. ● Low-skilled workers in social care and arts & culture sectors. ● Vocational trainers and educators. ● Employers and HR professionals looking to implement digital upskilling programs. ● VET providers, trainers, and career counselors guiding learners in using the e-learning materials effectively. 	



B1.5: Language Skills

Example from Luxembourg

General information	
Name	Language Lab (https://digital-inclusion.lu/language-lab/)
Organization & Financing	<ul style="list-style-type: none"> ● Digital inclusion (provision of commercial language-learning software) <ul style="list-style-type: none"> ○ Non-profit organization funded by the Ministry of Family Affairs, Solidarity, Living Together and Reception of Refugees.
Target groups	Individuals for self-learning <ul style="list-style-type: none"> ● persons who live in Luxembourg ● 18+ (except for MNA's-unaccompanied minor refugees) ● Asylum seeker or beneficiary of temporary protection or receive the cost-of-living benefit
Duration	<ul style="list-style-type: none"> ● Since 2020 and ongoing ● Fully implemented ● Individuals can use the software for up to 6 months.
Accessibility & User-friendliness	<ul style="list-style-type: none"> ● Registration is necessary, but the service is free ● Adaptation to the participant's language level ● Support in Open Classroom
Structure	
Objective	<ul style="list-style-type: none"> ● Promote social inclusion ● Learning English, French or German ● The tool is a complement to traditional language classes, it does not provide academically recognized certificates
Structure	<ul style="list-style-type: none"> ● Combines text, images, sound (listening and speaking)
Didactical approach	<ul style="list-style-type: none"> ● Immersive language learning software ● Rosetta Stone learning software (real-world scenarios, interactive activities, pronunciation feedback)
Quality Standards	/
Digitalization & Implementation	<ul style="list-style-type: none"> ● The platform is available from computer or smartphone
Contents	
Topics	<ul style="list-style-type: none"> ● learning English (A1 to B1) ● learning French (A1 to B1) ● learning German (A1 to B1)
Evaluation	
<ul style="list-style-type: none"> ● The software includes a built-in self-evaluation feature for each language level. ● Additionally, Digital Inclusion tracks how frequently license holders use the software (without monitoring their progress, as this is managed by the software itself) to determine 	



who should retain their license. This ensures a fair distribution of these commercial licenses, prioritizing beneficiaries who actively and regularly use them.

- Furthermore, the consistently high number of registration requests for the Language Lab over time demonstrates the ongoing relevance and effectiveness of this digital training activity.



**Co-funded by
the European Union**

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

B2: Career Development Tools

B2.1: Examples from Italy

General information	
Name	LabLab (https://lablab.regione.lombardia.it/)
Organization & Financing	<ul style="list-style-type: none"> Developed by Regione Lombardia (Lombardy Region), Italy.
Target groups	<ul style="list-style-type: none"> High school, university, and vocational training students, as well as career counselors and educators involved in career guidance and decision-making.
Duration	<ul style="list-style-type: none"> Unlimited, accessible online at all times. Launched in 2023 to support students' career orientation with an emphasis on practical work experiences and future job market trends
Accessibility & User-friendliness	<ul style="list-style-type: none"> Completely free and accessible through the official website. LabLab is designed with an intuitive and user-friendly interface, providing seamless navigation and personalized career path exploration
Structure	
Objective	<ul style="list-style-type: none"> Supports students in discovering potential career paths by providing real-world work experience simulations and matching educational paths with market needs.
Structure	<ul style="list-style-type: none"> Career Exploration Resources: a collection of guides, articles, and resources about different professions and how to pursue them. Simulated Work Experiences: interactive features where students can experience job roles or industries through digital simulations. Networking Opportunities: tools for connecting students with professionals and mentors in various industries. Thematic Workshops: regularly hosted sessions on topics like innovation, technology, and industry-specific trends.
Didactical approach	<ul style="list-style-type: none"> Integrates interactive, hands-on learning methods with real-world work scenarios, offering personalized guidance for students to make informed decisions about their futures.
Quality standards	<ul style="list-style-type: none"> LabLab collaborates with industry experts and career advisors to ensure the quality and relevance of the content. It is based on international best practices for career orientation and skills development.
Digitalization & Implementation	<ul style="list-style-type: none"> Fully digital, accessible from any device with internet connectivity. Ideal for use in both formal and informal educational settings, either individually or as part of group sessions led by educators or career coaches.
Contents	
Topics	<ul style="list-style-type: none"> Industry Profiles: detailed descriptions of various professions and the skills required to succeed in those fields. Education and Career Paths: information on the training programs and qualifications needed for different career opportunities.



	<ul style="list-style-type: none"> ● Emerging Job Markets: insights into future job trends and the impact of new technologies on the workforce. ● Career Development Resources: tools for creating resumes, preparing for interviews, and building professional networks.
<p>Evaluation</p>	
<ul style="list-style-type: none"> ● Provides access to practical work simulations and career insights that help students make well-informed decisions. ● Tailored content based on individual preferences, strengths, and market trends. ● Offers opportunities to engage with professionals from various sectors. ● Some users may need support to interpret simulated experiences or navigate advanced features. 	
<p>Recommendation</p>	
<ul style="list-style-type: none"> ● When: During career orientation, especially for students looking to explore practical work experiences and connect with real-world industries. ● By whom: High school, university, and vocational training students (TS_ETSP), as well as career coaches, mentors, and educators supporting students in their career planning. ● With the help of: Educators and career counselors who can guide students in making the most of the interactive and immersive content offered by LabLab. 	



General information	
Name	TalentHub (https://www.talenthub.coach/)
Organization & Financing	<ul style="list-style-type: none"> Developed and managed by the government of Lombardy Region in collaboration with Jobiri, an innovative career guidance start-up.
Target groups	<ul style="list-style-type: none"> High school and university students, young professionals, and individuals seeking career reorientation, as well as educators and career coaches involved in guiding career choices.
Duration	<ul style="list-style-type: none"> Unlimited, available online at all times. Launched in 2021, TalentHub focuses on providing career orientation tools and services, with a strong emphasis on supporting youth and professionals in their career development and skills assessment.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Completely free and accessible via the official website. The platform is designed with an intuitive interface that makes navigation easy and provides personalized career advice through interactive tools.
Structure	
Objective	<ul style="list-style-type: none"> Helps individuals identify career opportunities by evaluating their skills, preferences, and potential job market trends. The tool guides users towards making informed decisions about their educational and career paths.
Structure	<ul style="list-style-type: none"> Skills Assessment: an interactive self-assessment tool to evaluate users' skills, strengths, and career interests. Career Path Finder: personalized guidance on how to pursue different career options, including advice on courses, internships, and career opportunities. Job Market Insights: information on labour market trends, the skills in demand, and guidance on the emerging job sectors. Mentorship and Networking Opportunities: tools to connect users with mentors, industry professionals, and networks that can guide them in their career journey.
Didactical approach	<ul style="list-style-type: none"> Combines personalized career coaching with practical, data-driven tools to help users explore their options and develop skills needed to succeed in the workforce. It emphasizes self-reflection, personalized learning, and career development.
Quality standards	<ul style="list-style-type: none"> Developed based on internationally recognized career development and coaching methodologies, ensuring high standards of guidance.
Digitalization & Implementation	<ul style="list-style-type: none"> Fully digital, accessible from any device with an internet connection. Suitable for both formal educational settings (high schools, universities) and informal career counseling environments.
Contents	
Topics	<ul style="list-style-type: none"> Skills Assessment: helps users understand their strengths and areas for improvement through detailed evaluations.



	<ul style="list-style-type: none"> ● Career Advice and Pathways: offers step-by-step guidance on how to pursue different career options based on users' profiles. ● Labour Market Trends and Insights: up-to-date information on industries and sectors that are expanding, as well as emerging job opportunities. ● Networking Tools and Mentorship: provides opportunities for users to connect with professionals and mentors in their field of interest.
<p>Evaluation</p>	
<ul style="list-style-type: none"> ● Offers personalized career guidance and skill development resources. ● The self-assessment tool is a valuable feature for individuals looking to clarify their career goals. ● Regular updates on labour market trends help users stay informed about current opportunities. ● Some users might need additional help interpreting results or integrating the tool with real-world experiences. ● The platform might not cover all niche professions in detail. 	
<p>Recommendation</p>	
<ul style="list-style-type: none"> ● When: ideal for career orientation, re-skilling, or when individuals are considering switching careers or industries. ● By whom: high school and university students, recent graduates, professionals considering a career change, and job seekers. ● With the help of: educators, career counselors, or mentors who can assist users in navigating the platform and making the most of the available resources. 	



General information	
Name	ExcelsiOrienta (https://excelsiorienta.unioncamere.it/)
Organization & Financing	<ul style="list-style-type: none"> Developed and managed by Unioncamere, the Italian Union of Chambers of Commerce, Industry, Crafts, and Agriculture.
Target groups	<ul style="list-style-type: none"> High school and university students in the process of career and educational orientation, as well as teachers, tutors, and parents involved in guidance and decision-making.
Duration	<ul style="list-style-type: none"> Launched in 2021 and redesigned in December 2024 to improve user experience, content, and interactivity. Unlimited, available online at all times.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Completely free and accessible via the official website. Designed with an intuitive and interactive interface, including ExcelsiOrientaGame, a self-assessment quiz to engage users actively
Structure	
Objective	<ul style="list-style-type: none"> Helps students identify suitable educational and career paths based on their skills and market demand, supporting informed career choices.
Structure	<ul style="list-style-type: none"> Career orientation guides: detailed information on professions, educational paths, and job opportunities. Thematic sections: topics like entrepreneurship, ITS Academy, and emerging job markets. OrientaGame: a self-assessment quiz to help students discover their strengths and interests.
Didactical approach	<ul style="list-style-type: none"> Combines updated labour market information with interactive tools for self-evaluation, promoting active and personalized learning.
Quality standards	<ul style="list-style-type: none"> OrientaGame was developed in collaboration with the Work Psychology Research Group of the University of Bologna, based on internationally recognized career guidance models.
Digitalization & Implementation	<ul style="list-style-type: none"> Fully digital, accessible from any internet-connected device. Can be used in formal and informal educational settings, both individually and with the support of educators or tutors.
Contents	
Topics	<ul style="list-style-type: none"> Descriptions of professions and their related educational paths. Information on ITS Academy (Italian Higher Technical Institutes) and the opportunities they offer. Insights into entrepreneurship and how to start a business. Analysis of emerging professions and labour market trends.
Evaluation	
<ul style="list-style-type: none"> Provides clear and updated information on accessible training pathways and labour market demands. ExcelsiOrientaGame helps users identify transferable skills and personal inclinations. Supports realistic and achievable career planning. 	



- Some users might require assistance in interpreting self-assessment results or navigating the platform.

Recommendation

- When: during educational and career orientation phases, especially in transitions or re-skilling periods.
- By whom: students, job seekers, and individuals in professional requalification programs.
- With the help of: educators, career advisors, tutors, or mentors who can provide personalized support and contextualize the provided information.



B2.2: International Examples

General information	
Name	Value My Skills (www.unionlearn.org.uk/value-my-skills)
Organizations financing	<ul style="list-style-type: none"> The development of the online tool was supported by the European Union's Erasmus+ Programme as part of the Mid-Life Skills Review Project.
Target groups	<ul style="list-style-type: none"> To assist individuals in identifying and assessing their transferable skills, facilitating personal development, career progression, and employability.
Duration	<ul style="list-style-type: none"> Since 2019, Unlimited, accessible online at all times. Launched as an interactive online tool in June 2019 to support individuals in assessing and identifying their transferable skills, enhancing career planning and job mobility.
Accessibility & User-friendliness	<ul style="list-style-type: none"> Completely free and accessible via the official website. Available in multiple languages, including Romanian, English, Finnish, French, German, Italian, and Spanish. Provides a user-friendly interface for job seekers and employers. Offers personalized support services, including CV assistance and interview preparation. Features such as integration management and specialized consultancy enhance the matching process between candidates and job opportunities
Structure of the tool	
Objective	<ul style="list-style-type: none"> Helps individuals identify, assess, and develop transferable skills for career advancement, professional development, or transitioning to new job opportunities.
Structure of the tool	<ul style="list-style-type: none"> Self-Assessment Tool: Users rate their competence across different skills and record their reflections. Skill Categorization: Skills are grouped into four categories – People, Ideas, Data, and Things – helping individuals recognize their strengths. Action Planning: Users can create personalized action plans based on their assessment results. Career Exploration Resources: Provides materials and guidance to help users align their skills with job opportunities. Tracking Progress: Users can save their results and return to update their skill assessments over time.
Didactical approach	<ul style="list-style-type: none"> The tool follows an interactive and self-reflective learning approach, allowing users to analyze their skills, strengths, and career potential. It provides structured steps for self-guided skill assessment, making it accessible to individuals with various levels of experience.



Quality standards applied	<ul style="list-style-type: none"> Developed in collaboration with career guidance professionals, unions, and educational experts. The framework aligns with international best practices in career development and lifelong learning strategies.
Digitalization & Implementation	<ul style="list-style-type: none"> Fully digital and available online, accessible from any device with an internet connection. Ideal for individual use but can also be utilized in career coaching sessions, HR departments, and vocational training programs.
Contents of the tool	
Topics covered	<ul style="list-style-type: none"> Industry Profiles: detailed descriptions of various professions and the skills required to succeed in those fields. Education and Career Paths: information on the training programs and qualifications needed for different career opportunities. Emerging Job Markets: insights into future job trends and the impact of new technologies on the workforce. Career Development Resources: tools for creating resumes, preparing for interviews, and building professional networks.
Evaluation	
<p>Pros:</p> <ul style="list-style-type: none"> Empowers individuals by helping them identify and articulate their transferable skills. Free and easily accessible online, making it widely available. Provides personalized insights and action plans to improve employability. Supports career transitions by helping users align their skills with job opportunities. <p>Cons:</p> <ul style="list-style-type: none"> Relies on self-assessment, which may be subjective. Some users may require career coaching to fully utilize the results. Lacks direct integration with job databases for employment matching. 	
Recommendation	
<ul style="list-style-type: none"> During career planning and job transitions, particularly for individuals assessing their skills for professional growth. When preparing for job applications, career changes, or upskilling. Workers, job seekers, students, and individuals looking to explore their skillsets and career options. Career advisors, HR professionals, and union representatives assisting individuals in workforce development. Career counselors, educators, and HR professionals who can guide users in interpreting their skill assessments and using them to enhance career prospects. 	



General Information	
Name	Skills Profiling Tool - OECD https://oecd-skillsprofilingtool.org/skills-profile
Organization & Financing	<ul style="list-style-type: none"> Owned and run by the OECD Developed in cooperation with the JPMorgan Chase & Co. Foundation
Target Groups	<ul style="list-style-type: none"> Job seekers
Duration	<ul style="list-style-type: none"> Launched 2022
Accessibility & User-friendliness	<ul style="list-style-type: none"> Accessible without costs and in three languages (English, Spanish, Portugues). The tool can be performed in 30 Minutes.
Structure	
Objective	<ul style="list-style-type: none"> Provide guidance for individuals and career guidance counselors.
Structure	<ul style="list-style-type: none"> Three types of skills are assessed: <ul style="list-style-type: none"> occupation-specific skills foundational skills (literacy, numeracy and digital skills) a set of noncognitive skills The tool generates a personalized skill profile, that can be benchmarked against other users, and a list of suggested occupations that would fit the profile.
Didactical Approach	<ul style="list-style-type: none"> Occupation-specific skills are assessed through matching current or past occupations with the O*NET database and the ISCO and their connected skills. Foundational Skills are assessed through a survey To assess noncognitive skills the tool uses acknowledged self-reported tests.
Quality Standards	<ul style="list-style-type: none"> The Tool was going through extensive testing by users and career guidance counselors.
Digitalization & Implementation	<ul style="list-style-type: none"> The tool is fully digitized. Best use is in counseling situations, where users are already in a professional career guidance situation and can discuss the results with professional counselors. Especially useful for individuals with low or no formal education.
Evaluation	
<ul style="list-style-type: none"> As a supplement to professional career guidance the tool is ideal to give the user and counselors an orientation. Also individuals can use it to get a skill profile and a orientation for possible future career paths. 	



Appendix C: List of Interviews

Knowledge partner	Interview partner	Date
Johann-Wolfgang-Goethe-Universität Frankfurt am Main - IWAK	LAG Arbeit in Hessen e.V. (Association of TS_ETSPs)	13/01/2025
	BauHaus Werkstätten Wiesbaden (Member TS_ETSP of the LAG Arbeit in Hessen e.V.)	14/01/2025
	Outlaw Kassel (Member TS_ETSP of the LAG Arbeit in Hessen e.V.)	17/01/2025
Universita' Degli Studi di Milano-Bicocca	Fondazione Piazza dei Mestieri ETS (TS_ETSP)	21/01/2025
Prospektiker, S.A. - Instituto Europeo de Prospectiva y Estrategia	Sartu (TS_ETSP)	15/01/2025
LISER - Luxembourg Institute of Socioeconomic Research	Digital Inclusion (TS_ETSP)	23/01/2025
Universitatea de Vest din Timisoara	Grupul de Actiune Locala Freidorf (TS_ETSP)	27/01/2025



Appendix D: Questionnaire

Information for planning trainings for vulnerable groups

- What information do you need to plan training for un- and low-skilled persons?
- Where do you get this information from, what are your sources?
- Would you like to have other or more information/sources to get a better idea on the demand of your regional labour market for un- and low-skilled persons?
- What do you know about the situation of TS_ETSPs in planning training? Do most of them apply the same type of information or other, which is?
- What do you think, how could the planning of training better be aligned to labour market needs and demands? What would be helpful?

CEDEFOP Data

- Are these the occupational groups which you would have had in your mind when thinking about jobs for low- and unskilled persons?
- Which of the occupational fields on the list did you not expect to be there?
- Do you think it would be helpful to have this additional information for planning training? If so, why would it be useful?
- In general, do you think, if there would be a website with such information relevant to your region, would the Third Sector Employment and Training Service Provider (TS_ETSP) visit it in case they need information for planning their trainings?

Digital training tools

- Do you know Good Practice examples of digital tools applied in trainings for vulnerable groups?
- How are these tools applied, for self-learning purpose or in teaching sessions?

