



Potential of the EU transparency tools and national systems of qualifications in dealing with skill mismatches and fostering sustainable labour migration

Executive summary

This policy brief highlights the potential of EU transparency tools for qualifications (such as the European Qualifications Framework for Lifelong Learning (EQF), ESCO, and others) and national qualification systems to address skills mismatches and foster sustainable, effective and fair migration as one of the solutions to these mismatches. This primarily relates to the solution of the problems of the growing skills shortages due to the aging of population and implementation of the green and digital economic development agendas in the EU. Comparability and transparency of the national systems of qualifications are important factors for implementation of the EU Talent Partnerships and making use of the EU Talent Pool initiatives.

Research is based on the three questions:

- What are the key expectations on the potential of the EU transparency tools in solving skill mismatches and enhancing sustainable migration patterns in the destination and origin countries?
- How are the national systems of qualifications applied in dealing with skills mismatches and the issues related to workforce migration?
- What factors define their effectiveness?
- What are the (possible) synergies of the EU transparency tools and the national systems of qualifications in fostering skills matching and sustainable migration?

This paper is based on the interim findings of the Horizon Europe research project 'Skill partnerships for sustainable and just migration patterns (Skills4Justice)' Horizon-CL2-2023-TRANSFORMATIONS-01-03 No. 101132435.

Provided policy recommendations address the issues of the recognition of qualifications in dealing with skill mismatches and ensuring sustainability of labour migration. Recommendations for the EU national policy makers address the usage of the EU policy instruments and measures of the transparency of qualifications in matching supply and demand of skills and fostering of sustainable labour migration. There are also recommendations provided on exploiting the potential of the national systems of qualifications in dealing with raised issues of recognition of qualifications and solving the problems of skills shortages and migration.

POLICY BRIEF

Horizon Europe research project 'Skill partnerships for sustainable and just migration patterns (Skills4Justice)' Horizon-CL2-2023-TRANSFORMATIONS-01-03 No. 101132435.



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1 Introduction

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Recognition of vocational and professional qualifications and competences, by regulating access to skilled employment is an important factor in matching the demand and supply of skills in the labour market and the occurring mismatches in the labour market of the project partner countries.

What regards skills mismatches in the EU, Cedefop's Second European Skills and Jobs Survey (2022)¹ shows that four in 10 workers (40%) are mismatched in terms of qualification level; around 28% are overqualified, having higher levels of education than their job requires; 12% are underqualified. 17% of EU+ workers are affected by 'severe' overqualification, meaning that they are employed in jobs substantially below their level; similarly, about 8% are 'severely' underqualified. Looking at differences by qualification level, tertiary education graduates represent the largest share of overqualified workers in the EU+: over one in three graduates (34%) from higher education institutions have qualifications that exceed those required by their jobs. Around one quarter (26%) – of medium-educated workers also consider themselves overqualified. In countries with high quality VET systems (Germany, France, Italy, Poland, Lithuania in the Skills4Justice project), medium level overqualification potentially implies significant labour productivity losses. 12% of lower-educated employees (e.g. predominantly lower secondary graduates) consider themselves overqualified because they have a low-quality job below their own education level. Almost two thirds (65%) of workers in the EU are in jobs that require their field of study or a related field. Horizontal matching is generally weaker in Eastern Europe (Poland, Lithuania) than in other areas of the continent. Workers in skilled occupations are more often horizontally

well-matched than workers in other occupations. Their jobs are most likely (for 30% of them) to require exclusively their field of study. This is around three times higher than is the case for workers in elementary occupations and 50% higher than for workers in manual occupations. At the lower end of the occupational spectrum, elementary occupations employ the largest share of workers in jobs that do not require a specific field (53%), four times the share for workers in skilled occupations (13%). The share of workers with completed upper secondary or post-secondary, non-tertiary education in jobs that do not require a specific field is much higher, compared to tertiary education graduates (30% versus 17%). On average, six in 10 EU+ workers (63%) feel – to a great (16%) or moderate (47%) extent – that they need to develop their knowledge and skills to improve job performance. The ESJS2 shows that 52% of EU+ adult workers need to develop their digital skills further to do their main job better than at present: 13% significantly and 39% to a moderate extent.

In the UK, Francis-Devine and Buchanan (2023) drawing on data from the ONS Business Insights Survey highlighting the high proportions of employers with vacancies, and pointing to high shortages in many industrial sectors, including hospitality, construction and health. Evidence on the vacancies, the sectoral and occupational distribution of labour and skills shortages in the UK labour market can also be seen from the 2022 Employer Skills Survey (ESS)². In 2022, they find a total of 1.5 million current vacancies amongst employers in the UK, a figure that had risen from 600,000 in 2011, and 1 million in 2017 (Department for Education, 2023). Many of these are 'skills shortage vacancies' defined as hard to fill vacancies due to a lack of skills amongst applicants. The ESS finds that high proportions of skills shortage vacancies are

¹ <https://www.cedefop.europa.eu/en/tools/european-skills-jobs-survey>

² https://assets.publishing.service.gov.uk/media/672a2743094e4e60c466d160/Employer_Skills_Survey_2022_research_report__Nov_2024_.pdf



found in a range of sectors, notably construction, IT, manufacturing, health and social work and education.

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The overall trends in demand and supply of skills in Norway include increased demand for skilled labor, with skilled wages rising and firms adopting skill-complementary technologies (Carneiro, Liu & Salvanes, 2023) (high-tech), also affected by globalization, resulting in reduced demand for unskilled labor – with the exception of salmon fish-farming industry in rural Norway (Finseraas & Nyhus, 2024; Sellevåg, 2021) - and, relatedly, to increased skill mismatches and changes in wage structures (Bjørnstad & Skjerpen, 2006). Immigration from Central and Eastern Europe, powered by economic growth and resulting higher wages for lesser skilled workers and structural changes in industries facing shortages in local labor supply has led to increased supply in certain sectors, affecting wages, employment, and the social organization of work (Friberg, 2016). Despite significant investments made in adult education and reforms aimed at improving basic skills, the proportion of low-performing adults has increased, particularly among the younger and foreign-born populations with low and middle skills levels. This suggests a misalignment between educational programs and labor market needs in the area of VET (Billington, Nissinen & Gabrielsen, 2017), while the matching of demand and supply in the field of higher education has been satisfactory.

Overqualification and underutilization of skills are very typical skill mismatches in the labour market of North Macedonia and Türkiye. A significant share of discouraged individuals, particularly younger men, not seeking work due to perceived unavailability of jobs suggests underutilized skills in the North Macedonian labour market. Long periods of unemployment which are often four years or more also point to skill mismatches, especially among those with EQF level 4 education who struggle to find roles that match their qualifications. Although higher education does not entirely prevent long-term unemployment, it is less common for the least educated to remain jobless for extended periods, indicating

that underutilization stems more from a lack of alignment between available skills and employer needs than from insufficient credentials alone.

According to the OECD (2023:102), over 80% of employers in Türkiye struggle to fill vacant positions, particularly in middle-level skills and blue-collar jobs. Shortages are most acute in manufacturing, operations, and logistics. Many vacancies remain unfilled due to a lack of professional skills or insufficient work experience. Most sectors facing labour shortages require skills below university level, which can be obtained through vocational education and training courses. The main reasons for these shortages include a lack of applications, dissatisfaction with work conditions, insufficient professional skills, and inexperience.

Forced migration and business relocation during the war in Ukraine have caused significant disruptions in regional labour markets, leading to an uneven distribution of jobs and changing demand for qualifications. For example, the share of vacancies in the group "Workers for maintenance, operation, and monitoring of process equipment" decreased from 24.9% in 2022 to 18.4% in 2023. Despite the overall employment decline, the highest demand for professionals in 2023 was seen in sectors such as: "Legislators, senior civil servants, administrators, managers" (e.g., sales managers, chief accountants); "Specialists" (e.g., accountants, medical nurses); "Trade and services employees" (e.g., food sellers, cooks); "Qualified workers in agriculture, forestry, and fishing"; "Qualified workers with tools" (e.g., seamstresses, electricians); and "Workers in maintenance and operation of technological equipment" (e.g., drivers, tractor operators, boiler plant operators).

Skills shortage in Ethiopia is observed in the areas of advanced technical skills, job-related digital skills, and skilled machine operators. Conversely, there are ample unemployed or underemployed HE and VET graduates, where the problem mainly stems from two sources: graduates' lack of practical skills and the lack of economies that can create decent jobs.



High level of unemployment and underemployment in this country is caused by the young population with a migration mind-set, successive experiences of displacement due to natural disasters and conflict, and the inherent nature of people migrating from peripheral, rural, or resource-scarce settings to urban areas or regions, as well as the emigration of skilled workers.

The regimes and approaches of recognition of qualifications can both generate skill mismatches and resolve them. The process of recognition of skills, competences and qualifications is an integral part of the national system of qualifications, which defines the design, provision, awarding and quality assurance of qualifications within a given country. This recognition also underpins global transactions involving human capital enhanced by the transnational mobility of jobs and working people. Qualifications and their systems are important measures in regulating the labour migration where they can be used for attracting, screening, directing, relocating the migrant workforce in the labour markets and education systems of the destination countries (in case of immigration), as well as in the origin countries (in case of return or circular migration). The recognition of a qualification acquired in the other country depends on the transparency of the national systems of qualifications of the origin and destination countries, as well as on the comparability of the foreign qualification to the 'counterparts' in the destination country in terms of level and content. Globalization of the labour markets and educational provision in the last decades enhanced development of different transnational transparency tools of qualifications, such as regional qualifications frameworks and international datasets of skills and qualifications. This paper discloses the potential of the EU transparency tools of qualifications (European Qualifications Framework for Lifelong Learning (EQF), ESCO and others) and the national systems of qualifications in dealing with mismatches of demand and supply of skills and fostering sustainable migration as one of the solutions of these mismatches. Research is based on the three questions:

- 1) What can we expect from the EU transparency tools in solving skill mismatches and enhancing sustainable migration patterns in the destination and origin countries?
- 2) How are the national systems of qualifications applied in dealing with skills mismatches and the issues related to workforce migration? What factors define their effectiveness?
- 3) What are the (possible) synergies of the EU transparency tools and the national systems of qualifications in fostering skills matching and sustainable migration?

This paper is based on the interim findings of the Horizon Europe research project 'Skill partnerships for sustainable and just migration patterns (Skills4Justice) Horizon-CL2-2023-TRANSFORMATIONS-01-03 No. 101132435. This project aims to develop systemic analysis of skills shortages in the 5 EU countries and 6 non- EU countries in the context of the global workforce migration by providing research-based evidence on the nature and development of skill shortages as well as on the potential of different skills partnerships to tackle these shortages in the countries of origin and destination of migrants. Amongst other targets, the project aims to design the shortage model for recruitment of skilled workers in the seven countries of destination of migration (Germany, France, Italy, Poland, Lithuania, Norway, UK) by referring to the agency of existing skill partnerships in these countries. Also, there has been conducted evaluation of the labour market in looking how the demand of skills in the labour market is matched with the supply of skilled workforce in the countries of origin – North Macedonia, Ukraine, Türkiye and Ethiopia. These research activities were conducted in 2024 and involved systemic analysis of mismatches between the demand and supply of skills in the above indicated 11 countries, exploration of the labour market context of skill supply and demand in the chosen sectors/occupations, clarifying the role of qualifications systems in linking skill supply with demand, as



well as investigation how education and training systems involved in skill formation address skills shortages and mismatches.

In executing empirical study there were conducted interviews (face-to-face and online ways) and focus groups with the respondents from enterprises, employers' organizations, trade unions, governmental institutions and bodies working in economic, employment, education and training and migration policies, vocational education and training providers, higher education institutions, non-governmental organizations and labour market intermediaries working with migrant workers.

67 interviews were conducted in Lithuania, 40 interviews in Germany, 28 interviews in France, 27 interviews and 4 focus groups involving 18 participants in Italy, 30 interviews in Poland, 40 interviews in Norway, 45 interviews in the UK, 49 interviews in North Macedonia, 40 interviews in Türkiye, 76 interviews in Ukraine and 40 interviews in Ethiopia.

The data of interviews were analysed by applying thematic analysis. Conducting interviews and analysis of findings took place in the period from May to December 2024. The findings of interviews were analysed by triangulating them with the findings from the literature review and analysis of the official statistical data on employment, skill formation and migration. Research reports are available at the project website <https://www.skills4justice.eu>.

2 Qualifications and their transparency tools in the EU –potential in matching skills demand and supply and enabling fair and sustainable employment of the migrant labour force

There is a broad range of EU policies and instruments aimed to foster transparency and

comparability of skills and qualifications. European Qualifications Framework for Lifelong learning (EQF) facilitates comparability of the levels of qualifications through referenced National Qualifications Frameworks of the EU countries, as well as thorough referencing of the EQF with the other national and regional qualifications frameworks of the world.³ The information for comparison of the contents of qualifications in terms of learning outcomes, competences, credits is provided in the broad range of European databases including Europass, European Learning Model (ELM) for structuring data on skills and qualifications, the multilingual European Classification of Skills Competences, Qualifications and Occupations (ESCO), the European Digital Credentials for learning (EDC) allowing for the building, issuing in a digital format, storing, sharing and verification of qualifications and other credentials awarded by educational and training organisations to be understood and verified in all Member States⁴.

Skills-first principle in the inter-country recognition of skills and qualifications - ensuring fairness of recognition based on relevance to skills needs at work

The European Commission Recommendation EU2023/7700 of 15 November 2023 on the recognition of qualifications of the third country nationals⁵ outlines fundamental principles for transparent, fair and non-discriminatory recognition of qualifications of the third country nationals. One of these key principles is 'skills-

³ Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:c11104>

⁴ Europass: <https://europass.europa.eu/en>; ELM: <https://europa.eu/europass/elm-browser/index.html>; ESCO:

https://esco.ec.europa.eu/en/classification/skill_main; EDC: <https://europass.europa.eu/en/europass-digital-tools/european-digital-credentials-learning>

⁵ https://single-market-economy.ec.europa.eu/publications/commission-recommendation-recognition-qualifications-third-country-nationals_en



first' meaning the priority to the identification of the real skills of the applicants from the third countries in matching people with jobs in the destination countries. What are the implications of following this principle in the inter-country comparability of qualifications? First, this principle brings the comparison and comparability of qualifications for the recognition purposes closer to the matching of demand and supply of skills. What happens when the comparability of skills becomes the main object of the recognition of qualifications of the migrant workers? In this case qualification becomes a more auxiliary object of comparison which guides comparison in terms of localisation of compared sets of skills in the concrete occupational areas and work processes as well as in terms of defining the vertical localisation of these skills according to established levels of qualifications in the NQF. Secondly, this principle also brings the process of recognition closer to the work processes and workplaces by requiring more active involvement of the employers and trade unions in this process. At the same time, it requires to delegate more functions and responsibilities in the process of comparison and recognition of the skills and qualifications of the third country nationals to the companies, trade unions and other local labour market actors (decentralization of the process). Thirdly, it stresses the importance of the links of comparison of the skills and qualifications with the monitoring of the labour market needs, as the professional skills in the work processes are subjected to much more intensive and fast changes compared to more stable formal qualifications.

The need for improving recognition of professional qualification is also reconfirmed in the special report of European Court of Auditors - ECA (2024) *The recognition of professional qualifications in the EU: An essential mechanism but used sparsely and inconsistently*⁶. This report raises such issues as lack of electronic procedures and large differences between countries in the handling of application procedures, varying and unjustified fees for the

recognition of professional qualifications among Member States, excessive and contradictory requirements for the documents to be submitted, disproportionate compensatory measures, the lack of monitoring of recognition procedures, insufficient use of the established EU qualifications tools like European Professional Card, absence of the common training framework, insufficiently user-friendly and inaccurate Internal Market Information System for exchange of information between competent authorities as well as information for EU citizens on the recognition of professional qualifications. Report outlines some degree of uncertainty among member states as to which extent Directive on the recognition of professional qualifications is applicable to third country qualifications.

EU policies support the development of the open and transparent systems of qualifications in the EU and in the neighbouring regions as precondition of just and sustainable mobility and migration

EU policies are directed to supporting development of the open and transparent national sectoral and regional systems of qualifications which create conditions for sustainable and reciprocally beneficial international mobilities of the citizens for the purposes of education and employment. Such mobilities involve imperative for open and transparent comparison of qualifications demanded in the labour markets of the EU and those provided in the third countries, including:

- 1) Linking and referencing of the national qualifications and their databases with the EU transparency tools, including

⁶ https://www.eca.europa.eu/ECAPublications/SR-2024-10/SR-2024-10_EN.pdf

EQF, European Learning Model version 3, ESCO.

- 2) Establishing direct comparability/comparison exercise between the national qualifications of the origin and EU countries.

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The key principles of ensuring justice and sustainability in dealing with skills shortages within the EU and managing migration from the third countries are consideration of the situation in the national labour markets in the origin and destination countries and usage of the European transparency tools in dealing with qualifications. Usage and opening of the EU databases and transparency tools for the third countries enables effective interoperability of data on qualifications and competencies, which helps in the smoother recognition of learning outcomes and qualifications of the migrant workers and prevents their overqualification. Besides, it creates a basis for systemic dialogue on the design, provision and awarding of qualifications between the authorities and stakeholders in the origin and destination countries. These transparency instruments operate by creating common references or other background of comparison of qualifications designed and applied in the national contexts of the EU countries. Here the role and potential of the national systems of qualifications for inter-country comparability and transparency of qualifications must be taken into consideration.

3 The potential of the national systems of qualifications in dealing with issues of skill matching and sustainable migration

National systems of qualification enable cross-country comparability of qualifications through universal presence of these systems and their role of intermediation between the labour

Comparison of qualifications and competences between the countries and their mutual recognition takes place in the context of the national systems of qualifications. There exist different definitions of the national system of qualifications. OECD treats national system of qualifications as set of activities, processes institutional arrangements and mechanisms linking education and training to the labour market and civil society, what results in the recognition of learning in a given country (OECD 2007).⁷⁷ Similarly, European Training Foundation (ETF) defines the national system of qualifications as “a set of organisational arrangements in a country that work together to ensure that individuals have access to, and can choose and obtain qualifications that are fit for purpose, meet the needs of society and the labour market, and offer opportunities for employment, recognition, career development, and lifelong learning”(ETF, 2016). These definitions indicate two fundamental features of the national system of qualifications; 1) universal presence (all countries have qualifications systems), what creates institutional preconditions for comparison of qualifications; 2) intermediation between education and training and labour market as a core purpose of the systems of qualifications, what indicates central role of these systems in matching supply and demand of skills. These systems are expected to facilitate aligning the supply of skills with the labour market needs in the sectors of economy, thus preventing mismatches and related loss of the human capital (including economic emigration).

The findings of the exploration of the institutional, political and socioeconomic factors for matching of demand and supply of skills and development of sustainable migration pathways in the 11 partner countries of the Skills4Justice project help to distinguish seven key factors defining potential of the national

⁷⁷ OECD (2007), Qualifications Systems: Bridges to Lifelong Learning, Education and Training Policy,

OECD Publishing, Paris, <https://doi.org/10.1787/9789264013681-en>.



systems of qualifications in dealing with the issues of skills mismatches and migration:

- 1) Stakeholder engagement in the development of the national systems and qualifications.
- 2) Usage of the national systems of qualifications for the control of immigration.
- 3) Reaction of the national systems of qualifications to the skills shortages.
- 4) Fragmentation and incompleteness of the national systems of qualifications and their implications for the cross-country transparency of qualifications.
- 5) Capacity development needs of the national systems of qualifications in dealing with the issues of skills shortages and migration.
- 6) Design and implementation of the multi-country transparency tools of qualifications.
- 7) Development of skills partnerships and their implications for the cross-country transparency of qualifications.

These factors are discussed in the next section.

3.1 Stakeholder engagement in the development of the national systems of qualifications: implications for the matching of the demand and supply of skills and development of sustainable migration patterns

Engagement of the social partners and ownership of the national systems of qualifications by the social partners make national system of qualifications effective instrument for skill matching and development of sustainable migration

Research conducted in the project Skills4Justice disclosed limitations in usage of the instruments of the national systems of qualifications (National Qualifications Frameworks, occupational/qualification standards, etc.) for the matching of supply and demand of skills from the one side and recognition of the competencies and qualifications of the migrant labour in enterprises and by the responsible national or sectoral bodies, on the other side. One of the possible explanations of this problem is related to the extent of ownership of the key instruments of the national systems of qualifications by the corporate, sectoral and national stakeholders. When the companies use national systems of qualifications in developing their own corporate systems and measures, it equips companies with effective and usable measures of better matching supply and demand of skills of their employees (corporate competence or qualifications frameworks serving as background for planning human resource development). Such companies are also better equipped in employment of the migrant workers and recognition of their qualifications. Similarly, active engagement of the social partners and sectoral stakeholders in the development of the national system of qualifications equip these stakeholders with the capacity to assume significant roles and to take initiatives in the areas of recognition of qualifications of the migrant workers. This is evidenced by the example of **German Chamber of Commerce and Industry** and other social partners of collective skill formation systems. Recognition of qualifications of the migrant workers in Germany before becoming regulated by law⁸ was stipulated by the cross-chamber engagement. Looking to the development and usage of the qualifications and their transparency instruments on the sectoral level (sectoral qualifications frameworks and standards), it largely depends on the interest and engagement of the companies in these processes. As shows the example of implementation of the Builders Card in the construction

⁸ Validierungsverfahren (nach § 1 Absatz 6 BBiG); https://www.gesetze-im-internet.de/bbig_2005/_1.html



sector in **Lithuania** in implementing the system for independent and voluntary assessment, validation and certification of the competences of construction workers STATREG⁹, limited usage of sectoral qualifications can be defined by price-based competition, very limited role for qualifications in the human resource management and development practices of enterprises and in the public procurement competitions.

Recommendation to the national policy makers and social partners

Foster the ownership of qualifications and the instruments of the national system of qualifications by the labour market stakeholders - employers, trade unions, professional organizations. It can be done in the different ways:

- 1) by enhancing and supporting the usage of the national system of qualifications in the development of corporate and sectoral qualifications, standards and frameworks;
- 2) by fostering industrial policies favouring competition based on quality and innovations.

Recommendations to the enterprises, employers' organisations and trade unions

Actively use the national qualifications and related instruments (occupational or qualifications standards) in the human resource management and development practices. Also, when developing corporate systems of qualifications or profiles establish clear references with the national system of qualifications. These practices will significantly facilitate and ease recognition of the foreign qualifications when employing migrant workers.

3.2 Usage of the national systems of qualifications for the control of immigration

Requirements of the proof of qualifications used by the labour market stakeholders and policy makers in the destination countries as the instrument of selection, control and preventing of immigration

The requirement of the formal qualifications for employment can be treated very differently – as the formal obstacle to get access to employment, or as employment access opportunity through the recognition of possessed competencies. A proof of qualifications is often regarded by the national policy makers as objectively established, unbiased and just/fair criterion for control of the flows of labour (including immigrants) based on matching the supply and demand of workforce in the labour market. The main objective of this control is to guarantee entrance and worker visas only to the candidates possessing qualifications which guarantee their employment. However, the real practices of such usage of qualifications in the field of migration policy face multiple challenges and limitations. For example, the qualification recognition system in **Norway** does not adequately account for the diversity of international qualifications, leading to disparities in employment outcomes between migrant workers and their native counterparts (Støren & Wiers-Jenssen, 2010). Norway has implemented new recognition procedures for individuals without verifiable documentation, aimed at facilitating the integration of highly educated refugees and migrants (Toker, 2019). Recognition of qualifications of the migrant workers acquired in their home countries can involve the lengthy bureaucratic procedures of validation of possessed foreign credentials or requirements to undergo requalification which includes additional education and examinations. For example, many refugees arrive with professional experience and education that are

⁹ <https://statreg.lt/>



not automatically recognized in Norway, forcing them to undergo lengthy requalification processes. A head nurse from Eritrea, for instance, had to complete over a year and a half of additional education before being eligible to work in Norway. In healthcare in **France**, where many medical and paramedical professions are regulated and require a French national diploma (*diplôme d'état*) to practice, analogue qualifications acquired in countries outside of the EEA and Switzerland are generally not recognized without compensatory measures, while a European nationality condition continues to affect professional integration in a small number of cases. This situation exists against a constantly evolving skills backdrop as the state and social partners interact to create new healthcare professions, education benchmarks and qualifications and reform pre-existing ones, generally indexed in national directories by the regulation authority, *France Compétences* and matched to the NQF, the EQF and EuroPass. For non-EU migrants wishing to access healthcare education and work, the processes of evaluating training, qualifications and experiences gained outside of the EU involve complex procedures and multiple stakeholders, which vary according to the profession, creating a certain illegibility. The intermediary role played by designated organizations, like the ENIC-NARIC centre which provides certificates of the comparability of foreign qualifications for non-regulated professions, remains insufficiently well-known. Outside of bilateral agreements with third countries (or provinces like Québec), healthcare professionals who have already trained and/or qualified outside of the EEA and Switzerland must undergo compensatory measures to practice or resume their studies in order to requalify with the French qualification. However, policy efforts have so far been more focused on the highly skilled, such as doctors and other medical professionals. For medical professionals wishing to requalify to full practice, procedures have been simplified to allow them to work while undergoing additional evaluation and compensatory training, though in precarious and underpaid positions that have allowed the health system to save money on

patient care (Hounsou, 2014; Sirna, 2020, 2021) and generated ongoing protests by doctors' groups. For paramedical professionals, on the other hand, few compensatory measures have been established, other than the possibility to sign up to a course of study in their chosen profession from the beginning, with some exceptions. Despite the shortages in the skilled workforce indicated by government research bodies, cumbersome and challenging recognition, training and compensation procedures, which translate concern for patient care but also bureaucratic obstacles, 'act as a border' for non-EU migrants in accessing training and jobs in healthcare.

Smooth integration of the migrant workers can be fostered by creating recognition systems for informal learning achievements and work experience

Regarding the instrumentalization of the national systems of qualifications and formal qualifications for the control of immigration, research disclosed several key challenges. Comprehensiveness of the applied qualification assessment instruments and consideration of different dimensions of the skills and competencies of migrant workers are essential to ensure that the qualification system supports matching of demand for skills with the supply of migrant labour, as well as it ensures fair and transparent recognition of skills and qualifications of the migrant labour. The decisions regarding the work permits and employment of the migrant workers are often issued only based on the formal referencing of credentials to the national or sectoral qualifications frameworks of the destination country. Such recognition ignores the importance of the skills and competencies acquired by the migrant workers through experiential learning or other informal and non-formal ways and fails to evaluate these aspects due to the absence of relevant instruments in the national system of



qualifications. In case of conservative and restrictive immigration policies of Lithuania and Poland, instigated by the geopolitical tensions in the region, the demand of the skills and qualifications quite often is downplayed or ignored in making decisions on the work and living permits for the third country nationals. The control of immigration narrowly focused on the formal qualifications cannot properly ensure the matching of the skills needs of employers in the destination country, lead to over-qualification and other forms of sub-optimal and unsustainable integration of the migrant workers, create obstacles for their human capital development. Besides, it is not effective for coping with and prevention of the usage of fake qualifications by the migrants to get permissions to immigrate.

Recommendations to the national policy makers and social partners

Comparison of the different institutional approaches of recognition of the qualifications of the migrant workers in the project partner countries shows, that supplementing the recognition of the formal qualifications with the flexible approaches to assessment of the experiential learning and work experience of the migrant workers executed by the social partners organizations enable more transparent, fair and sustainable practices of migration control.

At the same time, delegating more responsibilities and decision-making power on recognition of qualifications of the migrant workers to the labour market actors can make these processes 'leaner' and more convenient for all involved parties. However, here there should be made precautions against possible misuses, discriminations and other negative derivatives caused by the lack of competence and domination of interests of narrow groups of stakeholders. These issues can be tackled by involving multipartite bodies and social partners structures in the recognition of foreign qualifications.

3.3 Reaction of the national systems of qualifications to the skills shortages

Shortage of workforce reduces reliance on the formal qualifications in meeting the demand of skills

Increasing shortage of skilled workforce creates pressure for the revision and reduction of the role of formal qualifications, as it is evidenced by different programmes and initiatives of attracting migrant workers from the third countries implemented by the EU countries, such as the Western Balkans regulation initiative implemented by the Federal Government of **Germany** (see Textbox 1).

Textbox 1. Western Balkans regulation initiative

Since January 2016, the Western Balkans regulation (Section 26 (2) of the Employment Regulation)¹ has made it possible for nationals of non-EU Western Balkan states - Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia - to take up employment in Germany without having to provide proof of vocational qualifications. The conditions are a binding job commitment from the future employer and the approval of the Federal Employment Agency (BA) (Brücker et al., 2020). The Western Balkans regulation is considered as one of the most important in the area of labour migration: As a result, it led to more than the half of the employments of non-EU citizens at skilled worker level or a higher level of activity (Brücker et al., 2020). Since it came into force, the Western Balkans regulation has helped to facilitate access to the German labour market for workers from the Western Balkan states and at the same time meet the demand for skilled workers in Germany (Adunts et al., 2022). Since June 2024, the quota of the Western Balkans regulation has been doubled from 25,000 to 50,000 for easier access.

Enterprises may also have low trust in formal qualifications of the applicants from the third countries. Besides, formal qualifications cannot reflect a full scale and content of human capital possessed by the applicants, especially practical skills and experiential knowledge in the particular occupation.



The national systems of qualifications are pushed to become flexible and quickly adjustable

In case of the abrupt radical changes of demand and supply of skills caused by the 'force majeure' factors, the adjustment of the national system of qualifications targets operability and usability of qualifications and their related instruments. For example, the Russo-Ukrainian war significantly and abruptly changed the demand of qualifications in **Ukraine** both in terms of content (demand of new qualifications to adapt to the demands of defence industry, civil protection, etc.) as well as in terms of structure and types of qualifications (the rise of demand of micro-qualifications to respond to the necessity of fast provision of workforce with required skills profiles – see Textbox 2).

Text box 2 Growth in demand for partial qualifications and microcredits (micro-qualifications) in Ukraine during the war

Short-term training in the conditions of the war in Ukraine is growing to solve the issue of employment of internally displaced persons and to meet the current demand for new skills by employers. For example, in the Dnipropetrovsk region in the 2023-2024 academic year, in 33 vocational education institutions under the programs of VET, competence upgrading, retraining/reskilling and CVET there were studying, 547, 664 and 1,527 internally displaced persons and other adult learners. This is 1.6 times more than in the period of 2022-2023. During the same academic year of 2023-2024, 9 vocational education and training institutions (18 % of the total number of specialised institutions in the region) trained 897 learners by providing them with partial qualifications, which is 3.2 times more than in the academic year of 2022-2023. Training curricula targeting partial qualifications were implemented in the different sectors and occupational areas: construction industry (plasterer, painter, installer of building insulation systems, installer of sanitary and technical systems and equipment, master in installation and maintenance of renewable energy systems, tiler, installer of building insulation systems, building maintenance and repair worker), catering (cook, confectioner); engineering industry (electrician for repair and maintenance of electrical equipment, electric arc and gas welder), other sectors of the economy (cashier, information processing and software operator). Starting from 2023-2024, at the request of the regional employment service and employers the internally displaced persons can enroll in the training programmes awarding micro-qualifications for the critically important sectors of construction and energy supply, including performer of mason works, installation of plasterboard structures, executor of floor coverings, roofer working with of rolled roofs and roofs made of artificial materials, the installer-assembler of metal-plastic structures, the installer of building insulation systems, master of installation and maintenance of renewable energy systems.

The openness and transparency of the national system of qualifications in Ukraine are considered as crucially important for attracting the skilled labour from the other countries in the period of future post-war reconstruction.



Recommendations to the national policy makers and social partners

Skills monitoring and forecasts should become integral part of the national system of qualifications

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Ensure proper links of national system of qualifications with the skills needs forecasting. For example, Lithuania implemented Human Resource Forecasting system which integrates the data from the available administrative statistical databases on population, education, employment and other areas¹⁰. Estonian Qualifications Authority uses similar digital instrument for the forecasting of the skills needs in the sectors of economy – OSKA¹¹.

Facilitate diversity of qualifications by integrating partial, micro-qualifications and credentials in the national system of qualifications, as well as by facilitating the linking of the sectoral and corporate qualifications systems and frameworks to the national systems of qualifications. This would make the national systems of qualifications more flexible and agile in the face of the changes of labour market and society.

3.4 Fragmentation and incompleteness of the national systems of qualifications and their implications for cross-country transparency of qualifications

The openness of the national systems of qualifications to the transparent 'inter-country' comparison of qualifications is compromised by the incompleteness of these systems in terms of availability of the qualifications (e.g., lack or absence of occupational standards and qualification profiles), weakly operating or absent mechanisms of quality assurance and updating of qualifications, lack of established processes and procedures of design of qualifications, assessment of learning outcomes/competencies and awarding of qualifications, low

engagement of stakeholders in the usage, maintenance and development of the national systems of qualifications and other problems. Our conducted study disclosed that this is rather typical not only for the qualifications systems in the origin countries (**North Macedonia, Ukraine, Türkiye and Ethiopia**) but also in the countries of destination of migration, especially those which recently underwent the transition from net emigration to net immigration (Lithuania, **Poland**).

The sectoral qualifications frameworks enable more direct transfer of the information on skills needs and shortages to the skill formation system compared to the NQFs and can provide more objective criteria for the recognition of qualifications of the migrant workers by referring directly to the requirements of the work processes. Besides, sectoral qualifications frameworks are often integrated with different arrangements of the training and competence development which can serve as flexible compensatory training in seeking for recognition of qualification in the destination country.

EU institutions and international donors provide support and policy transfer opportunities in developing their systems of qualifications through different projects and programmes, with the particular focus on implementation of the national qualifications frameworks, design and development of the occupational and qualifications standards, quality assurance of qualifications and other areas.

Recommendations to the EU policy makers and actors

Integrating sectoral qualifications frameworks with the national system of qualifications strengthens their comparability potential

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<https://experience.arcgis.com/experience/b247e11609344bf48c56e0e835fce1ed/>

¹¹ <https://oska.kutsekoda.ee/en/>



Facilitate and support further development of the national systems of qualifications of the EU member states, candidate countries and the third countries participating (or being potential partners) of the skills and migration pacts, with the particular focus on the gaps and shortages influencing transparency and comparability of qualifications.

Support the development of sectoral qualifications frameworks and standards as integral parts of national qualification systems to improve skill matching and ensure transparent recognition of migrant workers' qualifications.

3.5 Capacity development needs dealing with the challenges of skills shortages and migration

There is a need of capacity building of the human resource managers on applying the national systems of qualifications in dealing with skills shortages and migration

Our research disclosed different challenges of recognition of skills and qualifications in matching demand and supply of skills in the labour market and facilitating sustainable migration patterns. One of these challenges is underusage of the available instruments of the national systems of qualifications in the VET and HE curriculum design, assessment of competences and recognition of skills and qualifications. This underusage is usually caused by the low awareness of these instruments amongst the employers, trade unions and other stakeholders, reductionist human resource management strategies and practices of enterprises (especially in case of competition on price and cost minimisation). Companies (especially in the countries which recently opened to the global labour market or became net immigration countries like Lithuania and Poland) lack the expertise and know-how in

the assessment of competencies of the migrant workers and establishment of their comparability to the qualification requirements of the destination country. Consequently, they subcontract these human resource management functions to consultancy firms and recruitment agencies working locally and in the targeted migration origin countries. These circumstances preclude the development of know-how and expertise of the enterprises in the field of skill matching and employment of the migrant workers, also becoming one of the major reasons of their lack of engagement in the related policy actions and initiatives.

Recommendations to the national policy makers and social partners

Invest in the training of the human resource managers and other representatives of the enterprises on the usage of the national systems of qualifications and their instruments in handling skills shortages and employment of the migrant workers.

Engage more actively representatives of the enterprises, trade unions and employers' organizations in the development of the national systems and of qualifications, especially the instruments for recognition of competences and qualifications. This would facilitate development of their expertise.

3.6 Design and implementation of the multi-country transparency tools of qualifications

Instruments for international comparison of qualifications can make a significant contribution to addressing the issues of matching skills supply and demand and strengthening sustainable migration by strengthening the links between instruments for comparing qualification levels and instruments for assessing similarities and differences in the content of qualifications. One of the problems encountered in the assessment and recognition of qualifications acquired in both the countries of origin and destination of migration is the lack of tools to



objectively compare and assess specific competences and/or learning outcomes. The relevance of this problem is further exacerbated by the trend towards partial and micro-qualifications.

Sectoral competence frameworks and regional international professional profiles are potentially powerful instruments of inter-country recognition of skills and qualifications

Therefore, in addition to the development and implementation of regional qualifications frameworks, it would be appropriate to promote the development of regional-sector competence frameworks or international professional profiles containing information on requirements for typical professional competences or learning outcomes in a region. Such regional-sectoral qualifications frameworks can serve both as references for the recognition of qualifications, as well as important resources for planning and implementation of the skills pacts between the destination and origin countries. An example of the development of such instruments is the DARYA project implemented by the ETF, one of the tasks of which is the development of regional qualifications frameworks and prototypes of cross-country professional profiles for the countries of Central Asia. The development of such instruments can serve several purposes: they not only provide an objective basis for the comparison of qualifications but can also serve as important sources of information for improving the transparency of national qualifications systems, and for the development and updating of qualifications standards and descriptors. The involvement of labour market stakeholders from the countries of origin and destination of migration in this process fosters confidence in the instruments being developed and their use in the human resource management, by developing sustainable practices for search, recruitment and repatriating third-country nationals.

Potential of the systematic vision and approaches towards inter-country comparison of qualifications in dealing with skill mismatches and labour migration issues

Looking to the interoperability of the national qualifications systems and the international/multi-country transparency tools of qualifications in the fields of matching of demand and supply of skills and sustainable migration, there can be noticed several key challenges. Existing tools of inter-country comparison of qualifications so far are more advanced in enabling transparent vertical comparability of qualifications with the help of the national and regional qualifications frameworks. At the same time, there is a lack of systemic vision and approach in 'inter-country' comparison of the content of qualifications, especially by referring to the real work processes and related requirements to knowledge, skills and attitudes, despite of availability of some important international and EU reference instruments, such as ESCO, ELM and others.

Recommendation to the national and EU policy makers and social partners

Develop multi-country referencing instruments of qualifications based on existing qualifications, occupational standards or profiles. There are available various examples of such comparability instruments. For example, the VQTS (Vocational Qualification Transfer System) model developed by the group of EU experts and institutions to support transnational mobility in the context of the European Credit System for Vocational Education and Training (ECVET) in 2005 enables the transparent presentation of work-related competences and the process of competence development and can serve as a basis for comparison of quali-



cations, training programmes and occupational profiles, as well as for allocation of qualifications to qualifications frameworks.¹² The multi-country occupational standards and professional profiles developed in the projects of the European Training Foundation present a slightly different kind of referencing instrument designed and implemented in cooperation between countries by integrating the information on the national, sectoral and international requirements to qualifications, competences, knowledge, skills and attitudes related to the selected professional area and qualifications.¹³ Development and usage of this kind of instruments by the interested parties of the international skill matching and regulated migration could help in making the search and employment of the migrant workers more transparent, sustainable and responsive to the labour market needs of both destination and origin countries, also helping to avoid vertical and horizontal skill mismatches in this process and other negative effects.

3.7 Development of skills partnerships – implications for the cross-country transparency and recognition of qualifications

Established obligation of the recognition of qualifications of migrant workers fosters development of clear recognition pathways

Recognition of qualifications is an important factor of the sustainability of skill formation and employment of the migrant workers, especially regarding the dignity of the employment pathways and matching of the skills for migrant workers with the skills need in the labour market of the destination countries. For example, the transnational skills partnerships executed in **Germany** according to the Skilled Workers Immigration Act (FEG) involve recognition of

the qualifications acquired by the participating migrant workers, independently whether the training and upskilling of these migrant workers took place in Germany according to skill-upgrading programmes (also taking into consideration the work experience of the candidates), or they followed the entire apprenticeship course in Germany, or the apprenticeship has been carried out in the country of origin by following the uniform qualification standards also recognized in Germany. Recognition of formal qualifications is a prerequisite only for regulated professions. For non-regulated professions, recognition is generally no longer required. In this case it is necessary to provide the proof of completed vocational training course. For example, in recognising of the qualifications of immigrant nursing the applying professionals receive a notice regarding any missing qualifications and then have a choice between two compensatory measures: an adaptation course or a knowledge test. To support and "simplify" recognition, there is then the option of entering recognition partnerships. The employer undertakes to compensate for any missing qualifications through further training measures. However, if the training is completed in Germany, recognition of the qualifications is not required, as the training was already conducted according to German standards. Although there are sector-specific restrictions, particularly in the regulated professions, these are still bases for skills partnerships that target sustainable recognition of the migrants' qualifications.

Establishment of training facilities by the stakeholders of destination country in the origin country can reduce financial burdens for learners and ensure

¹² <https://vocationalqualification.net/>

¹³ <https://www.etf.europa.eu/en/news-and-events/events/darya-defining-methodology-multicountry-qualifications-pilot-central-asia>



smooth recognition of provided skills and qualifications necessary for work in destination country

When the skills partnerships are implemented on the initiative of the labour market stakeholders, especially employers, the role of awarding and recognition of qualifications of the migrant workers in these partnerships depends on the requirements of the formal qualification for the entering of the destination countries and subsequent employment. Awarding of the internationally recognized qualifications to the training participants in such cases can also become the source of risk for the sustainability of the skills partnership. The case of cooperation between the road transport employers' organizations of Lithuania and Uzbekistan in the training of drivers illustrates this case. In order to meet the growing demand of the road cargo drivers from the third-countries, Lithuanian employers' organizations of international cargo transportation are creating professional training partnerships with organizations of Central Asian countries. Big road freight transport companies and employers' organizations of Lithuania have accumulated and developed know-how and expertise in the area of the training of drivers, certification of their competences and qualifications, employment of the third country nationals. It is a very important factor enabling these companies to initiate and implement skill formation partnerships with the enterprises and employers' organizations in origin countries. These partnerships are based on mutual benefit and added value. Linava, the Lithuanian haulage association together with the Uzbekistan's international haulage association AIRCUZ established the training centre for the training of drivers in Tashkent (Uzbekistan) in 2023. This partnership is expanded by involving the national road freight transport organizations from Latvia, Estonia and Poland. Establishment of such training centre in Uzbekistan significantly reduces the costs of

training and preparation of the drivers, as well as helps to assess the competencies and award the qualifications to the learners before they leave for work to Lithuania. However, this initiative faces some challenges. First of all, it is conservative immigration policy which strongly limits the access to labour visas for the third country nationals from the ex-Soviet Union countries referring to the state security interests in the conditions of the geopolitical tensions in the region. Secondly, the road freight companies involved face difficulties in sustaining the employed drivers from third countries. A qualification recognized in the EU (CPC driver qualification) makes its holders internationally competitive, mobile, thus creating difficulties in sustaining the newly prepared drivers in the Lithuanian companies.

Skills partnerships can target empowerment of vulnerable groups in countries of origin in order to reduce irregular migration and create regular migration pathways based on skills formation

Skills partnerships can also be focused on the capacity building of the VET provision for the empowerment of the vulnerable youth in the origin countries by aligning VET with the skills needs of the local economies and migration destination country. This is a case of the project of national employers' organization of **Italy** Confindustria executed in collaboration with the "Don Bosco" vocational school in Cairo, Egypt, and targeted to meet the Italian demand for qualified technicians¹⁴. Similar projects are also being extended to other vocational training centres in North African countries, always involving large Italian companies in partnerships. These projects are targeted to establish and develop vocational training opportunities

¹⁴ <https://ilcairo.aics.gov.it/it/home-ita/paese/educazione/>



in the areas with high volume of socially vulnerable youth becoming the source of irregular emigration to Europe. Enhancement of the VET centres locally, together with the provision of access to VET in the destination country (Italy), equips vulnerable young people with the skills and qualifications making them employable and competitive in their countries and abroad. These projects seek to implement the training “supply chain” involving vocational training organizations, NGOs and social platforms of the Salesians Don Bosco networks in Italy and African countries, engaged for the socio-professional integration of third-country nationals.

Establishment of pre-departure and post-arrival support actions related to recognition of qualifications needed to ensure smooth mobilities within the skills partnership

Through pre-departure and post-arrival support actions, win-win cooperation schemes (aimed at also having an impact on countries of origin of migrants through employment and business development), according to a well-established methodology, these projects aim to develop synergies between clusters of the VET skill ecosystem in Italy and Northern African countries and are carried out in partnership with companies, intermediary bodies, enterprise associations, and with the support of government authorities of the origin country. In seeking for employment of the young people from the North Africa in Italy the established VET schools and training centres in the North African countries shape a portfolio of skills (which are recognized with formal and non-formal assessment tools, such as competency profiles) suitable to ensure employment in the country of arrival. Skills gaps and shortages of

migrant youth involved are dealt with by applying short, modular and individualized training courses carried out directly by partner institutions and companies involved in the programme. The modules of such training are designed by comparing learning outcomes of the identified vocational qualifications, descriptions of the tasks of the professional profiles in the destination country, with formally and informally acquired competencies gained by the beneficiaries in the country of origin. The partnership between VET providers, policy bodies, companies and social partners developed by the Salesians VET centres in Italy and in African countries is the key: companies cooperate with VET centres and actively participate in all stages, starting from comparison of curricula, provision of guidance for beneficiaries, training and selecting beneficiaries when they have not yet arrived in Italy. In some of these projects which provide for the young migrants from the North Africa the formal initial VET pathway in Italy, or professionalization pathway in the VET centre, if the beneficiary is already in Italy, the Italian regional and national legislation for the recognition of qualifications applies (with references to Italian NQF and EQF). If the beneficiary has not yet entered Italy (or Europe), several approaches are used: design and implementation of an ad-hoc individualised training course in Italy by the training centre (must be validated by the Region) or of an internship at the training centre. The beneficiaries gain access to the country with a study visa which, after one year, may be converted into a multi-annual residence permit. In this case, there is a requirement for learners to obtain at least a general education certificate and the regional or national legislation for the recognition of qualifications applies. In Italy, the Decree DL 20/2023¹⁵ introduced a new visa process enabling international workers from specific sectors to enter and stay in the country after completing a mandatory skill development program: the programs have to deliver pre-departure training courses which covers language,

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<https://www.gazzettaufficiale.it/eli/id/2023/05/05/23A02665/sg>



civic and technical skills presented by Italian companies and VET centres and must be approved by the Ministry of Labour which leads to obtaining a visa for work purposes. This case illustrates the application of the “skills first” principle in the skills partnerships, when the priority is given to the skills training of the migrant youth by applying flexible and modular approaches to the curriculum design, training provision, assessment and recognition of learning.

Addressing labour market needs of the country of origin in the skills partnership to ensure it's fairness and mutual benefits

The application of the comparison of qualifications and related training curricula in the above outlined skills partnerships does not play any critical role, because design of the training curricula is oriented mainly to the skills needs and qualifications needed for the employment in the destination countries – the national qualifications standards in case of the transnational skills partnerships executed in Germany according to the Skilled Workers Immigration Act, international CPC driver qualification in case of partnership between the road freight transport organizations of Lithuania and Uzbekistan, portfolios of skills on the basis of skills needs of the Italian companies in case of cooperation between Italian stakeholders and Egypt on establishment of the VET centres. In all these cases, comparison is applied only for the assessment and recognition of the prior learning of the candidates from the origin countries applying for the training and employment measures. While national qualifications and national systems of qualifications of the destination countries serve as references for the curriculum design in these partnerships, the role and place of the qualifications and curricula of the origin countries remain in the shadow. The same can be stated about the implications of such partnerships for the design and development of qualifications in the origin countries. It can be presumed, that a part of the

training participants involved in the above-mentioned initiatives and programmes will remain in their home countries or return to them after some period, what raises the question of recognition of their skills and qualifications acquired in the destination countries, except the cases when the skills partnerships target provision of the international qualifications. This issue can be pertinent object of the further research and policy discussions.

Recommendation to the national policy makers and social partners

When developing sustainable partnerships targeted to solution of the skills shortages, consider the skills needs of both origin and destination countries. This potentially creates different reciprocal benefits for all involved partners. Consideration of the skills needs of the origin countries makes easier the recruitment and selection of the migrant workers, facilitates transparent recognition of their possessed skills and qualifications, creates preconditions for smooth return and reintegration of the migrant workers to their origin countries after expiring of their employment contracts.

Recommendation to the EU policy makers and actors

Promote synergies between skills development programmes and EU skills partnership initiatives, with a focus on enhancing transparency, comparability, and mutual recognition of qualifications. Such synergy could potentially benefit skills partnerships by providing fair and transparent instruments for the mutual recognition of education and training outcomes based on the national systems of qualifications of all involved countries. The synergy with skills partnerships also serve to the projects and programmes of the development of national systems of qualifications by providing the stimulus and creating concrete playground for the development of comparable qualifications, their design and awarding processes.

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