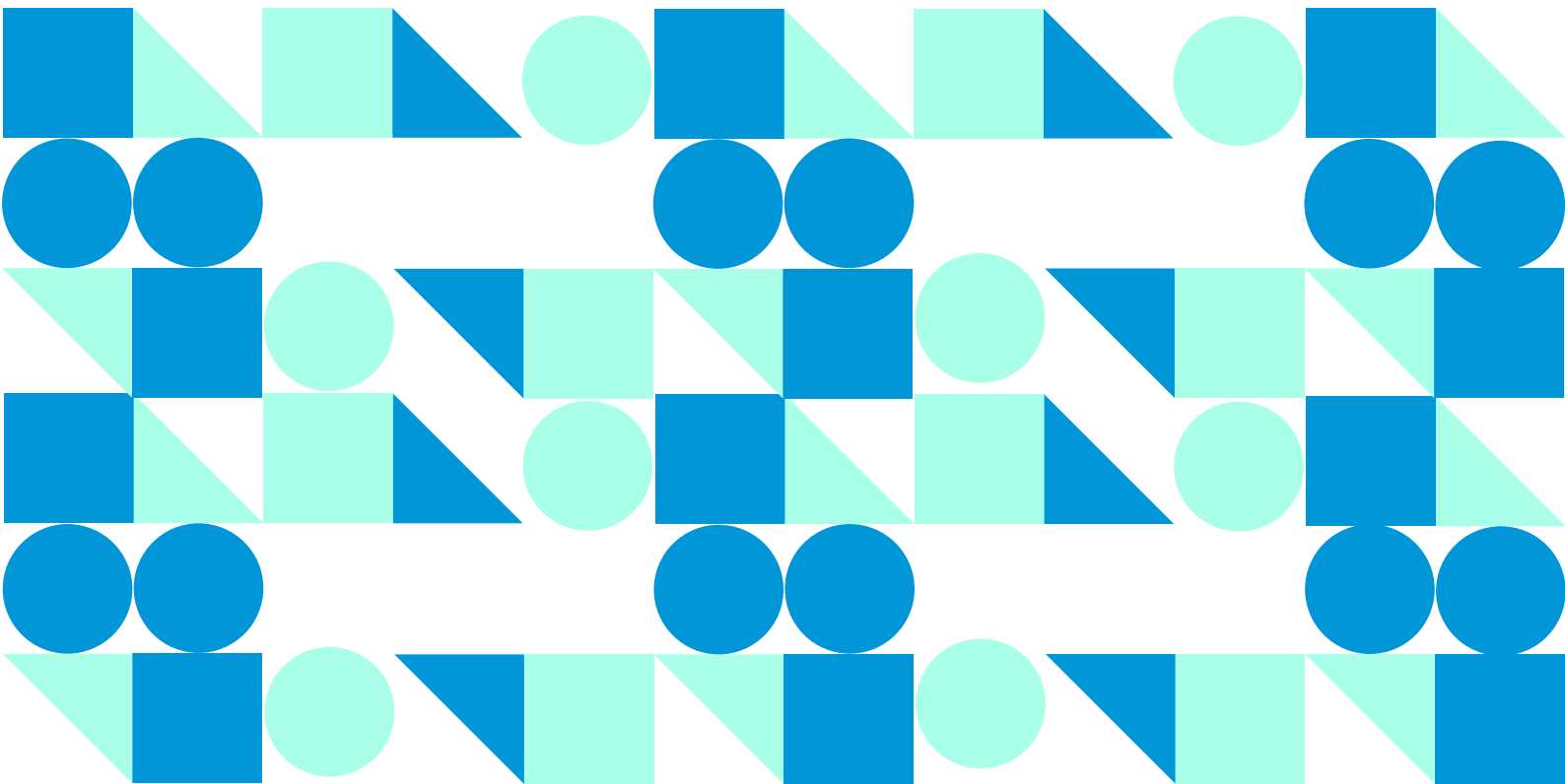




Research paper

Transparency and transferability of learning outcomes: a 20-year journey

Analysis of developments at European and national level





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The **European Centre for the Development of Vocational Training** (Cedefop) is the European Union's reference centre for vocational education and training, skills and qualifications. We provide information, research, analyses and evidence on vocational education and training, skills and qualifications for policy-making in the EU Member States. Cedefop was originally established in 1975 by Council Regulation (EEC) No 337/75. This decision was repealed in 2019 by Regulation (EU) 2019/128 establishing Cedefop as a Union Agency with a renewed mandate.

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Foreword

Learning takes place in all areas of life. Individuals should be able to combine and accumulate learning across institutions, sectors, and countries and return to learning as needed for personal and professional growth. Achieving this requires education and training systems to adopt a learner-centred approach that supports permeability between different education and training systems and flexible learning pathways tailored to individual needs and circumstances.

Over the past two decades, EU and national policies aimed at reducing barriers to lifelong and life-wide learning, often focusing on increasing the transparency of programmes, qualifications, and systems and the promotion of transferability of learning outcomes across formal, non-formal, and informal settings. Taking the turn of the century as a starting point, the Cedefop project, *Transparency and transferability of learning outcomes (2022-25)*, acknowledges the need for a comprehensive, cross-sectoral, and long-term analysis of developments in this area.

Building on Cedefop's extensive experience in developing and supporting implementation of European transparency tools and principles, this report maps relevant policy initiatives across different education and training sectors, reflecting on their coherence and contribution to developments at European and national levels. By combining a comprehensive and long-term perspective, the project aims to offer insights into successes and areas for improvement to inform policy discussions on the way forward.

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(1) More information: [Making learning progression reality: building on lessons from European transparency tool](#), virtual event, September 2022 and [Making learning progression a reality: learners in the spotlight](#), virtual event, February 2024.

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Executive summary

This report presents a comprehensive review of the key policy initiatives that have fostered transparency and transferability of learning outcomes over the past two decades (2000-20) to promote mobility and lifelong learning. It concentrates on European-level initiatives, while also considering national developments, offering an in-depth analysis of the objectives, coherence, and contribution of these initiatives. The report adopts a long-term and comprehensive perspective across education and training sectors, with a particular focus on higher education and vocational education and training (VET).

Background

The publication of the Memorandum on lifelong learning in 2000 (European Commission, 2000) marked the onset of two decades of European policy initiatives aimed at fostering a shift towards more flexible education and training systems, facilitating lifelong and life-wide learning. Over these two decades, the vision of an individually centred education, training, and learning approach has been promoted, contrasting with an approach to education and training that expects individuals to adapt to predefined curricula and teaching methods delivered in specified locations at fixed times. European as well as national developments point to a set of barriers preventing individual learners from entering, re-entering and combining education, training, and learning in a flexible way:

- (a) learning outcomes acquired outside formal education and training institutions are less visible and not fully trusted and valued;
- (b) education, training, and learning systems are diverse and complex, making it difficult for individuals to navigate the system and take ownership of their lifelong and life-wide learning progression, and for employers to make the best possible use of available education, training, and learning resources;
- (c) diverse education and training systems with weak interconnections limit the possibility of transferring (and accumulating) learning outcomes across institutional, sectoral, or national borders.

Designing education and training systems with a focus on learning outcomes, achieved in formal as well as non-formal and informal settings, promotes a shift towards more open and flexible education, training, and learning systems. To map the wide variety of European and national policy initiatives promoting the

transparency and transferability of learning outcomes, the following research questions were developed to guide the study.

- (a) Which European and national policy initiatives, since 2000 and across levels and sectors, address transparency and transferability of learning outcomes (formal as well as non-formal and informal learning)?
- (b) What is the orientation of the policy initiatives and which objectives have been set?
- (c) How are policy initiatives connected to each other and how do they support or contradict each other?
- (d) How can European and national policy initiatives and reforms in this area be judged according to the criteria of sustainability and impact?

Conceptual and analytical framework

To analyse systematically the various policy initiatives, a conceptual framework of five policy thematic areas was developed and employed for the study. This framework resulted from a systematic review of policy documents and was reviewed and agreed upon by policy experts through interviews and a workshop.

The five policy thematic areas are:

- (a) encouraging the use of quality assurance mechanisms;
- (b) encouraging credit accumulation and transfer;
- (c) promoting the comparability of skills and qualifications;
- (d) supporting validation of non-formal and informal learning;
- (e) encouraging mutual recognition of qualifications.

For quality assurance, the European Standards and guidelines for quality assurance in the European higher education area (ESG) and the European quality assurance reference framework for vocational education and training (EQAVET) are examined. In terms of credit accumulation and transfer, both the European credit transfer and accumulation system (ECTS) and the European credit system for vocational education and training (ECVET) are considered. The comparability of skills and qualifications is addressed by exploring the European qualifications framework (EQF), the framework for qualifications of the European higher education area (QF-EHEA), Europass, the emerging framework for microcredentials, the European Skills, Competences, and Occupations (ESCO) classification, and the key competence framework. For the validation of non-formal and informal learning, the focus is on the 2012 recommendation on the topic. Lastly, the recognition of qualifications included analyses of the Professional Qualifications Directive (PQD), the Lisbon Recognition Convention (LRC), and the

Recommendation on promoting automatic mutual recognition of qualifications and learning outcomes.

The analysis of coherence was started by examining the synergies between initiatives associated with the same policy thematic area (internal coherence) and was then associated to different thematic areas (external coherence). To assess the level of coherence, principles and objectives between initiatives, as well as synergies in terms of coordinated management and implementation or further developments, were analysed.

It is crucial to acknowledge the challenges associated with measuring impact and establishing causal relationships, particularly when examining European education and training policy initiatives of, where cooperation is based on the principles of subsidiarity, with EU competences limited to fostering cooperation. The report aims to provide insights into the overall contribution of these initiatives to the objectives associated with fostering the transparency and transferability of learning outcomes.

Research methods

This report is the result of two interrelated phases of the project [Transparency and transferability of learning outcomes: analysing two decades of European and national initiatives](#), addressing the European and, subsequently, the national level. The data presented in this report were gathered through multiple research methods, including an initial scan of the policy literature to map out progress achieved over the past 20 years; eight country case studies (Germany, Ireland, France, Italy, Netherlands, Poland, Romania, Finland) to identify and analyse national policy initiatives; a review of academic and grey literature; semi-structured expert interviews with policy officials specialised in European policy initiatives and with national stakeholders involved (as part of the eight case studies); an online survey (December 2022 to January 2023), filled in by 98 national stakeholders from 28 European countries; online expert workshops in 2022 and 2024 to present and discuss initial findings and gain additional insights into the coherence and perceived impact of these policy tools and initiatives; and extraction of key information from all the evidence collected to answer the research questions.

European cooperation in education and training: strategic frameworks and lifelong learning initiatives

At the outset, the study explores the broader strategic frameworks that have fostered European collaboration in education and training, encouraging lifelong learning, and promoting mobility among European citizens. The 1963 Council Decision established general principles for a common vocational training policy and an Advisory Committee to support the European Commission. Lifelong learning gained prominence in the late 1990s, and the 2000 Lisbon European Council marked the beginning of the Lisbon Strategy, which aimed to promote lifelong learning through increased transparency of qualifications, worker and learner mobility, and the development of a European format for curriculum vitae. The Open method of coordination was introduced to facilitate mutual learning and best practice sharing among Member States.

Launched alongside the Lisbon Strategy, the Bologna Process aimed to reform the European higher education sector by increasing compatibility, comparability, and coherence of higher education systems. In 2002, the Copenhagen Declaration (re)launched European cooperation on vocational training, integrating it into the Lisbon Strategy and its successor, the EU 2020 Strategy. In the context of these overarching strategic frameworks, the Council endorsed the Education and Training 2010 (ET 2010) work programme, succeeded by the strategic framework for European cooperation in education and training (ET 2020). Several Community action programmes emerged after the Maastricht Treaty, such as Leonardo Da Vinci for VET and SOCRATES for general education. European funding streams, such as the European Social Fund (ESF), have significantly supported the development of these programmes, funding interventions and pilot projects across the EU.

European policy initiatives on the transparency and transferability of learning outcomes

Quality assurance

European cooperation in quality assurance has been crucial in strengthening the quality and relevance of learning outcomes in Europe. The European standards and guidelines for quality assurance in the European higher education area (ESG) and the European quality assurance reference framework for vocational education and training (EQAVET), targeting higher education and VET respectively, aim to promote mutual trust, transparency, and recognition of qualifications to enable

mobility and lifelong learning. Both initiatives emphasise a culture of quality, with the ESG being more explicit in the implementation process for higher education and the EQAVET serving as a guide for Member States for VET. Despite differences, their shared objectives include facilitating mobility and lifelong learning. Quality assurance initiatives are closely linked to qualifications frameworks and credit accumulation and transfer, as well as to validating non-formal and informal learning and recognising qualifications. Quality assurance at the national level has seen considerable progress, with all country cases implementing quality assurance mechanisms in both higher education and VET. The primary goal of national policy initiatives has been to improve the quality of learning programmes, qualifications, and education and training providers.

Credit transfer and accumulation

The European credit transfer and accumulation system, originating in 1989, was initially developed for credit transfer within the ERASMUS programme and later evolved to include credit accumulation for lifelong learning. It has been widely adopted in most EHEA countries, improving transparency and recognition of learning outcomes in higher education. However, challenges include estimating required workload and translating it into learning outcomes, as well as credit recognition for student mobility between countries. The European credit system for vocational education and training, established in 2009, aimed to promote portable qualifications and transferable learning outcomes in VET, recognising learning outcomes acquired through formal, informal and non-formal learning. Despite efforts to promote synergies, ECVET impact has been limited, and its compatibility with ECTS is constrained by differences in conceptual design and governance. The 2020 Council Recommendation on VET repeals the ECVET recommendation, although it encourages the use of its principle and the use of ECVET tools like learning agreements and memorandums of understanding for learner mobility, while encouraging the use of ECTS for vocational qualifications at post-secondary and tertiary levels. In the higher education sector, there are strong synergies between quality assurance and credit initiatives, with the ESG supporting tools like ECTS. In contrast, the synergies between quality assurance and credit systems in VET are more limited. National policy initiatives have primarily focused on introducing and developing credit systems in higher education, making learning programmes more flexible and promoting credit transfer and accumulation. The use of credit systems in VET has been more limited and coordination between subsystems is often lacking. However, ECVET has promoted the use of learning outcomes and modularisation of VET qualifications.

Comparability

Qualifications frameworks

Both the European qualifications framework and the framework for qualifications of the European higher education area (QF-EHEA) aimed at improving transparency and comparability of qualifications within Europe. The EQF was adopted in 2008 as a common reference framework of eight levels, covering all types and levels of qualifications, while the QF-EHEA introduced in 2005 focuses on higher education qualifications. Both frameworks use learning outcomes-based levels and promote transparency and comparability for lifelong learning and mobility.

The QF-EHEA and EQF have strong connections and synergies due to their shared objectives, principles, and concepts, as well as efforts to ensure alignment at both the conceptual level and in terms of adopting similar approaches. European-level efforts continue to foster links and interactions between the two initiatives throughout their implementation and development. The EQF has significantly impacted education and training policies, resulting in the development of national qualifications frameworks (NQFs) in most participating countries. Countries have made progress in broadening the scope and coverage of their NQFs, including qualifications from all formal education and training sectors and, in some cases, qualifications awarded outside the formal system. This has enhanced the transparency of education and training systems and fostered cooperation and communication among stakeholders. The use of NQFs has grown among qualification developers and education and training experts, but more efforts are needed to increase awareness and use among the general public. NQFs establish connections with all other policy areas, such as quality assurance, credits, validation of non-formal and informal learning and recognition of foreign qualifications.

Europass

Europass was launched in 2004 to improve the transparency of qualifications and competences, offering a portfolio of documents like the CV, diploma supplement, certificate supplement, language passport, and Europass mobility. Both the Europass diploma and certificate supplements aim to provide a standardised format and structure for sharing and presenting information on qualifications: the diploma supplement shows more connections with other policy developments than the certificate supplement. The 2018 revised Europass Decision aims to modernise and promote interoperability, introducing the Europass portal in 2020. The portal enables users to create an E-profile, store digital credentials, and share their achievements with employers and organisations. The portal also includes the

European Learning Model (ELM), a data model facilitating the publication of information as open data. These developments have the potential to strengthen synergies with developments in quality assurance, credits, validation of non-formal and informal learning and recognition. The Europass portal serves as the main EU access point for individual EQF/NQF qualifications and their learning outcomes.

Microcredentials

Microcredentials are short-term learning experiences, such as courses or training exercises, leading to a record of learning outcomes, with the Council Recommendation promoting their quality, transparency, and adoption for efficient and flexible re/upskilling. They are connected to the modularisation of education and training programmes, and national-level variations often exist under different labels. They have connections with developments in quality assurance such as ESG and EQAVET, the EQF, credit systems, with some experts believing ECVET's principles 'live on in microcredentials' and they can play an important role in supporting validation of non-formal and informal learning.

European skills, competences, qualifications and occupations (ESCO)

ESCO is a multilingual classification system for skills, competences, and occupations, aiming to facilitate communication between employment and education and support job mobility across Europe. It is organised into three elements: occupation, skills, and qualifications. ESCO has no legal basis but is referenced in the EU Regulation on a European network of employment services and the Europass Decision. Since its launch, ESCO has been regularly updated and is currently utilised by employment agencies and within the education sector. ESCO has links with qualifications frameworks, specifically EQF/NQFs and the Europass portal. Pilot projects have looked at linking learning outcomes of EQF/NQF qualifications with ESCO skills and knowledge. ESCO can also be used through the ELM to enrich qualification data by linking learning outcomes of qualifications with ESCO skills and knowledge, allowing for an indirect link with occupations.

Competence frameworks

Competence frameworks, such as the European key competences reference framework, focus on eight key competences essential for individuals' success in various aspects of life and learning. Frameworks like DigComp and EntreComp describe knowledge, skills, and attitudes. They can be used as reference points for education and training provision and can support the development and comparison of qualifications, curriculum, and assessment standards. Although not

directly connected to quality assurance initiatives or credit systems, they align with the EQF, with some countries expanding their NQF learning-outcome descriptors by integrating EU key competence frameworks. The Europass portal incorporates self-assessment tools for digital skills based on the DigComp. ESCO and competence frameworks share a common goal of defining skills and knowledge required for jobs and personal development, employability, active citizenship, and social inclusion.

Validation of non-formal and informal learning

The EU has prioritised policies for recognising learning in diverse contexts and settings since 2000, with the 2012 Recommendation on validation of non-formal and informal learning as a significant milestone. The Recommendation aims to increase the visibility and value of knowledge, skills, and competences acquired outside formal education and training through work, personal life, or voluntary activities. Validation is closely connected to many initiatives, including quality assurance, credits, and qualifications frameworks.

At the national level, validation developments vary widely, with significant variation in frameworks and approaches across Member States. Education remains the primary sector for validation arrangements, with varying degrees of progress in specific education and training sectors. The 2012 Recommendation has contributed to a common understanding of validation, but challenges remain. Despite progress since 2012, the fragmented nature of the validation landscape highlights the need for increased coherence across sectors.

Validation initiatives should link and expand across different education and training sectors and connect with broader policy frameworks, including NQFs, credits, and quality assurance. The implementation of validation is connected to the development of NQFs in several EU countries, with many NQFs explicitly linked to validation policies.

Recognition of qualifications

The recognition of qualifications across the EU has long been a key topic, with initiatives like the Professional Qualifications Directive (PQ Directive), the Lisbon Recognition Convention (LRC), and the Recommendation on automatic recognition aiming to support foreign qualification recognition. The PQ Directive addresses the mutual recognition of professional qualifications within the EU and is legally binding, while the LRC promotes fair recognition of academic qualifications and is an international agreement. The Recommendation on automatic recognition encourages automatic mutual recognition of higher education and upper secondary education qualifications and learning periods abroad.

Synergies between quality assurance, credits and recognition, primarily related to higher education qualifications, have played a significant role in this area. The ECTS system, used in most countries, facilitates credit recognition and transfer between education institutions, promoting international mobility. The EQF/NQFs have become increasingly relevant for the recognition of qualifications, providing a tool for supporting comparability, which is often at the basis of recognition. In some countries, NQFs are only used as a complementary source of information about qualifications; in others, they are actively used in the recognition process.

Discussion and conclusions

The report highlights that the EU Member States' sustained commitment and efforts across the five policy areas over the past two decades offer a successful story of European cooperation in education and training, given that most policy tools and processes are voluntary. The analysis of policy coherence across initiatives points towards an increasingly coherent policy framework aimed at promoting learning mobility and progression, with the learning outcomes approach serving as a unifying element for this coherence. Most developments build upon and support one another, but there are varying levels of synergies between policy initiatives. When limited synergies exist, they are often associated with conceptual barriers or limited cooperation across European and national actors responsible for their development and implementation.

Stronger synergies are more frequently found between initiatives associated with the same education and training sectors rather than the same policy thematic area. This suggests that the 'education and training system' factor has been a stronger driver for promoting synergies than the 'thematic' factor, pointing to the opportunity to improve connections between education and training sectors and advocate for more thematic collaboration as a way to foster permeability between sectors. Stronger synergies are also more frequently found among European initiatives associated with higher education compared to those associated with VET. Initiatives on quality assurance, credits, qualifications frameworks, and recognition appear more integrated and working together in higher education; similar synergies are less evident in VET. This indicates areas where further work at the European level could be promoted.

Overall, there is an increasing focus on learning taking place outside formal learning across the policy initiatives examined, but integrating and accounting for it remains a common challenge across many initiatives. The EQF exhibits the most connections across policy areas and education and training sectors, with varying

coherence levels with other initiatives, particularly regarding the QF-EHEA and validation of non-formal and informal learning. The Professional Qualifications (PQ) Directive showcases minor synergies with the examined initiatives, with limited references to EQF and ECTS. Validation of non-formal and informal learning is promoted in its context; however, there appear to be no particular activities in promoting synergies between developments connected to the 2012 Recommendation on validation of non-formal and informal learning and the PQ Directive. All tools and initiatives examined support the recognition of qualifications in some way and some of them are becoming increasingly intertwined with the recognition process at the national level.

More recent European initiatives, such as Europass, microcredentials, and automatic recognition recommendations, promote comprehensive approaches for formal, non-formal, and informal learning and other policy thematic areas. Synergies and coherence among them and contributions to other policy areas will largely depend on their coordinated implementation with other initiatives. Digital advancements can streamline existing initiatives, but strategic and technical discussions are needed to leverage synergies for learners.

From a perspective of joint contribution, the European policy initiatives examined have promoted the transparency and transferability of learning outcomes over the past two decades in the following manner:

- (a) increasing the focus on the learning-outcomes based approach in various education and training sectors and promoting a shift towards learner-centred systems;
- (b) increasing attention to learning experiences outside formal settings;
- (c) fostering convergence across initiatives and countries;
- (d) promoting commitment to transparent, comparable, and recognised qualifications;
- (e) emphasising the need for more permeable education and training systems and flexible learning pathways.

The study highlights European cooperation initiative strengths and weaknesses, identifies potential areas for improvement, and reflects on challenges, such as implementing learning outcomes and transitioning to individual-centred systems. Addressing these challenges requires continuing dialogue and cooperation, overcoming resistance to perceived top-down initiatives. Conceptual and technical discussions are necessary for common understanding and trust among actors, as well as addressing data collection and monitoring for informed policy discussions.

CHAPTER 1.

Introduction

This is the first report of the project [Transparency and transferability of learning outcomes](#), which aims to analyse the evolution of European and national policy initiatives fostering lifelong and life-wide learning for citizens. Starting the analysis from the turn of the century, the project wants to shed light on the extent to which European and national policy initiatives promoting the transparency and transferability of learning outcomes, concerning qualifications, programmes, and systems, have collectively contributed to developing more flexible education, training and learning systems. These systems should enable individual learners to enter, re-enter and combine education, training and learning based on their needs and circumstances. The study adopts a comprehensive, cross-national, and long-term perspective, looking at developments taking place over the past two decades (2000-20) across education and training sectors, with a particular focus on higher education and vocational education and training (VET), as well as outside the formal education system. In doing so, the study will provide insights into the sustainability and impact of European and national lifelong and life-wide learning policies and practices.

Specifically, the 3-year project (2022-25) seeks to:

- (a) provide an overview of policy initiatives at European and national level across different education and training sub-systems;
- (b) analyse relationships and synergies, as well as differences, between selected policy initiatives at EU level and in eight country case studies, providing insights into their sustainability and combined impact;
- (c) analyse the impact on individual citizens and identify what has changed in making it possible for them to (re)-enter and combine education, training and learning, over time and across different institutions, sectors and countries;
- (d) develop a set of policy scenarios towards 2040 illustrating alternative policy choices and their implication at European and national levels.

This report covers the first two aspects, while the last two aspects will be further explored in the next phases of the project.

1.1. [Background and aim of the study](#)

The publishing of the Memorandum on lifelong learning (European Commission, 2000) signalled the start of two decades of European and national policy initiatives

encouraging a shift towards more flexible education and training systems facilitating lifelong and life-wide learning⁽²⁾. According to these initiatives, individuals must be able to enter and re-enter education, training and learning throughout life, reflecting their changing and evolving needs and circumstances. Learning, it is stated, takes place in all areas of life, in education and training as well as work and leisure time. Individuals must, therefore, be able to combine and accumulate outcomes across institutions, sectors and (even) countries. Throughout the two decades, a vision of individually centred education, training and learning has been promoted, contrasting an approach to education and training where individuals must adapt to pre-defined curricula and teaching methods delivered in specified locations at fixed times. While the language used to promote these policies has changed over the years, European as well as national initiatives consistently point to a set of barriers directly preventing a shift towards more individually centred education and training. These barriers prevent individual learners from entering, re-entering and combining education, training and learning in a flexible way.

- (a) Learning outcomes acquired outside formal education and training institutions – for example at home, work or in leisure time – are less visible and only to a limited extent trusted and accounted for. Learning is traditionally valued based on formal status (being an approved part of the education system) and input (location, timing and teaching method), not on the skills and competences acquired. Given the importance of learning taking place outside formal settings, this lack of trust in learning outside the classroom directly influences the ability of individuals to pursue lifelong and life-wide learning.
- (b) Education, training and learning systems are becoming increasingly diverse and complex and it is difficult for individuals to overview and manage their lifelong and life-wide learning progression. A strengthening of lifelong learning, requiring individuals to re- and upskill throughout life, further increases this complexity. This increasing complexity also influences the ability of employers to make best possible use of available education, training and learning resources.

⁽²⁾ While it is possible to refer to the 1996 European year of lifelong learning as the start of this process, the Memorandum and its 2002 follow up Council resolution on lifelong learning seems to have had a more direct impact on policy cooperation. This is illustrated by the 2002 Copenhagen VET Declaration which builds on the messages of the lifelong learning initiatives and implicitly and explicitly launches the EU tools and principles influencing this area in the years that followed. It should also be noted that the European-level work is inspired by the UNESCO report on lifelong learning, frequently referred to as the 1996 Delors/Faures report.

- (c) Education and training systems are commonly organised as ‘silos’ only weakly interconnected. Learning careers tend to follow pre-defined pathways with limited opportunities for individual tailoring. The outcomes of learning can only be partly transferred (and accumulated) across institutional, sectoral or national borders; their currency is bound and restricted to the context where they were originally delivered. While recognition and transfer in some cases is due to significant content differences, relevant and potentially high-quality outcomes can also be refused due to their ‘wrong’ origin. This can be linked to lacking trust between stakeholders.

According to the above, existing education and training systems can be regarded as too rigid and as obstructing an individually centred approach. Policies promoting a shift towards more open and flexible education, training and learning systems are thus anchored to the following principles:

- (a) need to design education and training with reference to learning outcomes ⁽³⁾ acquired in formal as well as non-formal and informal settings;
- (b) need to increase the transparency ⁽⁴⁾ of systems and qualifications;
- (c) need to allow for and ensure transferability ⁽⁵⁾ of learning outcomes.

The terminology employed to describe policies in this area is diverse and continuously evolving: focusing on recognition, validation, mobility, permeability, and quality can all be regarded as aspects of an overarching strategy enabling individuals to enter, re-enter and combine learning throughout life and across institutional and sectoral borders. In this study, lifelong learning is defined as ‘all learning activities undertaken throughout life, with the aim of improving knowledge, skills, competences and/or qualifications for personal, social and/or professional reasons’ (Cedefop, 2014b, p. 171), while life-wide learning refers to ‘all learning that takes place across the full range of life activities (personal, social or professional), and at any stage of a person’s life, and can encompass either formal, non-formal or informal learning’ (p. 172).

⁽³⁾ Cedefop (2017a) defines learning outcomes as statements of what a learner is expected to know, be able to do and understand following the completion of a learning sequence.

⁽⁴⁾ Cedefop (2014b) defines transparency of qualifications as degree of visibility and legibility of qualifications, their content and value on the (sectoral, regional, national or international) labour market and in education and training systems.

⁽⁵⁾ Cedefop (2014b) defines transferability as the degree to which knowledge, skills and competences can be used in a new occupational or educational environment, and/or be validated and certified.

Against this background, the specific research study aims to map the wide variety of European and national policy initiatives promoting the transparency and transferability of learning outcomes, providing analytical insights into their objectives, orientation, synergies, and contributions. To this end, the following research questions were developed to guide the study.

- (a) Which European and national policy initiatives, since 2000 and across levels and sectors, address transparency and transferability of learning outcomes (formal qualifications, as well as non-formal and informal learning)?
- (b) What is the orientation of the policy initiatives and which objectives have been set?
- (c) How are policy initiatives connected to each other and how do they support or contradict each other?
- (d) How can European and national policy initiatives and reforms in this area be judged according to the criteria of sustainability and impact?

1.2. Conceptual framework of the study

1.2.1. Policy analysis framework

Policy analysis is defined as ‘the process of systematic investigation of the implementation and impact of existing policy (ex-post analysis), and of options for new policy (ex-ante analysis)’ (ETF, 2018, p. 7). This study adopted an ex-post analysis approach, focusing on a broad conception of policy as a ‘purposive course of action followed by an actor or a set of actors’ (ETF, 2018, p. 7). In the context of this report, the term policy encompasses a broad range of initiatives developed by European stakeholders, including policy strategies, tools, frameworks, and processes that shape the direction of policymaking regarding education and training, employment, and the internal market.

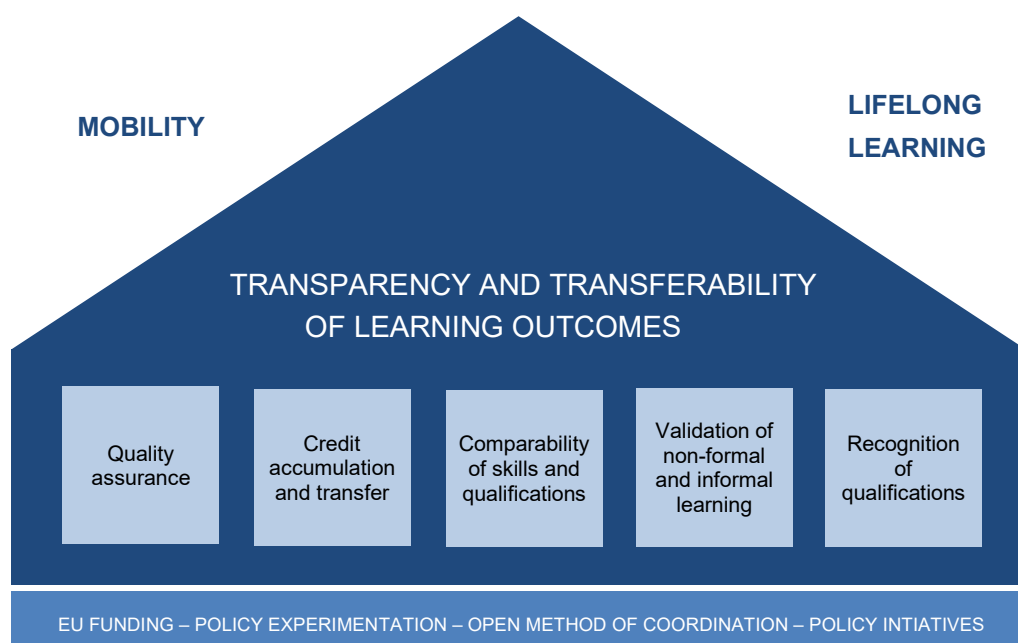
Although the study considers overarching policy frameworks, strategies and processes such as the Lisbon Strategy, the primary emphasis of the analysis is on policy initiatives that emerged from broader strategies and processes and may be relevant to multiple ones. These policy initiatives are considered to have a specific focus and detailed objectives (e.g. the development of a credit system), as well as a binding (e.g. EU Directives) or non-binding (e.g. Commission Communications) nature for Member States. The study also considers the role of lifelong learning and mobility programmes.

To analyse systematically the various policy initiatives aimed at increasing the transparency and transferability of learning outcomes at the European level since 2000, a conceptual framework of five thematic areas was developed and employed

for this study. This was the result of a systematic review process of policy initiatives introduced at European level over the last 20 years. Initially, an extensive screening of all European policy initiatives directly or indirectly related to transparency and transferability of learning outcomes was conducted, resulting in a list of 63 initiatives. Following an inductive thematic analysis of each policy initiative objectives, key patterns were identified, leading to five overarching thematic areas, which were subsequently reviewed and agreed upon by policy experts during expert interviews and a policy workshop in 2022. The five thematic areas, also illustrated in Figure 1, include:

- (a) encouraging the use of quality assurance mechanisms;
- (b) encouraging credit accumulation and transfer;
- (c) promoting the comparability of skills and qualifications;
- (d) supporting validation of non-formal and informal learning;
- (e) encouraging mutual recognition of qualifications.

Figure 1. **Five policy thematic areas aimed at increasing the transparency and transferability of learning outcomes**



Source: Cedefop.

These thematic areas can be regarded as supporting the transparency and transferability of learning outcomes in various ways, often overlapping or interconnected, thereby fostering lifelong learning and mobility across systems, institutions, and borders. They function as a conceptual lens to filter the diverse

policy initiatives and tools introduced at the European and national levels since the turn of the century. They were deductively applied to categorise those policy initiatives deemed by the study's experts as most pertinent to supporting the transparency and transferability of learning outcomes at the European level and influential for driving policy developments at the national level. Several of these initiatives focus on different education and training sectors, such as VET or higher education. Specifically, the following policy initiatives were selected for in-depth analysis.

- (a) Quality assurance
 - (i) Standards and guidelines for quality assurance in the European higher education area (ESG) (ENQA, 2005; ENQA et al., 2015);
 - (ii) European quality assurance reference framework for vocational education and training (EQAVET) (European Parliament & CEU, 2009b; CEU, 2020);
- (b) Credit accumulation and transfer
 - (i) European credit transfer and accumulation system (ECTS) (European Commission, 2015a);
 - (ii) European credit system for vocational education and training (ECVET) (European Parliament & CEU, 2009a);
- (c) Comparability of skills and qualifications
 - (i) European qualifications framework for lifelong learning (EQF) (European Parliament & CEU, 2008; CEU, 2017a);
 - (ii) Framework for qualifications of the European higher education area (QF-EHEA) (Bologna working group on qualifications frameworks, 2005);
 - (iii) Europass (European Parliament & CEU, 2004, 2018a);
 - (iv) Microcredentials (CEU, 2022a);
 - (v) Multilingual classification of European Skills, Competences, and Occupations (ESCO) (European Commission, n.d. -i);
 - (vi) Competences Frameworks (European Parliament & CEU, 2006b; CEU, 2018a);
- (d) Validation of non-formal and informal learning
 - (i) Validation of non-formal and informal learning (CEU, 2012);
- (e) Recognition of qualifications
 - (i) Professional Qualifications Directive 2005/36/EC and 2013/55/EC (PQD) (European Parliament & CEU, 2005, 2013);
 - (ii) Lisbon Recognition Convention (LRC) on the Recognition of qualifications concerning Higher Education in the European Region (CoE, 1997a);

- (iii) Recommendation on promoting automatic mutual recognition of higher education and upper secondary education and training qualifications and the outcomes of learning periods abroad (CEU, 2018b).

In this report, the policy analysis focuses on two critical aspects of the policy process: the objectives, orientation, and contribution of European and national policy initiatives regarding the transparency and transferability of learning outcomes; and the coherence and synergies among the policy initiatives at the European level, as well as their interplay with national-level initiatives.

1.2.2. Studying policy coherence in the context of European cooperation

The study examines the objectives of and synergies between European and national policy initiatives, drawing inspiration from the concept of coherence. The concept of policy coherence has different interpretations in the literature (Söderberg, 2016), but a common denominator is the emphasis on alignment in beliefs, problem definitions, goals, and rules (Kurze & Lenschow, 2018; May et al., 2006; Michanek et al., 2016; Nuttall, 2005; Olsen, 2008); there is also a strong focus on policy goals and rules consistency (Nilsson et al., 2012). This alignment extends to shared objectives within and across policies and administrative systems (Den Hertog & Stross, 2013; Nilsson et al., 2012). When policy coherence exists, governance systems align and work in the same direction, which is a key feature of effective governance and attracts increased attention in contemporary governance literature (Lenschow et al., 2018; May et al., 2006). A concerted and coordinated approach across policies is a crucial element for policy effectiveness.

However, policy coherence does not occur automatically. It is a deliberate choice by governments that necessitates intentional interventions to ensure coordinated institutional structures, connected processes, shared information, and collaborative administrative culture that systematically consider sectoral interconnections and their effects. For analytical purposes, we utilise the distinction between:

- (a) internal coherence: this involves examining the synergies between policy initiatives or tools associated with the same thematic area, which, in some cases, might belong to different education and training sectors or areas;
- (b) external coherence: this involves exploring the synergies between a policy initiative or tool from one thematic area to policy initiatives from different thematic areas.

This conceptual distinction was established to facilitate the structuring of the analysis presented in this report. To elucidate relationships and synergies between policy initiatives, the study examined various aspects, including alignment in terms of objectives and principles, as well as synergies in terms of coordinated

management, implementation, or further developments. In many instances, particularly at the national level, there was insufficient evidence to analyse all these aspects systematically, so the results are presented in a more descriptive way.

This report primarily explores the effects of European policy initiatives, considering their interaction with national policy initiatives. At the system level, impact encompasses changes at the national level, such as the adoption of specific tools or the establishment of rules governing the use or adoption of a particular policy or tool. Identifying and evaluating impact poses challenges, especially in the broad field of education and training, where the EU can only facilitate cooperation among Member States. Our aim is not to establish explicit causal relationships, but rather to describe the degree to which European policy initiatives have contributed to national policy processes, either by complementing existing policies or supporting new reforms. The legal foundation for European cooperation in education and training is grounded in the principle of subsidiarity, with Member States responsible for the content of teaching and organisation of their education systems, while the EU can only support and complement their actions (Lisbon Treaty, Article 165, 2006).

Policy initiatives in education and training are often referred to as ‘soft law’ ⁽⁶⁾, indicating that they are not legally binding but rather serve as guidelines, recommendations, and principles that Member States are encouraged to follow without any direct legal consequences for non-compliance. In contrast, ‘hard’ EU policies involve legally binding measures documented in the form of directives, regulations, and decisions, which Member States must implement and enforce. While the report also covers binding instruments such as the Lisbon Recognition Convention and the Directive on Professional Qualifications, it mainly concentrates on soft law initiatives where the EU fosters cooperation and knowledge sharing through the Open method of coordination (OMC) approach. In education and training, the OMC is a flexible and non-binding mechanism that encourages Member States to establish objectives collectively, employ shared evaluation instruments, and, through benchmarking, compare their performance and support the exchange of best practices (EUR-Lex, 2024). In addition to the OMC, other policy mechanisms aiming to promote policy development and modernisation in education and training include structural and cohesion policy, cross-sectoral instruments, educational programmes, and knowledge and information management (Halász, 2013).

In areas characterised by soft policy, where horizontal mechanisms of interaction are more common than vertical ones, the distinction between cause

⁽⁶⁾ Article 288 of the Treaty on the Functioning of the European Union

and effect becomes blurred. Through their engagement in the OMC, countries can influence the development of common European objectives, ensuring they align with their national priorities. Simultaneously, the EU supports implementation, monitors and assesses Member States' progress in attaining these shared objectives through periodic reporting and evaluations. This reciprocal interaction between the European and national levels can foster policy learning and change for both sides, while making it challenging to discern the origin and impact of specific European policy initiatives. Although our approach in this study does not enable the establishment of direct causal relationships, it provides an overview of the policies' objectives, contributions, and interplay with national policies, offering valuable insights for policymakers, researchers, and practitioners.

1.3. Research methods

This study was conducted in two interrelated phases addressing the European and subsequently the national level. It combined multiple research methods to gather data. Extraction of key information from all the evidence collected through these different methods was analysed comparatively to assess coherence and combined impact. The research included several stages.

- (a) An initial scan of the policy literature to map out progress achieved over the past 20 years (2000-20) at the European level in facilitating lifelong and life-wide learning, notably by increasing the transparency and transferability of learning outcomes acquired in formal, as well as non-formal and informal settings.
- (b) A review of academic and grey literature carried out by the core team and national researchers, including items in English and in case-study country languages.
- (c) Eight country case studies (Germany, Ireland, France, Italy, Netherlands, Poland, Romania, Finland) were carried out to identify and analyse national policy initiatives and reforms addressing the transferability and transparency of learning outcomes across levels and sectors. Through the eight case studies, 71 national policy initiatives that have promoted transparency and transferability of learning outcomes in the last 20 years were identified. This is not an exhaustive list of policies but offers a first picture of the main developments in these eight countries. This list was complemented by a general mapping and overview of 92 policy initiatives that have been introduced in the remaining 22 countries (the 19 EU countries not covered by the case studies plus Iceland, Norway and the UK).

- (d) Twenty semi-structured expert interviews with policy officials specialising in European policy tools and initiatives, and 50 semi-structured interviews (as part of the eight case studies) with key national stakeholders and experts involved in lifelong learning development and implementation. Interviews filled evidence gaps from the literature review and helped the core team and the national researchers to obtain more in-depth insights into policy implementation, their rationale and relation to other policy fields, their contribution to change, and the key enabling factors and barriers to policy innovation.
- (e) An online survey (December 2022 to January 2023), completed by 98 national stakeholders from 28 European countries. The survey was addressed to national actors, umbrella organisations and EU working groups involved in developments related to the 5 policy areas across different education and training subsectors related to policy, The questionnaire covered 98 stakeholders across 28 countries.
- (f) Online expert workshops in September 2021 and February 2024 to present and discuss initial findings and gain additional insights into the coherence and perceived combined impact of these policy tools and initiatives.

1.4. Structure of the report

This report is structured in four chapters. Following the introductory chapter, Chapter 2 offers an overview of the broader policy frameworks, strategies, and programmes that shaped the development and implementation of transparency and transferability of learning outcomes initiatives at European level. Chapter 3 delves into the detailed examination of the main European policy initiatives from the past 20 years, focusing on their objectives, internal and external coherence, and contribution, referring to concrete policy developments at the national level. Chapter 4 presents the main conclusions and considerations on the coherence and contribution of the policy initiatives analysed regarding the transparency and transferability of learning outcomes at European and national levels, drawing upon the analysis presented in the previous chapters.

CHAPTER 2.

European cooperation in education and training: strategic frameworks and lifelong learning initiatives

This chapter delves into the broader strategic frameworks that have been instrumental in fostering European collaboration in education and training, encouraging lifelong learning, and promoting mobility among European citizens. By examining the interplay between strategic frameworks, such as the Lisbon Strategy and its successors, and the various lifelong learning and mobility programmes, this chapter aims to provide a comprehensive understanding of the European policy context that has fostered the development of concrete policy initiatives impacting the transparency and transferability of learning outcomes at European and national levels, covered in the subsequent chapters.

2.1. Strategic frameworks for learning outcomes transparency and transferability

EU interest and work in education and training has its roots in the 1950s, starting with the Treaties of Paris (1951) and Rome (1957). These initially focused more on vocational education, with the latter's Articles 118 and 128 explicitly considering vocational education and training (VET) as part of EU social policy. A few years later, the Council Decision of 2 April 1963 laid down 10 general principles for a common vocational training policy, also mentioning the relationship between vocational training and general education (Council of the European Union [CEU], 1963). At the same time, as part of its fourth principle, the Council Decision called for the establishment of an Advisory Committee to support the European Commission in its VET-related tasks. To this end, the Advisory Committee on Vocational Training (ACVT) was set up in 1963 and has been assisting the Commission in implementing EU VET-related programmes and policies (European Commission, n.d. -a). While this work has been significant in laying the groundwork, it is in the late 1990s, and notably from 2000 onwards, that lifelong learning has become a key component of the EU policy agenda, giving increasing relevance to learning taking place in various contexts.

The 1995 Commission White Paper on Education and Training set out a vision of a European 'learning' society where teaching and learning, as well as the

acquisition of skills, are pursued throughout life, and learning is valued wherever it takes place: in formal, non-formal, and informal settings (European Commission, 1995). The following year (1996) was declared the European Year of Lifelong Learning, which provided the Commission an opportunity to engage all relevant stakeholders at both EU and national/regional levels in addressing the challenges of lifelong learning and exploring the best ways to tackle them (European Commission, 2006). However, it was in 2000 with the publication of the Memorandum of Lifelong Learning, following the 2000 Lisbon European Council meeting, that lifelong learning was firmly established as a central pillar of European education and employment policy. The messages included in the memorandum indicated that, at the outset of efforts to shift education systems towards lifelong learning, there was recognition that doing so would necessitate increasing the transparency and transferability of qualifications, potentially moving away from a focus on formal qualifications towards a more holistic way of understanding learning.

The promotion of lifelong learning is influenced by various factors and advancements, such as flexible education, training and learning systems. Increased emphasis on learning outcomes as a means of increasing system flexibility and fostering lifelong learning has gained prominence over the years. Although the learning outcomes principle became explicit in EU policy documents in 2004, national initiatives and developments regarding the use of learning outcomes were already under way. Shifting focus to learning outcomes, as opposed to inputs (e.g. training duration, education institution characteristics, subject content) can, for example, increase system transparency by clarifying the goals of programmes and qualifications, enabling stakeholders to work towards these objectives, and facilitating assessments of what is being delivered (Cedefop, 2017a).

To ensure effective education and training, learning should not be limited to the institutional, sectoral, and national contexts where it originated. This can result in fragmented education and training systems, making it difficult for individuals to continue learning at different stages of their lives. Transparency of learning outcomes promotes the transferability of learning acquired in formal education and training, as well as in informal contexts like work, volunteering, and leisure activities. These outcomes are often less visible and are not always trusted or valued by employers and other stakeholders since they are not officially recognised (Werquin, 2010). Transparency of learning outcomes helps stakeholders assess the value of programmes or qualifications in unfamiliar contexts and is crucial for building trust, which in turn supports transferability across institutions, sectors, and geographic boundaries. This fosters lifelong and life-wide learning and mobility.

Nevertheless, in practice, no transnational mobility is possible without addressing the broader issue of transferability. Many European initiatives, such as the Lisbon strategy, the Bologna process, the Copenhagen process, and the strategic frameworks for European cooperation in education and training for 2010 and 2020, address this overall challenge of transferability, as detailed in the following sections.

2.1.1. The Lisbon Strategy and the Memorandum of Lifelong Learning

The 2000 Lisbon European Council can be considered as a decisive moment for promoting lifelong learning, making it a key component of the European Employment Strategy (EES). This meeting led to the launch of the Lisbon Strategy, which aimed to promote lifelong learning through increased transparency of qualifications, worker and learner mobility, the development of a European format for curriculum vitae, and the use of community programmes (CEU, 2000). The Open Method of Coordination (OMC) was introduced as a tool to facilitate mutual learning and best practice sharing among Member States, aiming for greater convergence towards the common EU goals. With particular reference to lifelong learning, the OMC was expected to support more coherent policy development and improved mobilisation of resources at both EU and national levels (European Commission, 2000).

In 2001, the Memorandum of Lifelong Learning solidified the political commitment to lifelong learning at both EU and national levels (Elken, 2015), emphasising the need for a structured framework and open debate on its implementation. The Memorandum highlighted six key messages, focusing on enhancing teaching and learning methods, understanding and appreciation of learning participation and outcomes, and acknowledging the importance of non-formal and informal learning. This broader and more integrated perspective on learning raised the need for transparency and transferability of qualifications.

As a result of the Lisbon Strategy, more targeted strategies for education and training emerged, such as the Copenhagen process and the Education and Training 2010 (ET2010) initiative, which was later succeeded by Education and Training 2020 (ET2020). These strategies aimed to build upon and expand the principles established in the Lisbon Strategy, further promoting lifelong learning as a cornerstone of the European social model.

2.1.2. The Bologna Process

Launched alongside the Lisbon Strategy, the Bologna Process aimed to reform the European higher education sector by increasing compatibility, comparability, and coherence of higher education systems. The Bologna Declaration was signed in 1999 by 29 countries, a number that increased over the years, so that the Bologna

Follow-Up Group (BFUG) currently includes 49 countries (Bologna Process, n.d.). The European Commission is also a member, and other European organisations are also included as non-voting category ⁽⁷⁾. By seeking to create a European higher education area (EHEA) by 2010, one of its stated objectives was to make education more compatible and comparable, hence more transferable and transparent. The Lisbon Recognition Convention, signed in 1997, is the only legally binding instrument for recognition of qualifications within the EHEA, influencing its approach to recognition.

Reviewing the ministerial communiqués that have been adopted as part of the Bologna process over the past 20 years, a focus on promoting a learning outcomes-based approach emerges, aimed at improving the transparency and transferability of qualifications and learning outcomes across Member States. Key objectives include developing easily readable and comparable degrees, and the establishment of credit systems to facilitate widespread student mobility and greater European cooperation in quality assurance (Bologna Process, 1999). These objectives were reinforced in the 2001 Prague Communiqué (Bologna Process, 2001), which encouraged higher education institutions to promote recognition and introduced the social dimension of mobility (European Education and Culture Executive Agency [EACEA] & Eurydice, 2020). Two years later, in the Berlin Communiqué (Bologna Process, 2003), the Ministers of Higher Education agreed to develop an overarching framework for qualifications of the European higher education area (QF-EHEA), which was eventually adopted with the Bergen Communiqué (2005). The London Communiqué emphasised the need for greater consistency and coherence in national and institutional approaches to recognition (Bologna Process, 2007). The 2010 Budapest-Vienna Declaration marked the official launch of the EHEA, with the Bucharest Communiqué introducing the concept of ‘automatic recognition of academic qualifications’ as a long-term EHEA objective (Bologna Process, 2010, 2012). This Communiqué set EHEA’s priorities for 2012-15, such as ensuring that the implementation of qualifications frameworks, credit systems and diploma supplement is based on learning outcomes. The 2015 Yerevan Communiqué saw signatory Ministers commit to ensuring qualifications are automatically recognised across the EHEA at the same

⁽⁷⁾ The current eight EHEA consultative members are: Council of Europe (CoE), UNESCO, European University Association (EUA), European Association of Institutions of Higher Education (EURASHE), European Students’ Union (ESU), European Association for Quality Assurance in Higher Education (ENQA), Education International (EI) and BUSINESS EUROPE. EQAR has a similar status to the consultative members (non-voting member of BFUG), but has so far not been officially named consultative member. Organisations can also be associated as partners. See: <https://ehea.info/page-members>

level as domestic qualifications (Bologna Process, 2015). The 2018 Paris Communiqué highlighted challenges in implementing Bologna reforms across policy areas and countries, calling for further action in certain areas, including the strengthening of higher education's social dimension and the recognition of qualifications (Bologna Process, 2018). Finally, the 2020 Rome Communiqué reaffirmed commitments to the Paris Communiqué's objectives and established EHEA priorities for the next decade (Bologna Process, 2020).

2.1.3. The Copenhagen Process

In 2002, the Copenhagen Declaration (re)launched European cooperation on vocational training (CEU, 2002), integrating it into the Lisbon Strategy and its successor, the EU 2020 Strategy. The Declaration drew from the European Commission's 1995 White Paper (European Commission, 1995) and 2001 Communication on lifelong learning (European Commission, 2001) and aimed to mirror the Bologna process in the VET field, following the request from the 2002 Barcelona European Council for closer European cooperation in VET and for developing instruments to ensure the transparency of diplomas and qualifications (European Council, 2002). Its main objectives focused on improving VET's attractiveness, quality and performance, as well as forging closer ties to the Bologna process (European Commission, 2016b). Key priorities of the Copenhagen Declaration included increasing transparency and recognition of competences and qualifications, and improving quality assurance in VET, through the development of common reference levels, common principles for certification, and common measures, including a credit transfer system for VET.

Subsequent Copenhagen process communiqués have recorded progress and suggested steps to support the transparency and transferability of learning outcomes. The 2004 Maastricht Communiqué acknowledged Copenhagen process success in raising VET's visibility and called for focus on developing an open and flexible EQF based on transparency and mutual trust; and implementing the European credit transfer system for VET, informed by both the ECTS and the Europass framework. The 2006 Helsinki Communiqué introduced new priorities, such as increasing flexibility and permeability of education and training systems and promoting recognition of non-formal and informal learning. It also encouraged ongoing work on developing and implementing tools like the EQF and European credit system in VET for the transparency and recognition of vocational qualifications.

The 2008 Bordeaux Communiqué (CEU, 2008) highlighted the Copenhagen Process's significant contribution in creating key transparency and recognition tools such as Europass, the EQF and the common European principles for

identifying and validating non-formal and informal learning. It noted that these tools increased interest and mutual trust in qualifications and learning outcomes. It also identified challenges such as building bridges between VET, general and higher education, establishing links between VET and the labour market, enhancing the role of higher education in VET, and promoting mobility between systems/sectors and countries. The 2010 Bruges Communiqué emphasised the need for integrating the learning outcomes approach in VET systems and called for national support for EQF implementation by developing comprehensive NQFs based on learning outcomes, using them as catalysts for improving permeability between VET and higher education, and developing VET at post-secondary or higher EQF levels. It also stressed the need for coordinated governance under the Copenhagen process and synergy with the Bologna process.

The Riga Conclusions in 2015 proposed new VET-related goals for 2015-20, focusing on quality assurance mechanisms in VET in line with the 2009 EQAVET Recommendation, continuous information and feedback loops to IVET and CVET based on learning outcomes, and key competences in VET curricula. The Riga Conclusions recognised progress regarding transparency and transferability of skills and qualifications but called for more EU level support on the development and implementation of coherent and integrated transparency and recognition tools (e.g. EQF, ECVET, EQAVET, Europass, and validation of non-formal and informal learning) to facilitate worker and learner mobility. The Osnabrück Declaration (2020) continues to increase European cooperation in VET, complementing the 2020 Council Recommendation on VET's vision and strategic objectives.

2.1.4. Education and Training 2010 and 2020

Education and training have been a crucial part of the EU's Lisbon strategy (2000-10) and its successor the Europe 2020 Strategy (2010-20). In the context of these overarching strategic frameworks, the Council endorsed in 2004 the Education and Training 2010 (ET 2010) work programme, which established a framework for cooperation in the field, promoting common objectives and mutual learning. This was succeeded by the strategic framework for European cooperation in education and training (ET 2020), in 2009. Both ET 2010 and ET 2020 are highly relevant to our study, as they supported policy cooperation, mutual learning, and peer learning activities, along with concrete measures and actions aimed at promoting the use of learning outcomes-based approaches.

For example, the ET 2010's Cluster on Recognition of Learning Outcomes played a significant role in the development of national qualifications frameworks (NQFs) across the EU and stimulated discussions on key issues related to validation, including costs, benefits, and quality assurance (Cedefop, 2009b;

European Commission, 2009). It facilitated the exchange of experiences between Member States and contributed to the 2004 Common European principles on validation. Following several peer learning activities on effective validation processes (Brussels, January 2007 and Paris, July 2007), it led to the development of the first set of European Guidelines for the validation of non-formal and informal learning by Cedefop (Cedefop, 2009a). As part of ET 2010, several common European tools and principles were developed to support learning outcomes-based approaches: these included the EQF, principles and guidelines for identifying and validating non-formal and informal learning, the European credit system for VET (ECVET), and frameworks for quality assurance in higher education and VET (European Commission, 2009).

The key EU-wide strategic objectives of ET 2020 (CoE, 2009), which aimed to make lifelong learning and mobility a reality, included:

- (a) promoting lifelong learning by encouraging Member States to work together in order to complete the development of comprehensive national lifelong learning strategies;
- (b) developing and/or refining European reference tools by supporting Member States to work together and link their respective NQFs to the EQF;
- (c) setting up comprehensive national validation arrangements and creating links between qualification frameworks;
- (d) facilitating learning (and work) mobility for all, within Europe and beyond. This was closely linked to the need to improve the EU-wide transparency and recognition of skills and qualifications.

The mid-term review of ET 2020 in 2015 found that it significantly contributed to the effective implementation of the EU 2020 Strategy and the overall EU agenda for jobs, growth, and investment (CEU & European Commission, 2015). However, it also identified areas for improvement, such as transparency and recognition of skills and qualifications, and called for greater synergy between the tools that promote mobility, employability, and lifelong learning.

The Bologna and Copenhagen processes, and ET 2010 and ET 2020 were complemented by other European policy initiatives relevant to our study. Recent developments include, for example, the 2016 New Skills Agenda (European Commission, 2016a), and its successor, the 2020 European Skills Agenda (European Commission, 2020c), and the European Pillar of Social Rights in 2017 (European Parliament et al., 2017), which emphasises everyone's right to quality and inclusive education, training, and lifelong learning.

2.2. European lifelong learning and mobility programmes

This section provides an overview of lifelong learning and mobility programmes that shaped EU policy initiatives in education and training, focusing on their objectives and contribution to the transparency and transferability of learning outcomes. Following the Maastricht Treaty, which laid the legal groundwork for Community activities in education and training (EFTA, 2007; Phillips & Ertl, 2002), several Community action programmes emerged, such as Leonardo Da Vinci for VET and SOCRATES for general education. European funding streams, such as the European Social Fund (ESF), have significantly supported the development of these programmes, funding interventions and pilot projects across the EU (UNESCO, 2009). A detailed presentation of each programme is presented in Table 1 below.

Table 1. **European lifelong learning and mobility programmes contributing to transparency and transferability of learning outcomes: building on lessons from European transparency tool**

Programme	Implementation period	Objectives	Contribution to transparency and transferability of learning outcomes
Leonardo Da Vinci I and II	1995-1999 (LdV I), extended funding 2000-2006 (LdV II)	<ul style="list-style-type: none"> • Develop and support vocational training policy at the Community level and introduce the concept of lifelong learning in EU policy discourse (Salajan & Roumell, 2021) • Improve VET systems and quality through multilateral innovative projects by transferring or adapting VET practices between countries • Enhance the transparency and recognition of qualifications and competences, including those acquired through non-formal and informal learning (European Commission, 2010a) 	<ul style="list-style-type: none"> • Broke down the division between IVET and CVET and promoted closer links among training providers at all levels (European Commission, 1997a) • Encouraged the exchange of experiences and promoted transparency of systems (European Commission, 2002) • Contributed to discussions on common European certification formats and the development of the EQF (European Commission, 2010a; Bjørnåvold & Pettersson, 2001) • Supported projects that tested how the EQF's learning outcomes-based approach could be applied more widely, covering themes such as building bridges between VET and higher education, promoting the validation of informal and non-formal learning, and fostering collaboration • Expanded the scope of transparency from formal, vocational qualifications to include non-formal vocational qualifications and skills
SOCRATES I and II	1995-1999 (SOCRATES I), extended funding 2000-2006 (SOCRATES II)	<ul style="list-style-type: none"> • Contribute to the development of quality education and training and the formation of a unified European area for cooperation in education (European Parliament & CEU, 1995) • Promote lifelong learning alongside other European initiatives (notably, LdV and Youth for Europe III) (Johnson, 1999) • Encourage academic recognition of diplomas, periods of study, and other qualifications to develop an open area for cooperation; and promote the mobility of students, pupils and teachers 	<ul style="list-style-type: none"> • First comprehensive programme at Community level promoting transnational cooperation across the entire education spectrum (European Parliament & CEU, 1995) • In its first 2 years, SOCRATES increased the volume of European cooperation in the fields of school education, adult education, and open and distance learning, which previously had little tradition of structured collaboration at transnational level. Educational institutions began to adopt a more strategic approach to European collaboration in the field of education (European Commission, 1997b) • It provided a new impetus to the academic recognition of qualifications obtained abroad and study periods abroad (European Parliament, CoE, 1995)

Transparency and transferability of learning outcomes: a 20-year journey

Programme	Implementation period	Objectives	Contribution to transparency and transferability of learning outcomes
		<ul style="list-style-type: none"> • Emphasise the European, cultural and linguistic dimensions of the curriculum, as well as the recognition of curriculum elements and joint qualifications (Teichler et al., 2000) • Include transversal measures and horizontal activities for all education sectors 	
Grundtvig	2000-2013 (first as part of SOCRATES, then LLP)	<ul style="list-style-type: none"> • Focus on European cooperation in non-vocational adult learning, encompassing formal, non-formal, and informal education • Address needs of individuals and institutions in all forms of adult education and 'alternative' education courses, as well as institutions and organisations providing or facilitating such education (EFTA, 2007) • Raise visibility of adult education • Promote non-formal and informal learning 	<ul style="list-style-type: none"> • Despite its small budget, Grundtvig, led to a much greater visibility of adult education and fostered a culture of European cooperation in the sector (European Commission, 2010c, 2010d) • Grundtvig's decentralised actions – Learning Partnerships, individual grants for in-service training of adult education staff and the development of European networks of adult education professionals – proved to be a major and highly successful innovation (European Commission, 2010a) • Promoted multilateral projects, networks, and thematic seminars development and testing of validation approaches in different educational sectors and settings • Supported projects aimed at developing or exploring personalised learning pathways
Lifelong Learning Programme (LLP)	2007-2013	<ul style="list-style-type: none"> • Aligned with ET2010 work programme, ensure that EU education and training policies help to achieve Lisbon Strategy goals (European Commission, 2010c) • Focus on enhancing quality, attractiveness and accessibility of lifelong learning • Encourage cooperation in quality assurance across all education and training sectors • It comprised sectoral initiatives: Comenius (school education), Erasmus (higher education), LdV (VET), Grundtvig (adult education); the Transversal programme, covering cross-cutting areas (e.g. policy 	<ul style="list-style-type: none"> • Funded actions such as partnerships, projects, multilateral networks, studies and policy reviews about lifelong learning and its components • Several activities supported by sectoral programmes promoted the transparency and recognition of learning outcomes, including those acquired through non-formal and informal learning and cooperation in quality assurance; Erasmus boosted transparency and compatibility between higher education and advanced vocational education qualifications obtained in Europe (European Commission, 2010d) • The Transversal programme aimed to enhance the quality and transparency of education and training systems across

Programme	Implementation period	Objectives	Contribution to transparency and transferability of learning outcomes
		<p>cooperation and innovation in lifelong learning, languages, development of innovative ICT,); and Jean Monnet supporting teaching, research, and reflection on European integration</p>	<p>Member States, supporting mobility and recognition networks (Euroguidance and NARICs), transnational web-based services (PLOTEUS), and Europass initiative</p>
Erasmus+ Programme	2014-20 (Erasmus+) extended funding 2021-27	<ul style="list-style-type: none"> • Support initiatives for education, training, youth and sport in Europe • Finance EU-level activities, like working groups and research, and national-level activities tied to EU tool and policy implementation • Cover all education sectors (higher education, VET, school education, adult learning, youth, sport) • Support policy reforms and system-level changes aligned with the broader European policy agenda, such as the ET 2020. Support numerous EU transparency and recognition tools for competences, skills and qualifications, including Europass, Youthpass, EQF, ECTS, EQAVET, ECVET, EQAR, and ENQA. Also support EU-wide networks promoting these tools, such as the National Academic Recognition Information Centres (NARICs) and Euroguidance networks, the National Europass Centres and the EQF National Coordination Points (European Commission, 2022a) 	<ul style="list-style-type: none"> • Funded projects promoting the transparency and recognition of skills and qualifications, facilitating credit transfer, quality assurance, and supporting validation of non-formal and informal learning, skills management and guidance (European Commission, 2019b) • Learner mobility contributed to higher education becoming more flexible (European Commission, 2017a) • Backed the OMC in education and training (and youth), leading to increased use of EU transparency tools in national contexts, influencing policy agendas and developments (e.g. the influence of Erasmus+ on qualification design and permeability (European Commission, 2017a) • Supported the implementation and follow-up of EU-level instruments and initiatives targeting the VET sector (e.g. EQAVET, ECVET, or the European Alliance for Apprenticeships - EAfA) • LLP and Erasmus + provided funding and support for ECVET pilot projects during its early development and implementation stages (ECTS was initially developed as part of an Erasmus pilot project 1988-89) • Erasmus+ has boosted understanding of ECVET principles and increased their use, including the implementation of the learning outcomes approach (European Commission, 2019b). While ECVET has been repealed, the Erasmus+ programme will continue supporting tools facilitating VET learner mobility, such as the Learning Agreement and Memorandum of Understanding (European Commission, 2021c)

CHAPTER 3.

European policy initiatives on the transparency and transferability of learning outcomes

This chapter presents a comprehensive overview of the most relevant European policy initiatives promoting transparency and transferability of learning outcomes in the last 20 years. Each initiative's objectives and key contributions are presented, followed by a detailed analysis of its coherence with other policy initiatives within the same thematic area (internal coherence) and successively with those belonging to different thematic areas discussed in earlier sections of the chapter (external coherence). To avoid redundancy, a progressive and layered approach for presenting information is employed, wherein each thematic area section will address coherence within the current and preceding thematic areas, rather than those covered later. Initial insights from examining national initiatives and developments, including eight country cases (Germany, Ireland, France, Italy, Netherlands, Poland, Romania, Finland), are provided for each thematic area. When insufficient evidence was available for national-level developments or coherence of a specific policy initiative, the focus shifted to a more descriptive overview of the initiative itself and a broader analysis of its coherence with other policy initiatives. The chapter is organised into five thematic sections, focusing on:

- (a) quality assurance;
- (b) credit accumulation and transfer;
- (c) comparability of skills and qualifications;
- (d) validation of non-formal and informal learning;
- (e) recognition of qualifications.

3.1. Quality assurance

Enhanced European cooperation in quality assurance and the establishment of a system to strengthen the quality and relevance of learning outcomes has always been a key factor in realising the European higher education area. The purpose of a European dimension to quality assurance was to foster mutual trust among institutions in recognising and accepting the quality of teaching and learning across various countries or universities. Quality in VET, essential to supporting mutual trust and the recognition of qualifications, was also central in the Copenhagen

process. These efforts aimed to support transparency to promote competitiveness and mobility. The crucial policy initiatives and advancements in this thematic area include:

- (a) developing European standards and guidelines for quality assurance in the European higher education area (ESG) for higher education institutions developed in 2005, which were later revised in 2015;
- (b) introducing the European quality assurance reference framework for vocational education and training (EQAVET) in 2009 as part of the Copenhagen process. The original 2009 Recommendation was replaced in 2020 by a revised and integrated version of the EQAVET framework, included in the new VET Recommendation.

3.1.1. Standards and guidelines for quality assurance in the European higher education area (ESG)

The European Network for Quality Assurance in Higher Education (ENQA) was established in 2000 to promote European cooperation in quality assurance for higher education institutions ⁽⁸⁾. Initially informal, it became an independent membership association in 2004 with a governance structure consisting of a General Assembly, Board, and Secretariat. Supported by various policy initiatives, ENQA evolved into a recognised organisation with 56 members across 32 countries in the EHEA by 2021 (ENQA, 2021). ENQA's objectives include representing its members (quality assurance agencies), driving quality development in the EHEA, and providing a platform for sharing and disseminating quality assurance information and expertise among members (ENQA, 2022b).

In 2003, ENQA, alongside the EUA (European University Association), EURASHE (the European Association of Institutions in Higher Education) and ESU (the European Students' Union), known as the E4 Group, were invited to develop a common set of standards, procedures, and guidelines for quality assurance, and a peer review system for quality assurance agencies (Bologna Process, 2003).

⁽⁸⁾ Its origins can be traced back to the early 1990s (ENQA, 2010), when Member States' desire to increase student mobility (e.g. through Erasmus exchange programmes), was rising and the Commission saw a benefit in introducing a European dimension to quality assurance as a vehicle to promote mobility objectives. This brought with it the need for assurance and trust that courses taken abroad were of an equivalent quality. To this end, a set of pilot projects were delivered in 1994/95 to begin testing a common approach to evaluating the quality of teaching and learning. The pilots highlighted the need and desire for establishing a platform for further exchange of learning and experience in what was a relatively new field (ENQA, 2003), an idea that was given momentum in 1998 via the Council Recommendation on European cooperation in quality assurance in higher education E and the Bologna Declaration (Bologna Process, 1999). Taken together, this paved the way for the establishment of ENQA.

This work led to the creation of the standards and guidelines for quality assurance in the European higher education area (ESG) in 2005, formalised through the Bergen Communiqué (Bologna Process, 2005). From 2008 to 2015, efforts focused on consolidating this quality assurance framework (EACEA & Eurydice, 2020), with the Leuven/Louvain-la-Neuve Communiqué in 2009 (Bologna Process, 2009), making quality a central focus for the EHEA; and the Bucharest Communiqué, allowing EQAR-registered agencies to operate across the EHEA (Bologna Process, 2012; ENQA, 2012). The ESG were revised between 2015-19 following the Yerevan Communiqué (ENQA et al., 2015).

The overall purpose of the ESG is to provide a reference document outlining standards and guidelines that foster a shared understanding of quality in learning and teaching, to enable higher education institutions to demonstrate the quality of their qualifications and provision, and to improve transparency, mutual trust, and recognition. The ESG address internal quality assurance at the institutional level and external quality assurance, including related standards and guidelines (ENQA, 2005). In line with the principle of subsidiarity, the ESG allow for different approaches to implementation across institutions, regions, and countries, while giving particular emphasis to outputs and learning outcomes (Dželalija and Maguire, 2016).

The ESG revision aimed to respond to and align with other Bologna action lines, such as qualification frameworks (QF-EHEA), recognition of competences gained outside formal education, promotion of learning outcomes, student-centred learning, and various types of education provision, including e-learning (European Training Foundation, 2015; EQUIP, 2016). The revised ESG introduced a new standard explicitly requesting institutions to incorporate a student-centred approach to learning, teaching, and assessment practices. It also emphasises support for different student populations, such as 'mature, part-time, employed, and international students as well as students with disabilities' (ENQA et al., 2015).

In 2008, following its endorsement in 2007 at the London ministerial conference (Bologna Process, 2007), the European register of quality assurance agencies (EQAR) was established, with the E4 Group as founding members, to guarantee compliance with the ESG (European Commission, 2018e). EQAR's main function is to track quality assurance agencies adhering to the ESG, supporting the transferability of learning and recognition of learners' mobility. In 2018, the Database of external quality assurance results (DEQAR) was developed to improve access to reports and decisions on higher education institutions/programmes externally reviewed against the ESG by EQAR-registered agencies across the EHEA (ENQA, 2022a).

A 2018 study on progress in quality assurance systems in the EHEA shows increased awareness and acceptance of the ESG among countries, although adoption varies (European Commission, 2018e). Quality assurance agencies have reported analysing the extent to which learning outcomes are clearly stated in study programmes. While there is a trend towards a quality culture, some institutions still view quality assurance as a tick-box procedure. The ESG has served as a guiding principle for higher education reform in some countries, such as restructuring higher education systems or revising external quality assurance procedures of national quality assurance agencies, while its adoption has been a key goal for future development in others. However, the same study revealed several challenges regarding ESG adoption at the national level, including limited financial and human resources, poor communication of the learning-outcomes approach, and lack of practical experience in integrating and measuring the student-centred approach in evaluation criteria.

The widespread acceptance and adoption of the ESG by most EHEA countries suggest that its impact is likely to be sustainable in the long term, contingent upon continued commitment and implementation at the institutional and individual levels. ENQA and EQAR can play influential roles in sustaining the impact of quality assurance in higher education institutions, according to expert interviews.

3.1.2. European quality assurance in vocational education and training (EQAVET)

Quality assurance in VET has been a focus since the 1994 Council Resolution on the quality and attractiveness of vocational training. Quality was mentioned in several overarching strategic documents which set in motion significant work from 2000 onwards to develop quality assurance tools and methods; this led to the establishment of the EQAVET framework through the 2009 European Parliament and Council Recommendation. EQAVET's goal was to improve VET quality, enhance transparency and consistency in VET policies between Member States, and promote mutual trust, worker mobility, and lifelong learning. The years leading up to the EQAVET Recommendation saw the development of a single framework for quality assurance in VET, with the establishment of a technical working group (TWG) to create a common quality assurance framework (CQAF) endorsed in 2004 by the Council. The European Network for Quality Assurance in VET (ENQAVET) was launched in 2005 to refine the CQAF and offer support. Following the 2009 EQAVET Recommendation, Member States were encouraged to develop national quality assurance approaches, establish national reference points (NRP) for quality assurance, and participate in the EQAVET Network (European

Commission, n.d. -c), which replaced ENQA-VET. The EQAVET Steering Committee guides the strategic direction and coordination of EQAVET's activities and Cedefop has supported European Commission and Member States with evidence and expertise on issues related to quality assurance in VET.

Between 2010 and 2019, several studies were conducted on the implementation of EQAVET (Ulicna & Curth 2013; European Commission, 2014b, 2019c), revealing evidence of impact, such as influencing changes in national policies and raising awareness of effective quality assurance systems. However, implementation challenges remained: the use of the framework had a higher level of influence on quality assurance in school-based initial VET and less on work-based learning, continuous VET and validation of non-formal and informal learning and non-formal provision (even though the 2009 Recommendation covered them); the learning outcomes approach, quality assurance of qualification design, assessment and certification were not sufficiently addressed; and there was a lack of cooperation between EQAVET and European initiatives in quality assurance in other sectors of education (European Commission, 2014b, 2019c; EQAVET, 2020). To address these gaps, a working group was established in 2017 to develop additional indicative descriptors and indicators (EQAVET+) (European Commission, 2015b; EQAVET, 2016, 2018, 2020). The EQAVET framework was integrated into the 2020 Council Recommendation on vocational education and training, focusing on trust-building and transparency. To this end, EU-level peer reviews were introduced as a mechanism to improve mutual learning, enhance transparency and consistency of quality assurance arrangements in the provision of VET, and reinforce mutual trust between EU Member States (see for example EQAVET, 2022a).

Despite the challenges that led to EQAVET's revision, its influence on national quality assurance systems has been substantial. The 2013 EQAVET evaluation (ICF GHK, 2013b) demonstrates EQAVET's 'agenda setting' effect at the national level. For example, in eight countries, EQAVET, and the CQAF, directly contributed to the formation of national quality assurance approaches that 'would have not taken shape in the same way' in their absence. In six additional countries, EQAVET inspired the creation of national quality assurance systems that were already in progress. The latest study carried out in 2019 (European Commission, 2019c) also provided evidence of the continued effects of EQAVET. It highlighted that the EQAVET Recommendation had been widely implemented, with most countries adjusting or reviewing their systems in response. Twelve countries have changed their quality assurance policies or introduced new legislation referencing EQAVET. Although reforms may not have been explicit and implementation varies across countries, raising awareness of quality assurance in VET is considered impactful.

EQAVET has increased the visibility and profile of quality assurance, promoting dialogue and reflection on practices (ICF GHK, 2013b; Gatt, 2016; European Commission, 2019c). Examples include increased dialogue about quality in VET providers, leading to changes in internal practices, such as the development of senior leader peer groups or quality assurance-specific meetings. Governance arrangements and EU-level support were crucial enablers for implementation. Notable activities include working group sessions, sectoral seminars, NRP networks (considered a key achievement of EQAVET), NRP meetings, and peer learning activities, which facilitated information exchange and cooperation among countries.

EQAVET has influenced strategic changes in national systems, suggesting that these changes will likely persist over the long term. However, sustainability potential varies given the uneven implementation, usage, and impact of the framework at the national level. The integration of the EQAVET framework into the VET Recommendation demonstrates the continued relevance and value of quality assurance in VET and the importance of EQAVET as an instrument.

3.1.3. Coherence of quality assurance initiatives

Internal coherence: ESG and EQAVET

ESG and EQAVET, focusing on higher education and VET respectively, share the common objectives of promoting mutual trust, transparency, and recognition of qualifications to facilitate mobility and lifelong learning. Both initiatives aim to:

- (a) develop a culture of quality by promoting consistent policies (EQAVET) and standards (ESG) across their sectors;
- (b) increase transparency of learning programmes to provide clearer evidence of the learning outcomes achieved by learners;
- (c) align with qualifications frameworks;
- (d) assist in the transferability of qualifications or units of learning across countries, sectors, and levels of education and training.

ESG and EQAVET share similar principles, such as non-prescriptive guidelines, emphasising learner feedback and stakeholder involvement, and centring on teaching and learning. They both promote continuous improvement through evidence-based quality assurance and suggest key stages for embedding quality culture in the education system, including the development and ownership of the quality assurance system; self-assessment or internal evaluation; external assessment or evaluation; and review and enhancement (Spiteri, 2015). Both tools also support a focus on, and emphasise, the importance of clearly defining and describing learning outcomes in higher education and VET. In EQAVET, the need

to strengthen the focus on learning outcomes had been identified as a crucial element which needed more explicit integration to address identified shortcoming of the framework.

While ESG and EQAVET have commonalities, differences exist that hinder a unified approach to quality assurance in higher education and VET. ESG is more explicit in the process of implementing quality assurance in higher education (Spiteri, 2016), while EQAVET can be regarded more as a toolbox: the latter's descriptors and indicators provide guidance for Member States, depending on the characteristics of their VET systems, meant to be used on a purely voluntary basis. Findings from the 2013 evaluation of EQAVET and 2019 study on ECVET and EQAVET highlighted that the ESG provide more specificity in some cases in areas more relevant to higher education institutions (HEIs), such as external quality assurance and standards for research output and autonomy (which may not be directly applicable to most VET providers) as well as the assessment of students and the quality of teachers. This suggested a lack of alignment, unsurprising given the different sectoral focus.

The overall approach to quality assurance was seen to lack synergy. This is because quality assurance standards in higher education (via the ESG), are set and implemented by a voluntary network of quality assurance organisations (ENQA) and through EQAR, in a self-regulation approach that sees HEIs sign up to the register and, in so doing, comply with those standards. Because there is no equivalent in VET, this difference potentially increases the complexity of EU quality assurance systems, which in turn makes it more challenging for employers and learners to understand comprehensively (ICF GHK, 2013b; European Commission, 2019c).

Ulicna and Curth (2013, p. 61) adds a further reflection, which relates to the different governance between ENQA and EQAVET, reflecting the fact that the two sectors of VET and higher education 'traditionally interact very little', while ESG (via ENQA) and EQAVET are managed differently. EQAVET is chaired by the European Commission, while ENQA is an autonomous association of quality assurance bodies. Efforts to strengthen links include a 2013 quality assurance in VET and higher education seminar, organised by EQAVET together with Cedefop to build on the commonalities between higher education and VET approaches to quality assurance and support cooperation to promote mobility and permeability (Cedefop, 2013). Experts participating in workshops for the study highlighted the importance of these meetings in building common understanding and trust between countries but also connect national stakeholders, noting that these should occur more regularly, along with other forms of cooperation.

Finding a merged quality assurance system for higher education and VET might be challenging due to sectoral differences (European Commission, 2019c). For example, the diversity of how VET provision is organised (WBL, IVET, CVET) means that indicators may need to be broader to be more comprehensive. To this end, the EQAVET Framework does not contain an equal level of detailed guidance in comparison to the ESG, which are addressed to a more homogeneous group of organisations in higher education. This is also reflected in less detailed guidance on process (as noted above) and more on broad reference points common across all VET systems such as governance and leadership, learning outcomes, assessment, recognition, and student-centeredness.

Thus, the relationship between ESG and EQAVET proves to be moderate, with shared objectives but distinct governance and implementation, due to the divide between higher education and VET. Quality assurance initiatives are closely linked to qualifications frameworks and credit accumulation and transfer, as well as to validating non-formal and informal learning and recognising qualifications, as argued in the rest of the chapter.

3.1.4. Quality assurance developments at the national level

Quality assurance at the national level has seen considerable progress in the first two decades of the century, with all country cases included in this study implementing quality assurance mechanisms in both higher education and VET. The primary goal of national policy initiatives has been to improve the quality of learning programmes, qualifications, and education and training providers, often through legislation or by establishing quality assurance agencies. Most European countries have complemented internal higher education quality assurance with external agencies, varying in scope and coverage of sectors, institutions, and disciplines (Kelo et al., 2020). European developments like the ESG contribute to convergence in higher education quality assurance.

VET-focused initiatives often concentrate on VET delivery and provider quality, promoting self-assessment in schools (primarily IVET) and external evaluation through quality observatories. Accreditation systems and provider registers provide national initiatives aiming to support quality-based VET delivery, increasing the visibility of and trust in providers. Before EQAVET, each country had its own approach to quality assurance: the new framework introduced common guidelines and indicators to assess the quality of VET systems. Some efforts to promote a coherent approach across different education and training sectors existed, as well as efforts to promote coherence across regions (e.g. Germany).

A 2018 study on the progress of quality assurance systems in higher education found mixed results in promoting dialogue between higher education

and VET on quality assurance (European Commission, 2018e). Stakeholders agreed on overlapping quality assurance principles, applicable across sectors, but harmonising approaches faced hesitation due to the unique features of VET and higher education. National authorities had reservations about implementing and achieving harmonisation in practice. Despite this, the study showed examples of cross-sectoral cooperation on quality assurance in different Member States. Some countries interconnect quality assurance in education and training subsystems through legislation, common governance structure (e.g. single authority), or supporting coordination across sectors.

In various countries, integrated quality assurance agencies manage both higher education and VET quality. In Ireland, Quality and Qualifications Ireland, established in 2012, is responsible for the quality assurance of all higher education institutions, public and private, and for the quality assurance and certification of further education and training. In Norway and the UK quality assurance in higher education is managed by the same ENQA-qualified agency as for VET (Kelo et al., 2020). In Finland, the Finnish National Agency for Education's (EDUFI), set up in 2017, oversees quality assurance for VET (CVET, IVET and WBL), assessed through external evaluations, self-evaluations and the monitoring of providers. In 2014, the Finnish Education Evaluation Centre (FINEEC), became responsible for the external assessment of the quality of the entire education system from early childhood to higher education, based on the assessment of learning outcomes ⁽⁹⁾. FINEEC also supports the education institutions in setting up their internal evaluation and quality management systems. Since 2018, FINEEC is an independent authority operating as a separate unit of EDUFI. In the Netherlands, although there are two distinct organisations focusing on quality assurance in higher education and in VET, the Dutch Inspectorate of Education (part of the education ministry) is responsible for the quality of education across all sectors and assesses the quality of education of the individual education institutes and the education system as a whole. In France, France Compétence seeks to establish common quality standards and foster collaboration between VET and higher education providers (France Compétences, 2023). It organises regular meetings and an annual conference so that all those involved in the education and training system (VET, higher education, adult education) share the same requirements and procedures, including a strong quality focus, in issuing qualifications.

Poland has adopted an integrated approach, with the Integrated Qualifications System Act (IQS Act) in effect since 2016, covering both general education and VET. The Act introduced both internal and external controls of the certification

⁽⁹⁾ Nevertheless, Finland has been promoting a strong quality assurance system since the late nineties.

processes of each institution, including monitoring the internal quality assurance system and periodic verification of the compliance of quality assurance providers with the requirements specified in the Act. For qualifications awarded in the formal education system, quality assurance procedures function in accordance with the ESG. According to the IQS Act, the awarding bodies (certifying institutions) of State-regulated and market qualifications awarded outside formal education and training must also have a system of internal quality assurance and be part of an external quality assurance system (Cedefop, 2023c).

Germany has maintained sector-based quality assurance frameworks⁽¹⁰⁾, with efforts to reduce regional differences by defining common standards and criteria at the sector level. The 2002 KMK resolution on the continuing development of quality assurance across all Länder and all universities established the accreditation of study courses. The German Accreditation Council (GAC) is a joint institution of the federal states for quality assurance in higher education; it is tasked with making decisions on the accreditation of study programmes and of quality management systems. The 2017 Interstate Study Accreditation Treaty was signed by all the German states and set out the legal requirements for a common accreditation system. Besides defining the new role of the GAC, accreditation agencies became responsible for the implementation of the assessment procedure for both system and programme implementation; the GAC makes accreditation decisions. The 2005 Vocational Training Act and its subsequent amendments specify national quality assurance standards for in-company training as well as quality requirements for trainers and training institutions, and how examinations are carried out by competent bodies.

Italy has promoted quality assurance in education and training subsystems through legal documents, including two ministerial decrees in 2004, introducing a quality assurance framework in general and higher education and establishing the National Institute for Evaluation of the Education System, as well as a National Plan for Quality Assurance for Education and VET in 2017, which introduced a coherent framework for general education (for programmes targeting learners aged 14 to 19), IVET, CVET and work-based learning/apprenticeships. The plan considers EQAVET and includes an explicit reference to learning outcomes (Ministry of Labour and Social Affairs et al., 2017). The 2021 Guidelines for interoperability across providers and agencies integrate minimum standards of quality in certifying competences and validating informal and non-formal learning.

⁽¹⁰⁾ For example, the Institute for Educational Quality Improvement (IQB) aims to improve the quality of primary and secondary education in all the Landers, while the German Accreditation Council (GAC) is a joint federation of the Landers for quality assurance in higher education.

The country cases showed that most quality assurance approaches focus primarily on formal learning with some exceptions. They have been challenged by the shift towards diversified modes of learning, which allow qualifications to be acquired through different learning pathways including those outside formal education and training ⁽¹¹⁾. Based on the analysis of the national initiatives identified in the eight country cases, explicit references to learning outcomes in quality assurance criteria are not always evident, but from the 2010s, quality assurance has increasingly been linked to learning outcomes in different learning stages and assessment procedures (Blomqvist et al., 2012).

3.2. Credit accumulation and transfer

At the start of the 21st century, several policy documents and processes, such as the Bologna declaration (Bologna Process, 1999), the Lisbon strategy (European Council, 2000), the EU action plan on mobility (CEU, 2000) and the Copenhagen declaration (CEU, 2002), encouraged a stronger focus on the comparability of academic and vocational qualifications to promote mobility and lifelong learning. A key aspect of this endeavour was the development of more efficient and robust methods to enable learners to receive and accumulate credits for both formal and non-formal learning experiences (European Council, 2000). The policy initiatives and developments relevant to this thematic area include:

- (a) the European credit transfer and accumulation system, which originated in 1989 and became a key component of the Bologna process.
- (b) the European credit system for vocational education and training, established in 2009 as part of the Copenhagen process (European Parliament & CEU, 2009a); the original 2009 Recommendation was repealed by the 2020 VET recommendation, which nevertheless retains its key principles and tools.

3.2.1. European credit transfer and accumulation system (ECTS)

The ECTS was initially developed as part of the ERASMUS programme, following a 1985 Recommendation to create a European academic credit transfer scheme that would facilitate mobility and the recognition of study periods taken abroad (European Commission, 1984). The original ECTS Pilot Scheme ran until 1995 and was coordinated by the ERASMUS Bureau, European Commission, and a group of subject area coordinators across five academic subject areas to test the use of ECTS credit points for study periods abroad (Wagenaar, 2019). The objective of ECTS was later expanded to allow for accumulation within the lifelong

⁽¹¹⁾ Find more information in [Cedefop's Quality Assurance webpage](#).

learning perspective (Adam & Gemlich, 2000), shifting from being a system designed for credit transfer to one that accumulates credits across all programmes of study in higher education.

Over time, ECTS has evolved to place more emphasis on learning outcomes alongside student workload required to achieve them; this was particularly so from 2000 onwards, driven by the Tuning Project funded by the Socrates Programme (González & Wagenaar, 2003). This was officially confirmed in the Yerevan Communiqué in 2015 and reflected in the most recent update of the 2015 ECTS Users' Guide (European Commission, 2015a).

There is evidence that ECTS has had a significant impact in most of the 48 EHEA Member States and that it is used as both a credit accumulation and transfer system, with learning outcomes and student workload increasingly used as the basis for credit allocation (Sursock & Smidt, 2010; Sursock, 2015; Gaebel et al., 2018). By 2016/17, only eight countries did not use a credit system or used a national credit system rather than ECTS for the accumulation and transfer of credits. Nevertheless, in all countries, including those with national credit systems, ECTS was used in practice by all or most higher education institutions at least in the context of international mobility (EACEA & Eurydice, 2018). The Bologna Process implementation report also concluded that ECTS has significantly impacted HEIs, increasing transparency and recognition of learning outcomes acquired in both domestic and foreign institutions while accommodating non-formal learning and facilitating more transparent curriculum design (EACEA & Eurydice, 2020).

However, the main ECTS orientation has so far been towards recognising learning within higher education courses, while several HEIs within the EHEA face difficulties in consistently estimating the required workload and translating it into learning outcomes (Structural Reform Working Group, 2014; Sursock 2015; EACEA & Eurydice, 2018), as the process can be fairly burdensome, complicated and resource-intensive (Sursock & Smidt, 2010; Mitchell et al., 2012). To address this, academics should receive better training on learning outcomes and workload concepts, although such training is often lacking in many countries (Bologna Process, 2019). Resistance among academics to describing programmes and their components in terms of learning outcomes and student workload is also evident, especially when reforms are perceived as 'top-down' (Gaebel et al., 2018).

Some barriers persist in using ECTS for student mobility between countries. Student surveys have reported issues with credit recognition (European Commission, 2015c; Finocchietti, 2015), with the 2019 survey of the European Students' Union (ESU) indicating that 12 countries had very dissatisfied students with regard to the recognition of their learning abroad. Reasons for this include

course content not being accepted by the sending institution, or a lower number of credits being recognised (Bologna Process, 2019), as well as sending institutions making unexpected changes to learning agreements, and providing incomplete or imprecise information (Sursock & Smidt, 2010; Sursock, 2015).

Overall, though, it seems that ECTS has become and continues to be a tool for improving transparency and flexibility of higher education study programmes across Europe, increasing the focus on learning outcomes and providing a tool for fostering mobility. As an expert interviewee notes, 'both at the political level and at the level of the institutions and academics, everybody thinks now in terms of ECTS'. Its sustainability is likely to improve due to its recent link to initiatives and recommendations, such as the Recommendation on microcredentials (CoE, 2022a) and the 2020 VET Recommendation CoE, 2020c). Both recommendations suggest using ECTS to describe the notional workload needed to acquire microcredentials, and vocational qualifications at post-secondary and tertiary level respectively.

3.2.2. European credit system for vocational education and training (ECVET)

The ECVET emerged from the Copenhagen Declaration, which emphasised the need for a system supporting 'the transparency, comparability, transferability and recognition of competence and/or qualifications, between different countries and at different levels'. Following the Copenhagen Declaration, a technical working group was set up in 2002 to develop a credit transfer system for VET. In 2009, the ECVET Recommendation was adopted (European Parliament & CEU, 2009a), and ECVET was officially launched via a series of meetings and conferences in the same year.

ECVET aimed to promote more 'portable qualifications and transferable learning outcomes, thereby making learning mobility and lifelong learning a reality for young and adult learners' (Cedefop, 2012-b, p.1). It focused on recognising and accumulating learning outcomes in VET at all levels of the EQF, but it also aimed to recognise learning outcomes acquired through informal and non-formal learning. Interviewees involved in ECVET's development had different perspectives on its primary focus and challenges. Some suggested that the main goal was to make VET qualifications more flexible by structuring them into small units of learning outcomes, allowing learners to receive credits for partial programme completion or validation of work experience. Others believed that the initial aim was to create a system similar to the ECTS, but they faced difficulties in developing a compatible credit system for VET which led to a refocusing towards 'competence development and modularisation'.

The 2014 evaluation of ECVET by the European Commission found limited evidence of its impact on transferring, recognising, and accumulating assessed learning outcomes using this tool across Member States. It was observed that ECVET was not a European credit system but rather a framework supporting VET flexibility and mobility, with limited synergy with ECTS (European Commission, 2014a; Ulicna et al., 2016). The 2020 Council Recommendation on VET, which repealed the 2009 ECVET Recommendation, acknowledged ECVET's contributions to better-quality mobility experiences through the use and documentation of units of learning outcomes; but it also acknowledged that ECVET did not lead to a credit system in VET. It further recommended Member States to build on some key principles of ECVET, for example describing VET qualifications in terms of units of learning, and to continue using the tools developed as part of it (in particular, the learning agreement and memorandum of understanding) to support learner mobility, for instance via the Erasmus+ programme. Challenges in implementing ECVET include the diverse (and in some countries fragmented) nature of European VET systems, with varying levels of ECVET readiness (in terms of units and learning outcomes, transfer and accumulation, and national lifelong learning frameworks) across countries when the Recommendation was adopted (Cedefop, 2016b). Additionally, low awareness among employers, social partners, and training providers limited ECVET's adoption (Donlevy et al., 2016; Szumilewicz & Berriman, 2020).

As an expert interviewee pointed out, the fact that ECVET was not adopted as a European credit system made it look like 'a failure', but it supported reforms in several countries, for example regarding the structure of VET qualifications. Despite its challenges, ECVET had broader impacts, such as encouraging a greater focus on learning outcomes in VET, promoting transparency, and supporting flexibility by encouraging the modularisation of vocational qualifications (Auzinger & Luomi-Messerer, 2021). An expert interviewee noted that ECVET ended up being 'an experimentation that supported other policies, [such as] validation of non-formal and informal learning'. Countries and VET providers can be expected to continue using some ECVET tools, like learning agreements and memorandums of understanding, to support learner mobility via the Erasmus+ programme, as suggested in the 2020 VET Recommendation. Some interviewees also noted that ECVET's principles live on in microcredentials, as they can be seen as official certifications of units of learning outcomes. However, others argued that microcredentials are intended for international vendor or company certificates rather than initial education and training within VET.

3.2.3. Coherence of credit system initiatives

Internal coherence: ECTS and ECVET

ECTS and ECVET appear to share similar objectives, as both aimed at making learning programmes more transparent (i.e. by assigning credits based on achieved learning outcomes), facilitating learner and worker mobility, and supporting the accreditation and accumulation of credits from informal, non-formal, formal, and part-time learning experiences (European Parliament & CEU, 2009a; Cedefop, 2012b, 2016b; ECVET Users' Group, 2012; Bologna Process, 2015). The potential for compatibility between ECTS and ECVET was recognised in the 2009 ECVET Recommendation; the Bruges Communiqué of 2010 (CEU, 2010) called for flexible links between VET and higher education and increased coherence between ECVET and ECTS (Ryan et al., 2018). To support greater compatibility, EU-funded projects under the Leonardo da Vinci programme were initiated. Projects, such as the 'Be-TWIN: Building bridges and overcoming differences', identified compatibility points between the two credit systems and developed tools to facilitate permeability (Ryan et al., 2018).

However, despite efforts to promote synergies, there is little evidence to suggest that the desired compatibility between ECVET and ECTS credit systems was achieved. A key difference in terms of compatibility lies in the conceptualisation of credit points: ECTS uses a standardised measure based on workload, with one credit typically representing a notional 25–30-hour workload, while ECVET uses a relative measure based on the weight of unit of learning outcomes in proportion to the overall qualification (Ryan et al., 2018) ⁽¹²⁾. Additionally, the structure of learning programmes and qualifications differs between higher education and VET, leading to limited permeability between the two systems. As one expert interviewee explained, in VET, there are 'different entry points even at the age level' and different ways of acquiring 'a qualification through a number of teaching sessions, [or] through an apprenticeship, through different teaching experiences, or a combination of experiences'. In contrast, higher education programmes were seen to be much more homogeneous.

Both ECTS and ECVET have been followed up by the European Commission, but with different governance structures. The ECVET implementation process was coordinated by DG EMPL (initially DG EAC, but later moved to DG EMPL), with

⁽¹²⁾ The ECVET recommendation specifies that ECVET points have no value independent of the qualification, and that their award is independent of the actual time required to achieve them. However, to enable a common approach for the use of ECVET points, a convention was established where 60 points are allocated to the learning outcomes expected to be achieved in a year of formal full-time study.

support from Cedefop, ETF, and various Working Groups, while ECTS was initially developed by DG EAC supported by a group of academics and administrators (Wagenaar, 2019). Interviewees pointed out that ECTS is 'owned' by the Bologna process group with the Commission being responsible for providing overall quality assurance and updating the Users' Guide. The 2020 VET Recommendation repealed the ECVET Recommendation, inviting Member States to make best use of European transparency tools, including ECTS, and acknowledging that ECTS may be applied for vocational qualifications at post-secondary and tertiary level.

In conclusion, the relationship between ECTS and ECVET can be considered limited. While there are considerable similarities in their overall objectives and principles, including a shared focus on learning outcomes, differences in their conceptual design and governance have limited their compatibility and implementation synergies. This could be partly attributed to the divide between higher education and VET, and the fact that a European credit system in VET was not materialised as initially planned.

External coherence: credit systems and quality assurance initiatives

Over the years, efforts have been made to promote synergies between quality assurance initiatives and credit accumulation and transfer in both higher education and VET. Quality assurance is considered crucial for the effective functioning of credit systems, as it ensures progression and transfer of learning. In higher education, ECTS is widely promoted to enhance transparency and improve the quality of information. While synergies between credits and quality assurance have been encouraged in both higher education and VET, they are more prevalent in the higher education sector.

Quality assurance plays a crucial role in fostering trust and competitiveness in the EHEA (Szabó & Tück, 2018), with the ESG supporting higher education reform tools like ECTS. Quality assurance has proven vital for acceptance of credits gained in different countries or HEIs. In the higher education sector, the links between learning outcomes and external quality assurance, as well as other tools such as ECTS and EQF, have been explored and strengthened in reports by ENQA (Bienefeld et al., 2008; Blomqvist et al., 2012). This has meant that internal quality assurance standards (Part 1 of the ESG) explicitly reference programme design and student involvement, with programmes expected to quantify workload in ECTS points.

The 2009 ECVET Recommendation highlighted the importance of quality assurance, inviting Member States to apply quality assurance principles in VET (European Parliament & CEU, 2009a). ECVET was designed to work coherently with transparency-promoting instruments, such as EQAVET and the EQF.

EQAVET, in turn, with its focus on enhancing learning quality and progression, was designed to support other VET instruments, including ECVET. Despite similarities and coherence between ECVET and EQAVET (and EQF) in objectives, principles and concepts, practical implementation and synergy appear limited. This is mainly associated to the fact that the adoption and implementation of ECVET has been restrained, while the EU-level perception was that these tools were not presented as a coherent set. Efforts were subsequently made to strengthen their links (for example the joint seminar on ‘assuring the quality of VET qualifications – the contribution of EQAVET, EQF and ECVET to the definition and re-definition of learning outcomes-based standards’), but results remained modest. The perception of these tools operating ‘in silos’ was also echoed by some national level stakeholders in the more recent study on EU VET instruments (European Commission, 2019c, p. 64), finding that, over the years, the narrative about their linkages seems to have become lost, or at least significantly weakened, along their way. At a national level, the use of ECVET and EQAVET has varied, making it difficult to establish practical connections between them. Links between credit systems and other policy areas are addressed in the following sections.

3.2.4. Credit system developments at the national level

The national policy initiatives identified in the eight country cases have largely promoted the use of credits in higher education, facilitating the transferability of learning outcomes usually between institutions within the same education and training subsystem. However, the use of credits in other education subsystems has been relatively limited due to fewer countries implementing relevant policy initiatives. The main objective of credit-related policy initiatives in these eight case studies has been to introduce and develop credit systems. Their aims included:

- (a) making learning programmes and pathways more flexible, primarily within the same education and training subsystem;
- (b) facilitating credit transfer and accumulation and promote learner mobility, by enabling the transferability of learning outcomes across institutions and countries;
- (c) promoting validation of prior learning, albeit in a limited number of cases.

EHEA countries have adopted the ECTS system, promoting convergence in higher education. However, the same has not occurred in VET, where the implementation of credit systems has been more challenging and adopted by fewer countries. Even when credit initiatives have been implemented in subsystems other than higher education, coordination between them has been limited, which has not significantly contributed to increased permeability. Finland is an exception, having successfully implemented credit accumulation and transfer initiatives

across education subsystems, facilitating the recognition and transfer of credits within and between them, and enabling seamless educational pathways. The country adopted the ECTS system for higher education in 2004 and developed a credit system for VET closely related to the ECVET principles before the 2009 ECVET recommendation (Franco et al., 2019). ECVET-FI provided a framework for the accumulation, transfer, and recognition of credits earned by VET learners in different learning environments, such as vocational schools and workplaces, and education institutions, which were also used to obtain a qualification. Policy initiatives have 'eased the credit accumulation and transfer across general education, higher education, VET, and transitioning from one education level to another' (Finland case study).

Ireland is a good example of early national initiatives supporting the adoption of a credit transfer and accumulation system in all the education and training sectors, aiming to 'establish zones of mutual trust for credit to operate within and between institutions at all levels' (National Qualification Authority of Ireland, 2006, p. 22). In Ireland, there is a wide range of access, transfer and progression (ATP) practices, initiatives and projects that enable successful ATP by particular groups of learners and support equity and social inclusion. Quality assurance procedures for education and training providers specify the need for ATP arrangements for new programmes, creating notable links between quality assurance and credit developments. However, in practice it is often difficult to use credits acquired through further education and training to access higher education undergraduate qualifications, as it is not always straightforward to link credit systems in VET and higher education. The existence of two credit systems, and the fact that they are not always adequately integrated, limit the impact of such initiatives. A review ordered by Quality and Qualifications Ireland mentions that the two credit systems have facilitated transfer and progression within their own subsystems, but it is questionable whether the existence of two distinct credits systems supports or hinders progression between further education and training and higher education (QQI, 2023). Netherlands has also introduced initiatives to support credit accumulation and transfer. The 2016 Regulation for vocational education and training certificates (*Regeling certificaten middelbaar beroepsonderwijs*) allows students who did not complete their entire study to get certificates (and course credits) for parts that they did complete, both in school-based and work-based routes with on-the-job internship elements. Certificates are not awarded for every part of a study but only for those that are meaningful for the labour market.

In contrast, countries like Germany and Italy have not shown familiarity with this approach to VET (European Commission, 2019c). In Germany, the introduction of credit systems in VET has been considered conceptually incoherent

with the nature of its VET programmes, although changes in recent years have been introduced to align the systems to other European countries. Modularisation of learning and training pathways was seen as problematic and potentially risky for the effectiveness of the German VET system. Resistance came particularly from SMEs and social partners, and related to the fear that 'splitting up' vocational pathways into modules could break the completeness and effectiveness of the longer, structured VET paths (Powell & Trampusch 2011; Ante 2016). In the higher education sector, the ECTS System was introduced by the amendment of the German Framework Act for Higher Education in 2002 and was considered a central instrument for the accumulation of study credits for all bachelor and master courses. The key initiative in promoting ECTS was the positioning of the German Rectors Association, which strongly advised German Universities to adopt the ECTS system and its instruments as a key and reliable tool to facilitate transparency, comparability of the programmes, and their modularisation (HRK, n.d.).

3.3. Comparability of skills and qualifications

In examining comparability, the study identified a range of initiatives and tools that promote transparency and comparability of skills and qualifications.

- (a) European qualifications framework for lifelong learning (EQF) adopted in 2008 and revised in 2017.
- (b) Framework for qualifications of the European higher education area (QF-EHEA), adopted in 2005.
- (c) Europass, specifically the Europass diploma supplement and the Europass certificate supplement, which were part of the 2004 Europass decision; as well as the Europass platform, launched in 2020 after the 2018 Europass decision, including developments related to the European Learning Model (ELM) and digital credentials for learning.
- (d) Microcredentials, a recent policy initiative adopted in 2022.
- (e) Multilingual classification of European Skills, Competences, and Occupations (ESCO), published in 2013 and launched in its first full version in 2017.
- (f) Competences frameworks, such as the key competence framework initiative adopted in 2006 and revised in 2018.

After providing an overview of the development and interconnections of these policy initiatives, their interactions and connections with the initiatives described earlier in this chapter will be discussed.

3.3.1. Qualifications frameworks: EQF and QF-EHEA

European qualifications framework (EQF)

The EQF was formally adopted by the European Parliament and Council in 2008 as a common reference framework of eight levels, serving as a ‘translation grid’ between national qualifications frameworks (NQFs). The Recommendation invited Member States to reference their NQFs or qualification systems to the EQF, establishing clear and transparent relationships between their national qualification levels and the eight EQF levels. The EQF aims to cover all types and levels of qualifications including those from higher education, vocational education and training and general education, as well as qualifications awarded by the private sector or international organisations (European Commission, 2018f). Following a 2017 revision, comparability between the EQF and third country regional and national qualifications framework is possible and being piloted (European Commission et al., 2021); increasing attention has been given to international qualifications ⁽¹³⁾.

The eight reference levels are defined based on learning outcomes, helping to shift the focus onto what a learner knows, understands and is able to do after a learning experience, rather than focusing on learning inputs, such as the duration of a learning experience or the type of institutions. The EQF aims to cover all types and levels of qualifications, promoting transparency, understandability, and comparability across countries, systems, and institutions, to increase the mobility, employability and the social integration of workers and learners between different levels and sectors of education and training, between education and training and the labour market, and within and across borders (European Parliament & CEU, 2008; European Commission, 2018f).

The EQF was developed in response to the 1998 European Forum on Transparency of Vocational Qualifications, which aimed to facilitate worker mobility within Europe by addressing the lack of transparency in vocational qualifications (European Parliament, 2012). Development continued in 2003 when a Cedefop-funded study proposed an eight-level reference framework based on learning outcomes (Cedefop, 2005), and the European Commission established an EQF expert working group in 2004, including representatives of all education and training sectors and social partners (European Commission, 2005). The EQF

⁽¹³⁾ International qualification means a qualification awarded by a legally established international body (association, organisation, sector or company) or by a national body acting on behalf of an international body that is used in more than one country and that includes learning outcomes assessed with reference to standards established by an international body. Source: 2017 EQF Recommendation

proposal was launched by the European Commission in September 2006. According to expert interviews, there were mixed reactions towards the EQF prior to its adoption. There was scepticism regarding the focus on learning outcomes rather than learning input, from actors involved in the Professional Qualifications Directive and stakeholders of countries with more rigid approaches to training and employment. Countries with higher mobility rates were more receptive and supportive of the EQF concept.

Following adoption of the recommendation in 2008, the EQF Advisory Group was formed, including representatives from all 32 of the ET 2010 countries, as well as from education and training providers and employers, employees and later also civil society, to ensure input from a wide range of different sectors (EQF-Ref, 2024). The group is chaired by the Commission and has received technical and analytical support from Cedefop and ETF for partner countries. The group also includes representatives from the Council of Europe which pay particular attention to developments related to the QF-EHEA. A 2013 evaluation by the European Commission (2013b) as part of the New Skills Agenda for Europe proposed a revision of the EQF, which led to the 2017 Recommendation emphasising up-to-date NQF references to the EQF, quality assurance and credit principles, supporting international qualifications cooperation, and developing criteria and procedures for comparing third-country qualifications frameworks to the EQF (European Commission, 2018f).

The same evaluation concluded that EQF had significantly impacted education and training policies, particularly through the development of the NQFs, and increasing the parity of VET and higher education. The adoption of the EQF in 2008 bolstered the development of NQFs in EU Member States and facilitated the implementation of the QF-EHEA (Blomqvist et al., 2012); it also influenced developments beyond the EU and Europe (UNESCO et al., 2023). The 2013 evaluation also revealed that the EQF fostered regional cooperation among European and non-European countries in developing their NQFs and promoted cooperation among stakeholders within the EQF Advisory Group. The monitoring and reporting activities carried out in preparation of EQF advisory group meetings were also found to contribute to raising awareness of qualifications systems in other countries.

Interviewed experts and participants in workshops for this study agreed that the EQF is one of the most successful 'single instruments', providing 'a platform for lifelong learning'. They noted that EQF had positively impacted the rise of lifelong and life-wide learning by increasing transparency, shifting focus from inputs to outcomes, and promoting a learning outcomes approach which became more widespread throughout Europe. The EQF promotes non-linear learning

pathways, challenging the traditional notion of an upward trajectory, and enabling comparisons based on content, making learning in different contexts more understandable.

The continued adherence to NQFs by countries signifies the EQF's success and sustainability, but challenges remain. For example, ensuring that teaching and assessment follow a learning outcomes approach, and determining if the labour market considers EQF levels when evaluating applicants. As pointed out by an expert interviewee, employer engagement in EQF development has been challenging, despite their interest, due to its potential to facilitate mobility. The evolving landscape of education, training, and labour markets, including microcredentials, raise questions about EQF's ability to address future challenges and adapt accordingly. The future of EQF will involve examining its relationship with alternative qualifications, and considering a potential shift from full qualifications to individual units or credentials. Continued development of the EQF adapts to the changing education and training landscape, and its sustainability hinges on maintaining high quality standards and remaining relevant.

Framework for qualifications of the European higher education area (QF-EHEA)

The Framework for qualifications of the European higher education area (QF-EHEA), introduced in 2005, provides a shared basis for understanding European higher education systems of countries in the Bologna Process and promotes transparency and comparability of qualifications (Bologna working group on qualifications frameworks, 2005). It is a set of cycles with descriptors for each cycle, allowing countries to develop compatible national higher education qualifications structures. Following the presentation of a report by a working group tasked with coordinating an overarching framework for the EHEA, the Bologna Follow-Up Group (BFUG) advised Ministers to adopt the QF-EHEA and create national higher education qualifications structures compatible with it. The QF-EHEA was adopted during the 2005 Bergen Conference, with a target of 2010 for all countries to complete the verification of their national frameworks' compatibility through self-certification. The BFUG also recommended that the QF-EHEA be compatible with the EQF (Latvian Presidency of the CEU & European Commission, 2015).

The QF-EHEA initially comprised three cycles (bachelor, master, and doctorate) with descriptors for each level based on learning outcomes, competences, and credits according to the ECTS for the first and second cycles. At the Paris Conference in 2018, the QF-EHEA was revised to include short-cycle qualifications (as an additional cycle), implementing the commitment made in the Yerevan Communiqué. Initially, there were mixed attitudes towards short-cycle

qualifications, with some ministers in Bergen in 2005 not considering them as higher education: one even objected to qualifications shorter than three years (Bergan & Deca, 2018). However, their inclusion indicates a shift towards more flexible and wider recognition of various learning experiences.

Evaluating the impact of QF-EHEA on the transparency and transferability of learning outcomes is challenging, partly due to its integration within the broader Bologna Process. Nonetheless, there is evidence that the QF-EHEA contributed to national higher education system reforms, as Education Ministers committed to developing national higher education qualifications structures (EACEA & Eurydice, 2020). By 2020, 30 countries had established and self-certified their national higher education qualifications structures to the QF-EHEA, while 12 others were on their way to completing self-certification, indicating that the majority of the EHEA had either fully or nearly fulfilled their commitment to implementing these higher education qualifications structures (EACEA & Eurydice, 2020).

QF-EHEA has facilitated the convergence of disparate qualification systems and fostered understanding between countries. It has also served as a mechanism for promoting transparency and trust between higher education systems. Higher education institutions from countries with national qualifications structures generally appreciate their role in enhancing transparency and comparability between degrees and across education sectors (Sursock, 2015). However, in some countries that had certified their national qualifications, institutions were not necessarily aware of it, despite the self-certification requirement that national higher education qualifications structures be fully used by institutions (Bergan & Deca, 2018).

Coherence of qualifications frameworks' initiatives

Internal coherence: EQF and QF-EHEA

The QF-EHEA and EQF have distinct sectoral and geographic scopes: the EQF encompasses all types and levels of qualifications, while the QF-EHEA focuses on higher education qualifications. The QF-EHEA applies to countries participating in the Bologna process, while the EQF applies to EU Member States and partner countries. Despite these differences, strong connections and synergies exist between the two frameworks due to their shared objectives, principles, and concepts, as well as their implementation and developments.

Both the QF-EHEA and the EQF serve as meta-frameworks that cover a broad scope of learning, aiming to improve the transparency of qualifications within Europe to support lifelong learning and mobility. Experts interviewed have noted that their design and approach stimulated synergies, as the EQF referencing

criteria were developed considering the QF-EHEA self-certification criteria, and experts involved in the Bologna process contributed to the EQF working group. This similarity in approach makes it easier for countries to combine both processes when developing their NQFs and national higher education qualification structures (Blomqvist et al., 2012).

The BFUG advised the QF-EHEA working group to consider the EQF, which was also being developed at the time, to ensure compatibility and alignment between the two frameworks. This was further cemented in the 2007 London Communiqué which stressed the positive development of NQFs compatible with both the QF-EHEA and the proposed EQF (Bologna Process, 2007). While this similarity promotes synergies and allows countries to address referencing and self-certification simultaneously, the processes are different (Dželalija & Maguire, 2016): meeting the EQF referencing criteria does not guarantee compliance with all QF-EHEA criteria, and vice versa.

Both frameworks use the concept of learning outcomes-based levels (although the level descriptors differ), with QF-EHEA's four levels (structured according to the Dublin Descriptors) corresponding to EQF's fifth, sixth, seventh and eighth levels. Consequently, countries can develop NQFs compatible with both frameworks. However, a difference lies in their approach: the QF-EHEA is based on a largely common degree structure (the four cycles included in QF-EHEA), while the EQF focuses on NQFs and their level descriptors without harmonising or matching a defined qualification structure.

Efforts to foster synergies between the two initiatives are apparent in the involvement of representatives from the European higher education area (Council of Europe) in the EQF Advisory Group and the growing practice of countries developing joint reports addressing both reference to the EQF and self-certification to the QF-EHEA. This collaboration is considered as enhancing the transparency and comparability of qualifications from different education and training systems. Conducting self-certification and referencing processes together can be considered as a way of fostering cooperation between different actors in higher education and vocational education and, in some cases, actors operating outside the formal system.

The relationship between the QF-EHEA and EQF is generally strong due to their shared objectives, principles, and concepts, as well as efforts to ensure alignment at both the conceptual level and in terms of adopting similar approaches. European-level efforts continue to foster links and interactions between the two initiatives throughout their implementation and development.

External coherence: qualifications frameworks and quality assurance and credits initiatives

Both the EQF and QF-EHEA processes emphasise the significance of quality assurance, which serves as the foundation for the credibility and comparability of systems and qualifications, ultimately impacting recognition and mobility within Europe. Quality assurance helps to build trust across countries, a crucial aspect for the effective functioning of qualifications frameworks. Both the EQF and QF-EHEA require countries to provide information on quality assurance and involve quality assurance bodies in the referencing and self-certification processes. These bodies must also agree upon submitted reports, supporting coherence in national-level quality assurance arrangements. According to Blomqvist et al. (2012, p.7), 'international self-certification and referencing processes can be considered as part of the overall quality assurance of qualifications frameworks at national and European levels'.

The revised ESG (2015) explicitly state that higher education qualifications should include references to qualifications frameworks. ENQA has provided a platform for exchanging experiences and methods in the implementation of qualifications frameworks and discussing their implications for quality assurance agencies (Blomqvist et al., 2012). The Bologna Follow-Up Group established the Thematic Peer Group A on Qualifications Framework (TPG A on QF) in 2018 to address key topics, including the relationship between qualifications frameworks and quality assurance.

EQAVET is not linked to the QF-EHEA but was designed to support the implementation of the EQF. The revised EQAVET framework, in its indicators, includes reference to the need to describe qualifications using learning outcomes, but does not include a reference to the national or European qualifications framework. The 2017 EQF Recommendation places a strong emphasis on quality assurance, with two of its ten reference criteria addressing this aspect when countries present referencing reports or their updates. It also mentions the possibility of exploring the development of a registry for bodies overseeing quality assurance systems for qualifications outside the higher education sector, though this aspect has not been pursued. It outlines common quality assurance principles that are entirely compatible with both the ESG and EQAVET, covering all levels and types of qualifications, including VET, higher education, general education, and qualifications outside the formal system (CEU, 2017a). Although these criteria are general enough to accommodate compatibility with both initiatives, their inclusion can be seen as an effort to strengthen a platform for cross-system and cross-initiative cooperation, supporting transparency and trust across VET and higher education. Despite this conceptual coherence, increased synergies in the

development and implementation of different quality assurance initiatives and their relationship with the EQF does not appear to have been a primary focus, leading to assessment of the level of synergy as moderate.

The relationship between credit accumulation and transfer initiatives and qualifications framework differs between the EQF and QF-EHEA, with a stronger connection existing within the QF-EHEA compared to the EQF. The QF-EHEA's cycles of qualifications are associated with credit ranges: short-cycle qualifications typically consist of approximately 120 ECTS credits, first-cycle qualifications typically include 180 or 240 ECTS credits, and second-cycle qualifications typically include 90 or 120 ECTS credits, with a minimum of 60 ECTS credits at the second-cycle level. The use of ECTS in the third cycle varies (European Commission, 2015a). Some interviewed experts believe that establishing this link with the QF-EHEA has strengthened the role of ECTS across Europe and made it a 'world norm now'. The ECTS user guide references the role and functions of qualifications frameworks, including both the EQF and QF-EHEA, as well as sectoral, national, and institutional frameworks.

Unlike the QF-EHEA, the EQF does not indicate credit ranges as part of its eight-level structure. One of the expert interviewees involved in discussing the EQF Recommendation mentioned that it sought to encourage countries to use credit systems to increase the transparency of the volume of learning across all levels of the qualification framework. However, there was resistance to this proposal, resulting in a weaker link between the EQF and ECTS compared to the QF-EHEA. Nevertheless, one of the criteria for referencing the NQF to the EQF suggests that the NQFs and their qualifications should be 'based on principles and objectives of learning outcomes, related to arrangement of validation and, where appropriate, to credit systems'.

A notable addition in the 2017 EQF Recommendation, similar to the area of quality assurance, is the inclusion of an annex outlining principles for credit systems related to NQFs or systems referenced to the EQF. These principles have been designed to be 'fully compatible' with both ECTS and ECVET. The annex emphasises that, upon linking credit systems to the NQFs, these systems should work together with them to facilitate progress and transition between levels and systems of education and training, as well as across borders. This highlights the potential role of EQF-NQFs in bridging between different education and training subsystems and promoting cross-initiative cooperation. However, there is limited progress in these discussions at EU level, possibly due to the lack of a homogeneous VET credit system, leading to assess the level of synergy between EQF and credit developments as moderate.

The ECVET was presented as a tool intended to work coherently with various other instruments and initiatives, including the EQF. As one expert interviewee involved in developing ECVET, EQAVET and EQF put it, learning outcomes were seen as ‘the glue or the common element behind these three’. However, in practice, the synergies appear limited, primarily due to challenges in ECVET’s adoption and implementation. The 2013 ECVET evaluation and a recent study on EU VET instruments (European Commission, 2019c) revealed a decline in the narrative around their interconnections, pointing to the perception of tools operating ‘in silos’.

Qualifications frameworks developments at the national level

In the early 2000s, only a few countries implemented qualifications frameworks; these included France, Ireland and the UK. The 2008 EQF Recommendation drove the development of learning-outcomes-based national qualifications frameworks (NQFs) in most of the 41 participating countries. Although progress in NQF implementation differs among EU countries, when compared to qualifications frameworks from other regions of the world, they can generally be considered as advanced frameworks (UNESCO et al., 2023). Nevertheless, differences among countries can be detected as there are those that can be characterised as front-runners (for example Ireland and France) and those where NQF implementation has been slower (for example Germany and Italy). In some cases, the development of the framework has been smooth, while in others it has been more challenging. For instance, in Finland following two public consultations in 2009 and 2010, the government presented a first NQF proposal to the Parliament in autumn 2010; however, the Finish NQF was not finally adopted until 2017 after the third such proposal was accepted (Cedefop, 2019b).

Countries participating in the EQF process have made progress in broadening the scope and coverage of their NQFs. In the 2010s, they were mainly working towards including qualifications from all sectors of formal education and training, including general education, VET, higher education, and adult education in some cases. Currently, all EU Member States have developed comprehensive NQFs including qualifications from all formal education and training sectors. In recent years, efforts have also been made to open up NQFs to include qualifications awarded outside the formal education and training system ⁽¹⁴⁾. Approximately 60% of EU Member States have taken steps in this direction, resulting in a diverse range

⁽¹⁴⁾ Such qualifications can be awarded, for example, by private providers, labour market stakeholders, adult learning providers, and civil society organisations. They can include, microcredentials, non-statutory (market) qualifications, professional/vocational/occupational qualifications and awards (UNESCO et al., 2023).

of qualifications that vary significantly depending on the national context (Cedefop, 2024). For instance, the Polish NQF includes State-regulated qualifications awarded outside formal education and training, as well as non-regulated qualifications from the private sector, provided they meet specific quality criteria (market qualifications). In the Netherlands, NQF qualifications awarded outside formal education and training are granted by stakeholders in the labour market, such as private training providers, companies, sectors and examination bodies (Cedefop, 2023b).

Most EU countries (25) have reported to Cedefop that NQFs have enhanced the transparency of their education and training systems (Cedefop, 2023e). This is mainly achieved by expanding the coverage of frameworks, including qualifications awarded outside formal education and training, which also fosters synergies between different education and training sectors. Approximately 50% of EU countries consider that NQFs have improved parity of esteem between different education and training subsystems (Cedefop, 2024). They are considered to have contributed to promoting the social value and attractiveness of vocational qualifications, including those acquired through non-formal and informal learning settings (ICF GHK, 2013a). In Germany, comparability between academic studies and higher VET has been reinforced by assigning them the same NQF levels, with new designations of the Bachelor Professional and Master Professional. The title *Meister* is now legally equivalent to professional bachelor, and NQF-levelled professional master degrees are equivalent to university master degrees (Bundesministerium für Bildung und Forschung, 2023).

In addition to their role in expanding qualification coverage, NQFs foster cooperation and communication among various stakeholders. In Italy, for example, these policies have led to increased interactions between stakeholders from different regions, while in Germany the NQF has promoted discussions on valuing and comparing qualifications from diverse sectors, helping to break down barriers between institutions and encouraging a comprehensive approach. NQFs often encourage countries to involve multiple sectors and stakeholders, as identified by Cedefop's analysis as the third most common impact area of NQFs. The implementation of NQFs has contributed to developing formal permanent cooperation structures, strengthening social dialogue and collaborative decision-making (Cedefop, 2024). This was evident from the first EQF evaluation report (ICF GHK, 2013b). A wide range of stakeholders, to varying degrees, are involved in NQF implementation, typically through two formal structures: sector (skills) councils and inter-stakeholder committees or councils. Sector councils most often oversee the development or updating of qualification and assessment standards,

linking them with to labour market needs, while inter-stakeholder committees can serve as platforms for collaboration between stakeholders (Cedefop, 2024).

The use of NQFs has grown among qualification developers and education and training experts, but more efforts are needed to increase awareness and use among the public (Cedefop, 2024). For instance, in Ireland and France the NQF is well-known and used among citizens, while in other countries it remains a challenge or a future priority. For example, in Finland, increasing public awareness of the NQF is still a challenge, and in Romania, awareness among labour market stakeholders is limited, with broader dissemination to all target groups a primary goal. An evaluation study in the Netherlands (NLQF NCP, 2019), revealed the need for more investment in NQF communication. In Ireland the NQF policy impact assessment (Indecon, 2017) found that the framework made it easier to understand the relationships between qualifications (84%), explain qualification pathways (89%), and evaluate qualifications for work or study (80%). Among labour market stakeholders, in 2018, 96% of employers and 69% of recruiters were aware of the NFQ and EQF, and 54% and 17% referred to them during recruitment⁽¹⁵⁾. To promote transparency and accessibility of qualifications further, most EU countries have established qualifications registers and databases, raising awareness and operationalisation of NQFs, and strengthening connections with other developments (Azzarà and Garmash, 2023). Qualification databases often provide information on qualifications, such as learning outcomes, the awarding body, credits, internal and/or external quality assurance, and entry requirements. Efforts to connect them with Europass are expected to improve comparability and transparency.

NQFs also establish connections with other policy areas in terms of objectives and implementation. For example, there are strong links between NQF, validation, and recognition quality assurance, and, to some extent, credits. Since one of the goals of NQFs is to improve the quality of teaching and learning, NQFs are used in quality assurance processes. Twenty-two EU countries have reported to Cedefop that there is a connection between the framework and quality assurance procedures (Cedefop, 2024). For instance, quality assurance bodies use the framework in their work, considering NQF level descriptors when accrediting qualifications from both higher education and VET. NQFs can contribute to ensuring the quality of qualifications awarded outside formal education, as long as they meet specific criteria.

In France, including qualifications in the NQF ensures that they undergo strict quality control, as qualifications listed in the national register (*Répertoire National*

(15) See: [Making sense of qualifications: how recruitment professionals in Ireland view qualifications](#).

des Certifications Professionnelles, RNCP) are subject to rigorous quality assurance measures. The introduction of the personal training account (CPF) in France has been a significant change that has made learning pathways more flexible. Connecting the NQF to the CPF has increased the framework's visibility and usage by the general public.

In the Netherlands, higher education qualifications are accredited using both QF-EHEA and NQF level descriptors. Providers of non-formal qualifications must undergo a process of accreditation, and specific requirements must be met for their qualifications to be incorporated into the NQF, including being written in terms of learning outcomes and backed up by quality assurance procedures (Cedefop, 2023e). According to the Ockham Institute for Policy Support (2017), the Dutch NQF has improved the quality of non-formal qualifications through processes such as validating providers and classifying qualifications in the NQF. Applying for NQF classification has led to the rationalisation of intended learning outcomes, improved examinations, and reflection on the underlying training programme. Non-formal, private qualifications often hold strong influence in the labour market, and their inclusion in the Dutch NQF increases their visibility and further enhances their value. The NQF has also provided a framework for connecting various training pathways, increasing opportunities for further learning, clarifying choices, and facilitating decisions on admissions and exemptions.

In Ireland, connections are established between the NQF, quality assurance, and credit systems. When Quality and Qualifications Ireland (QQI) was established, the NQF was introduced in legislation, and the act also included provisions for quality assurance and obligations for providers to create quality assurance procedures. The Irish case reveals that all providers offering programmes leading to NQF awards have ATP (access, transfer, progression) mechanisms in place and utilise the building blocks of the NQF, which include the use of credits.

3.3.2. Europass

Europass was formally launched in 2005 after the adoption of the European Parliament and Council Decision on a single framework for the transparency of qualifications and competences (Europass) in 2003 (European Parliament & CEU, 2004). The European Commission, first under DG EAC and then DG EMPL, has been responsible for managing and coordinating the Europass initiative. Prior to the 2018 revision, certain functions were delegated to Cedefop for providing expertise to Europass development and implementation, including the management of the website. Following the 2018 Decision, these responsibilities were transferred to the European Commission (DG EMPL).

Europass 2005 comprised five documents: the curriculum vitae (CV), the diploma supplement, the certificate supplement, the language passport, and the Europass mobility. The aim is to enhance the transparency of qualifications and competences through a portfolio of documents, thereby increasing opportunities for learners and workers to move between European countries. It is worth mentioning that the Europass Diploma Supplement was initiated by UNESCO and later jointly revised by UNESCO, the European Commission, and the Council of Europe in 2007 and 2019 (UNESCO & CoE, 2007, 2019), while the other documents were developed or adapted with the support of Cedefop. The language passport was initially developed by the Council of Europe.

The Europass diploma and certificate supplements, with their respective differences, are tools that provide information on qualifications (for higher education degrees and VET qualifications, respectively) in a clear, standardised manner to support comparability of information on qualifications and recognition. The Europass language passport is used to describe language skills, while the Europass mobility documents the skills acquired during mobility experiences abroad for learning or work. The Europass CV aims to serve as a model for a systematic presentation of qualifications and competences, allowing individuals to showcase information such as education, training, work experiences, and additional skills.

Box 1. **Europass documents definitions**

Diploma supplement: document attached to a higher education diploma issued by the competent authorities or bodies, in order to make it easier for third persons – particularly in another country – to understand the learning outcomes acquired by the holder of the qualification, as well as the nature, level, context, content and status of the education and training completed and skills acquired.

Certificate supplement: a vocational education and training or professional certificate issued by the competent authorities or bodies, in order to make it easier for third persons – particularly in another country – to understand the learning outcomes acquired by the holder of the qualification, as well as the nature, level, context, content and status of the education and training completed and skills acquired.

Europass mobility: document to record knowledge, skills and competences acquired during a learning experience in another European country (work placement in a company, period of study as part of an exchange programme, voluntary placement in an NGO, etc.). Comment: Europass mobility is completed by the organisations involved in the mobility of the individual (partners in the sending and host countries).

Source: European Parliament and Council of the European Union, 2018

At the time of the 2016 proposal for revising Europass, perceptions of the utilisation of Europass tools and the visibility of the Europass brand were positive. Between 2005 and 2016, Europass had over 150 million website visits, over 11 million documents downloaded, and more than 85 million Europass CVs had been created (Cedefop, 2018b). The Europass brand was considered to have become more established over time, and opportunities to increase the scope of the framework and develop its services to meet the needs and requirements of users within the labour market and education and training sectors were identified. One expert interviewee attributed the success of Europass to the promotion efforts carried out by the Europass centres, stating that this had helped the tool to become more widespread.

This demonstrates progress since the 2013 evaluation (European Commission, 2013a), which found a generally low level of awareness about the Europass service, its documents, and their purpose. The evaluation revealed that 61% of surveyed non-users reported that they had never heard of Europass documents, and subsequent consultations and studies provided consistent findings. One expert interviewee concurred with this view, stating that uptake of Europass had been slow initially because it was relatively unusual in that it could be used at a citizen level, rather than by higher authorities. This presented a challenge in terms of ensuring that it was sufficiently visible at this level. It was also noted that the uptake of the tools was not consistent across the Member States. At the same time, the 2013 Europass framework evaluation outlined several achievements. Europass documents were seen as relevant to all groups of stakeholders, and there was evidence that they had contributed to helping people change their job or location and gain learning opportunities, such as admission to education institutions. Europass was also seen to play an important role in facilitating mobility within the same country (European Commission, 2013a). However, some limitations were identified in reaching employers (Cedefop, 2014a).

In 2018, the European Parliament and the Council adopted a revised Decision on a common framework for the provision of better services for skills and qualifications (Europass) repealing the 2004 Europass Decision (European Parliament & CEU, 2018a), with the aim of modernising the framework and promoting its interoperability with other developments to support people better in a digital world (European Commission, 2019a). This led to the launch of the Europass portal by the European Commission in 2020. In addition to the four existing Europass documents (some of which have been further digitalised), the portal aims to include web-based tools and services and information aimed at

increasing transparency and comparability of skills and qualifications and promoting interoperability.

The online Europass platform, launched in 2020, enables individuals to create a Europass profile (e-profile) to record their work, volunteer, mobility, and education and training experiences, add information on skills, qualifications and interests, and store documents describing personal achievements, including digital credentials (Europass, n.d. -e). The new platform has been developed so that individuals can share their e-profiles and European digital credentials for learning with employers, education and training institutions, or guidance counsellors. The European Commission has also been developing the European Learning Model (ELM), a data model facilitating the publication of information as open data. ELM is used to publish information on qualifications, learning opportunities, accreditations and it is used for the issuing of digital credentials (Europass, n.d. -d). The Europass portal allows the issue of digital credentials (including digital qualifications) through the European digital credentials for learning infrastructure. Authorised bodies can issue these digital credentials free of charge, using qualified e-seals in compliance with EU guidelines. Stored in individuals' e-profiles, these credentials can then be shared and validated using the European digital credentials system, ensuring authenticity and validity.

Coherence of Europass and other policy initiatives on quality assurance, credits and comparability

Both the Europass diploma and certificate supplements aim to provide a standardised format and structure for sharing and presenting information on qualifications. Their common objective is to 'make it easier for third persons, particularly in another country, to understand the learning outcomes acquired by the holder of the qualifications as well as the nature, level, context, content and status of the education and training completed and skills acquired' (European Parliament & CEU, 2018a, p.5). Both supplements have been part of the Europass framework since 2004, with the diploma supplement adhering to standards agreed upon by the Commission, Council of Europe, and UNESCO. Issued by higher education institutions upon graduation, the diploma supplement highlights personal achievements, while the certificate supplement documents learning outcomes for vocational training qualifications and provides additional information to improve understanding.

The diploma supplement demonstrates strong ties with higher education developments, such as quality assurance, credits, and recognition. Programme duration, as per the diploma supplement, can be expressed in years and/or credits, with the explanatory note specifying that EHEA countries should reference ECTS

(UNESCO & CoE, 2019). This note also encourages mentioning whether the responsible quality assurance or accreditation agency adheres to the ESG or is a member of European quality assurance bodies. In turn, higher education developments related to credits and quality assurance take the diploma supplement into account. The certificate supplement has weaker ties to other developments in quality assurance and credits compared to the diploma supplement. The certificate supplement and its guidelines for completion (Europass, n.d. -c) reference quality assurance in general terms but do not include information on credits or units of learning.

Both supplements detail learning outcomes and qualifications levels, referencing the EQF, with the EQF referring to both; the QF-EHEA is only mentioned by the diploma supplement (which the QF-EHEA developments also reference). Both supplements follow the 2008 EQF definitions of learning outcomes (knowledge, skills, and competence) instead of the QF-EHEA domains (knowledge and understanding, applying knowledge and understanding, making judgements, communication skills, and learning skills). The inclusion of EQF (and NQF) levels on certificate and diploma supplements is also practiced in Cedefop monitoring and the EQF Advisory Group, with all countries indicating NQF/EQF levels on Europass supplements for at least some VET and/or higher education qualifications (Cedefop, 2022g).

In the context of the new Europass portal and digital credentials, the diploma supplement has been set up as a European digital credential, with plans to digitalise the Europass certificate supplement as well. The use of a shared model for both supplements can be seen as an opportunity to develop a broader digital qualification supplement for all EQF/NQF qualifications (Azzarà & Garmash, 2023).

Regarding the new developments in Europass, the European Learning Model (ELM) developed through the new Europass portal is also utilised for storing or connecting data on accreditation of institutions/providers or programmes. A pilot project between the European Commission and EQAR has focused on integrating information from DEQAR (the pan-European database of external quality assurance results for higher education institutions) into accreditation databases for verifying European digital credentials (EQAR, n.d.). This approach enables those verifying digital credentials/qualifications to access information on the accreditation status of the issuing higher education institution (by EQAR-registered quality assurance agencies in accordance with the ESG), reinforcing ties with higher education quality assurance developments. The integration of NQF qualifications databases/registers with Europass through the ELM presents opportunities to

strengthen the connection between digital credentials and quality assurance initiatives for various qualifications (Azzarà & Garmash, 2023).

The ELM gives the opportunity to share information on credits and showcase how different certificates (or microcredentials) can be combined to form broader qualifications, offering a technical tool for 'stackability' across various learning forms. The ELM also considers EQF common data fields for sharing information on EQF qualifications (CEU, 2017a) and the certificate and diploma supplements.

Overall, the Europass platform covers qualifications and qualifications frameworks, including both the EQF and QF-EHEA processes, with stronger ties to the EQF due to the integration of the previous official EQF portal (PLOTEUS) into the new Europass platform, which serves as the primary EU access point for individual NQF/EQF qualifications. A Europass Advisory Group was established to guide and support Europass tool implementation, with an EQF-Europass project group addressing 'short descriptions of learning outcomes for publication on databases/registers of qualifications connected to Europass' (European Commission & Cedefop, 2021a; EQF-Europass Project Group, 2024).

3.3.3. Microcredentials

At European level, microcredentials are defined as the record of the learning outcomes that a learner has acquired following a small volume of learning (CEU, 2022), meaning a short-term learning experience such as a short course or training. They can be acquired following assessment of learning outcomes obtained through formal, non-formal and informal learning.

The 2020 European Skills Agenda introduced a European approach to microcredentials, aiming to support their quality, transparency, and adoption, helping individuals efficiently and flexibly re/upskill in response to labour market and societal demands. The Council Recommendation adopted in 2022 encourages Member States to leverage microcredentials for various objectives, including lifelong learning and validating non-formal and informal learning experiences (European Commission, 2021a; CEU, 2022). Microcredentials can be used to complement and enhance existing learning systems and opportunities without disrupting or undermining current qualifications and degrees (CEU, 2022). They are connected to the modularisation of education and training programmes (Cedefop, 2022b) and promote the ability of individuals to gain credits for parts of qualifications or validate prior learning.

While the concept of shorter, modularised courses is not new, increasing use of technology and changing ways of learning (e.g. online learning platforms) seem to support a shift towards more learner-focused systems. The COVID-19 pandemic has further increased the demand for online learning, including short, tailored

courses, leading to a rapid surge in interest in microcredentials (Cedefop, 2020a). Microcredentials are components of the education landscape in many countries, playing a crucial role in both IVET and CVET (Cedefop, 2022b). They have also made an impact in higher education, with some Member States pioneering their use within their institutions (Karpíšek & van den Brink, 2021). However, before the adoption of the Recommendation, there was confusion among stakeholders about the term 'microcredentials', and many VET providers were unsure about whether they offered microcredentials to learners. VET providers were used to engage with full qualifications, while many were uncertain about the added value of microcredentials.

Cedefop's report on microcredentials (2022b) further demonstrated that they are being offered by some formal VET providers, either by the providers themselves or with other partner organisations, including recognised education and training institutions. The 2022 Council Recommendation on microcredentials for lifelong learning and employability emphasises that providers of microcredentials can range from formal education and training institutions to civil society organisations, companies, industry, employers, local authorities, social partners, private providers and other actors. The Cedefop study shows that they are issued by public and private providers, such as large companies and online learning platforms. Although there is no published research on how the 2022 Council Recommendation on microcredentials may have affected their provision at a system and institutional level, expert interviewees suggest that microcredentials can be closely tied to the concept of accumulation of learning and may breathe new life into ECVET. The increased use of microcredentials is linked to the potential for improved transferability of learning outcomes and the creation of more flexible learning pathways that meet the needs of various learner types, including higher education learners, vocational learners, and wider communities. Cedefop's report on microcredentials (2022b) shows that they are gaining EU-wide attention in policy debates.

However, there are concerns about the lack of clarity and consistency in the implementation and alignment of strategies across different sectors and institutions regarding the introduction of microcredentials. This misalignment can undermine their value and recognition. The scope and relevance of microcredentials, which vary depending on a country's national context, are also seen as obstacles. This is linked to questions about their inclusion in qualifications frameworks, which may impact their visibility and outreach. Experts recognise the potential of microcredentials to increase system flexibility and learning transferability across institutions, but the full extent of their added value remains to be seen.

Coherence of microcredentials and other policy initiatives on quality assurance, credits and comparability

Microcredentials, being at an early stage of implementation, make it challenging to gauge fully their connections with other policy tools and initiatives. However, insights can be gained from major legislative documents and discussions at EU level. Among the 10 principles guiding the European approach to microcredentials, quality assurance is a mandatory element, with microcredentials required to describe quality assurance measures (CEU, 2022). The 2022 Council Recommendation on microcredentials explicitly refers to the ESG and EQAVET frameworks, as well as quality assurance principles from the EQF recommendation. Additionally, the European Commission plans to develop guidelines on how to apply existing instruments. To improve transparency, providers of microcredentials can be listed in relevant registers, like DEQAR, which offers information on higher education institutions accredited by quality assurance agencies in line with the ESG. In both higher education and VET, efforts are being made to foster synergies in implementation and development. ENQA has played an active role in discussions and debates surrounding microcredentials, participating in the Microbol project (2020-22), which aimed to explore the use of existing Bologna tools or how they may need to be revised or adapted for microcredentials.

However, challenges in implementing quality assurance for microcredentials within individual higher education systems have been acknowledged, with the difficulties compounded when microcredentials are offered by non-higher education institutions and in informal and non-formal learning settings (ENQA, 2022c). One of the key issues is the variability in the quality assurance processes for microcredentials, as not all of them are quality assured based on quality standards set at national level. Given that microcredentials are frequently offered in a CVET context, which differs greatly both across and within European countries, the absence of a unified quality assurance framework for CVET was noted, concluding that links between quality assurance and microcredentials should remain an important topic in the European debate (EQAVET, 2022b). A Cedefop study on microcredentials (Cedefop, 2022-b) also showed that there are no fixed quality standards awarded outside formal systems and uncertainty about their quality is a major factor of distrust. As a result, efforts continue to promote further reflection on microcredential quality assurance.

The connection between microcredentials and credits, particularly ECTS and ECVET, is an intriguing topic. The ECTS and compliance with common EQF principles on credits are suggested for higher education institutions, while other systems can be used for providers not using ECTS, as long as they adhere to

common EQF principles on credit. Despite the repeal of ECVET, some experts believe that its principles 'live on in microcredentials', which can be both stand-alone and stackable towards larger credentials, similar to ECVET. One of the key principles and methodological objectives of ECVET included structuring qualifications into 'units of learning outcomes' (with associated ECVET points) that could be assessed, validated, and either recognised separately or be accumulated towards a qualification (Auzinger & Luomi-Messerer, 2021; Cedefop, 2012a, 2016b; ECVET Users' Group, 2012).

The Microcredentials Recommendation refers to the role of Europass in leveraging the implementation of microcredentials (e.g. providing information on learning opportunities that lead to microcredentials). This includes the possibility to issue microcredentials Digital Credentials and the ELM behind it is designed to promote 'stackability' of (micro-)credentials that can potentially be combined into larger credentials.

Increased attention has been directed towards the relationship between qualification frameworks and microcredentials. The intention of the Microcredentials Recommendation is to encourage targeted and flexible acquisition of learning outcomes without replacing traditional qualifications or undermining the core principles of 'full qualifications' in initial training (CEU, 2022). In line with both EQF and QF-EHEA approaches, microcredentials focus on using learning outcomes for description, intended as knowledge, skills, and competences. Specifying the level (and cycle, if relevant) of the learning experiences that result in microcredentials, with references to both the EQF and the QF-EHEA, is one of the mandatory elements in describing microcredentials (CEU, 2022). The Recommendation emphasises integrating microcredentials into NQFs, with the Commission supporting structured discussions on this. Interviewed experts stated that the next chapter in EQF history will be to continue looking at the framework's relationship to wider types of qualifications, such as microcredentials.

Microcredential developments at national level

At the national level, the term microcredentials is seldom used directly, but a wide variety of short educational and training activities leading to micro-qualifications, partial qualifications, nano-degrees, and digital badges (Cedefop, 2022b). European countries can be broadly categorised into three groups regarding the progress of policy discussions on microcredentials (Cedefop, 2023d):

- (a) those where policy discussions are at an early stage;
- (b) those where policy discussions have advanced;

(c) those where microcredentials (or similar terms) are explicitly mentioned, with legislation either in the process of being passed or already enacted.

Modularisation and the opening-up of NQFs to different types of qualifications awarded within and outside formal education and training are two key developments enabling the integration of microcredentials into NQFs. The Irish NQF includes minor, special purpose, and supplemental awards, some of which can be considered microcredentials. However, most microcredentials have emerged rapidly and extensively outside the formal education sector. In Poland, some market qualifications can be considered as microcredentials. Countries often consider modules as sharing similar characteristics with microcredentials as defined by the European Commission (Cedefop, 2023d). In Finland, certain competence modules, which can be considered as microcredentials (Cedefop, 2023d), awarded outside formal education and training are defined in learning outcomes and are included in the framework. They can 'refer to a part of a qualification (an entity), qualification units, further training related to an eligibility, or module of studies that is a requirement for a particular profession' (EDUFI, 2018). In the Netherlands, a draft law on the creation of personalised learning pathways within education programmes, utilising learning outcomes and prior learning, and facilitating the use of learning outcomes in microcredentials, is under consultation.

Higher education institutions are increasingly interested in microcredentials to increase their visibility and reputation (Kato et al., 2020). Many microcredentials programmes across Europe make use of ECTS to express the associated study load of courses, but the number of ECTS credits varies, ranging from 1 to 60 (with 60 ECTS equivalent to 1 year of full-time study). The resulting qualifications may not always be labelled as microcredentials within national systems, even though they exhibit the relevant characteristics. They can often stack the earned credits into larger qualifications (OECD, 2021b). In Germany, microcredentials are already used in higher education, including micro-degrees and badges. Between 20% and 60% of universities offer microcredentials (Kooperation International, 2023; DAAD, 2022), and the German Rectors' Conference (HRK, *Hochschulrektorenkonferenz*) recommends universities to consider micro-degrees and badges, as their importance will grow in the coming years (HRK, 2020), in line with the European Council Recommendation on microcredentials. In VET, the term itself is relatively unknown (Hippach-Schneider & Le Mouillour, 2022), although there are qualification formats that align with the microcredentials concept. Linked to the debate around microcredentials is the focus on modularisation and partial qualifications (TQ, *Teilqualifikationen*), including qualification modules (*Qualifikationsbausteine*), continuing training modules (*Weiterbildungsbausteine*)

and additional qualifications (*Zusatzqualifikationen*). In the Netherlands, as part of the broader orientation towards flexibilisation of training and promotion of lifelong learning, work on developing microcredentials and edubadges has started through pilot schemes in higher education and VET (Cedefop, 2023b).

3.3.4. European skills, competences, qualifications and occupations classification system (ESCO)

ESCO is the European multilingual classification of skills, competences and occupations. It acts as a dictionary, identifying and categorising occupation and skills in 28 languages. One of ESCO's objectives is to facilitate the description and understanding of learning outcomes in qualifications more aligned with labour market needs. By standardising the terminology for occupations and skills and competences, ESCO aims to create a 'common language', bridging the communication gap between employment and education and training, and supporting job mobility across Europe. The ESCO project was initiated by the European Commission, DG Employment, Social Affairs and Inclusion in 2010, with the collaboration of Cedefop.

A first version of ESCO was published in 2013; after stakeholder consultation, the first full version was released in 2017 (European Commission, n.d. -l). It has since been regularly updated to reflect changes in the European labour market and education and training. The most recent update includes a strengthened approach to transversal skills, building on the work of the ESCO/EQF expert group (European Commission & Cedefop, 2021c). ESCO is organised into three pillars: occupation, skills, and qualifications. It is available on an online portal and can be accessed free of charge, allowing different online platforms to utilise it for various services and enabling digital tools to communicate more easily.

ESCO has no legal basis but is referenced in two important legally binding instruments: the 2016 EU Regulation on a European network of employment services (EURES) and the 2018 Europass Decision. According to the EURES Regulation, Member States are required to map their national occupations classifications or skills classifications to ESCO or fully adopt it at a national level to support automated skills-based matching and improve the efficiency of EURES (European Commission, n.d. -e). By February 2022, 21 out of 31 EURES countries had fully implemented ESCO (European Commission, 2022b). ESCO is also mentioned in the 2018 Europass Decision, allowing the European Commission to utilise ESCO within the Europass framework and permitting Member States to use it on a voluntary basis, after testing and evaluation.

Currently, the 'occupations' and 'skills and competences' elements are both hierarchically structured and interrelated. According to the ESCO website, the

occupations section contains 3,007 occupation concepts, each mapped to the ISCO-08 (the International Standard Classification of Occupations 2008, managed by the International Labour Organization). The skills section consists of four sub-classifications: knowledge; language skills and knowledge; skills; and transversal skills. It has a total of 13,939 concepts (European Commission, n.d. -h). The interlinking of these two areas enables users to see which knowledge, skills and competences are typically associated to specific jobs. ESCO also has a qualification pillar. However, it sourced data from national qualifications databases connected to the European portal PLOTEUS. Since the launch of the new Europass portal, information on national qualifications is only published on the Europass portal, with the ESCO qualifications element now referring to Europass for qualification information.

Since its launch, ESCO has continued to evolve, expanding and refining the occupations, skills, knowledge, and competences it encompasses. A significant update has been the recent restructuring of transversal skills into six categories, aimed at supporting the future adoption of the learning outcomes approach across Member States (European Commission & Cedefop, 2021b, 2021c). After 5 years of operation, ESCO is regularly utilised, particularly by employment agencies and within the education sector (European Commission, 2022b). An evaluation survey published in November 2021, based on responses from 101 organisations, 60% of which were ESCO implementers, revealed that:

- (a) implementers are 'overall satisfied' with ESCO;
- (b) 'most of the time' it brought positive changes to their operations;
- (c) positive changes were particularly noticeable in the areas of interoperability, initiating new projects or research, and improving the quality;
- (d) for EURES members, ESCO aided in enhancing 'the quality of data exchange and their job-matching services'.

The impact of ESCO on employment and education and training services remains unclear, and more research is needed to gauge the outcomes. However, there are indications that it could be a useful tool for employers and education providers.

Opinions vary regarding the effectiveness of ESCO in promoting the transparency of qualifications and learning outcomes. Some studies suggest that ESCO is an effective tool for linking education services to the labour market and correlating different occupations with relevant skills. However, they also highlight gaps in certain areas, even after the publication of ESCO v1.1 (Mirski et al., 2017; Pryima et al., 2018; Chiarello et al., 2021). ESCO has been used as a reference point for comparing qualifications, with its detailed descriptions helping to identify overlaps between knowledge, skills, and competences concepts and national VET

qualifications (UNESCO & Cedefop, 2017; Cedefop, 2019a). Pilot projects have been conducted to link the learning outcomes of qualifications with ESCO skills to strengthen the further link between these two areas (European Commission, 2020d).

A recent report highlighted that ESCO's extensive coverage of sectors and languages, along with its references to EU labour markets, make its skills element a valuable tool for comparing and analysing VET qualifications (Cedefop, 2022a). It suggests that ESCO could also be useful for analysing national qualifications data, understanding matches between qualifications and labour market requirements, and analysing data on national job vacancies. However, the report also points out some shortcomings in the tool. For example, it currently lacks the ability to differentiate between different qualification levels, which hinders the analysis of learning progression or increasing complexity of skills and competences. Although ESCO aims to provide a standardised language, there is sometimes inconsistency in how knowledge, skills, and competences are described. While the ESCO skills element serves as an important reference point, it requires further conceptual and terminological development.

Expert interviews also indicated both strengths and weaknesses in ESCO. Some experts noted that the language used in ESCO does not always reflect that used in the labour market, leading to confusion, and that the contextualisation of transversal skills within individual professions could be improved to minimise redundancies and better align with job advertisement terminology. However, others view ESCO as a valuable reference point for developing standards, such as in writing and rewriting curricula and qualification standards, and as a potentially useful tool for education and training providers to monitor students' transversal skills alongside their performance in general school subjects. The fact that ESCO is multilingual and open-source is considered a key advantage over other competence taxonomies. ESCO is gaining traction and becoming more valuable, particularly in the context of digital advancements, including those related to artificial intelligence. However, there is room for improvement, such as separating skills into different complexity levels.

Overall, there is limited evidence to suggest that ESCO has a positive impact on individuals; no studies have yet attempted to assess the outcomes for job seekers or learners. Expert opinions on this subject are mixed, with some believing that it would be 'difficult for individuals to use ESCO at any point', and seeing it more as 'a tool for specialists to improve other tools', while others see the potentials of ESCO 'for guiding people in establishing their CVs and determining future learning goals'.

Coherence of ESCO and other policy initiatives on quality assurance, credits and comparability

Direct and visible links between ESCO and quality assurance and credit developments are not immediately evident. However, it has more apparent connections with qualifications frameworks (specifically with EQF/NQFs rather than QF-EHEA) and the new Europass portal, as well as with validation and recognition.

It can be argued that there are links between ESCO and EQF, conceptually, as both aim to act as 'translation grids' or reference points, and both tools focus on learning outcomes. However, the level of detail and granularity, as well as their structure, are very different. The concepts of knowledge and skills are central within ESCO, with occupations in its taxonomy being broken down into essential and optional knowledge and essential and optional skills and competences. ESCO uses the same definition of 'knowledge' and 'skills' as the EQF (European Commission, n.d. -d). The ESCO website points out that information about qualifications can be found in Europass, where this information is available in consequence of the EQF process.

Efforts have been made to strengthen connections between EQF/NQF qualifications and ESCO. Between 2019 and the present, pilot projects have been continued on the development of an automated approach for linking learning outcomes of EQF/NQF qualifications with ESCO skills and knowledge, exploring the potential of machine learning technologies (European Commission & Cedefop, 2021c). ESCO can also be used through the ELM to enrich qualification data by linking learning outcomes of qualifications (as well as microcredentials) with ESCO skills and knowledge, allowing for an indirect link with occupations. Cooperation is expected to continue, considering the intention of developing an open version of the 'linking tool' to be made available to stakeholders (European Commission, n.d. -g).

ESCO's potential for increasing qualification and learning outcome transparency has been studied, as in research comparing the content and profile of four vocational qualifications (bricklayer, health care assistant, hotel receptionist and ICT service technician) across 26 countries. As demonstrated in the case of bricklayer qualifications, the shared core of occupation-specific skills and competences made visible by ESCO fosters cooperation, eases qualification transfer, and promotes recognition among countries (Bjørnåvold & Chakroun, 2017). The use of ESCO to compare VET qualifications is also analysed in a recent Cedefop study, highlighting its potential to analyse and compare qualifications across countries, sectors, and languages, while acknowledging current limitations,

such as the lack of differentiation in proficiency levels or inconsistency in terminology, which require further improvement (Cedefop, 2022a).

The 2018 Europass decision clarifies that ESCO can be used within the Europass framework by Member States on a voluntary basis (European Parliament & CEU, 2018a). It is currently widely used in the Europass portal, with much information shared between the two platforms. While ESCO is less interactive than Europass and quite detailed, for those using Europass there are a variety of ways in which links to ESCO are intended to improve the user experience. For example, individuals completing the 'My skills' or 'My interest' section in their Europass profile can view a list of ESCO skills and occupations and add these to their Europass profile. In turn this is used to provide users with personalised information on job opportunities published in EURES, or course and qualifications, as well as microcredentials published in Europass if the learning outcomes has been annotated to ESCO. ESCO can be used in the European Learning Model when publishing information on qualifications. European classification and taxonomy mean ESCO will likely play an important function in promoting digital interoperability between different areas.

3.3.5. Competence frameworks

The 2006 Recommendation on key competences for lifelong learning introduced the European key competences reference framework, listing eight key competences essential for individuals' success in society, family, the labour market and for further learning. The framework aimed to serve as a European reference for policy makers, stakeholders, and practitioners, promoting the quality of education and learning opportunities for all. These key competences can be developed through various learning activities (formal, non-formal and informal), with a focus on competence-based approaches to increase learning transparency. The framework comprises the following eight key competences:

- (a) communication in the mother tongue;
- (b) communication in foreign languages;
- (c) mathematical competence and basic competences in science and technology;
- (d) digital competence;
- (e) learning to learn;
- (f) social and civic competences;
- (g) sense of initiative and entrepreneurship;
- (h) cultural awareness and expression.

In 2010, the DG Education and Culture of the European Commission, together with the Joint Research Centre (JRC) focused work on digital competence, resulting in the DigComp framework (updated in 2022), which uses a learning

outcomes approach to describe knowledge, skills, and attitudes. The EntreComp framework, released in 2016, was also developed by JRC in collaboration with DG EAC and then DG EMPL; according to one expert interviewee this resulted in a greater focus on employment and VET, including adult learning. It was developed with reference to the key competence 'sense of initiative and entrepreneurship'. In 2018, a new Council Recommendation on key competences for lifelong learning updated and revised the eight key competences, emphasising the importance of lifelong learning and competence-oriented education, training, and non-formal and informal learning for citizens. Since then, additional frameworks include LifeComp (2019), promoting personal, social, and learning to learn competences, and GreenComp (2022), encouraging environmental sustainability education. There are also several other competence frameworks such as the Reference framework of competences for democratic culture, developed by the Council of Europe in 2018, and the Common European framework of reference for languages: Learning, teaching, assessment (CEFR), first released in 2001 and updated in 2020 (CoE, 2020). These share similar objectives and structure.

The 2006 Recommendation on key competences for lifelong learning supported better European country understanding of the benefits of adopting a competence-based approach in education and training programmes (CEU & European Commission, 2010; European Commission, 2018b); this can be considered a precursor of the learning outcomes approach. It has made an impact in both general school education, with several countries developing national strategies to support the development of at least some competences described in the framework, as well as in VET, where key competences have received attention in curricula and standards (European Commission, 2018b). It was also used to support reforms in adult education, with less impact in higher education.

Most competence frameworks use the term 'competence' defined as a combination of knowledge, skills, and attitudes; the 2018 recommendation highlights that they can be 'translated into frameworks of learning outcomes' (CEU, 2018a). In this sense they can be considered relevant reference points to promote transparency and transferability of learning. They are commonly used as reference point for the elaboration of what learners need to know and be able to do after completing a learning process, supporting the development of qualifications, curriculum and assessment standards in different education and training sectors. Several countries have expanded their NQF learning-outcome descriptors by incorporating EU key competence frameworks, highlighting the growing significance of 'transversal skills and competences'. The development and use of competence frameworks that focus on an individual's knowledge and skills

facilitate comparisons and recognition of skills acquired in various settings, thereby supporting transferability.

Coherence of competence frameworks and other policy initiatives on quality assurance, credits and comparability

Developments related to competence frameworks align with various initiatives analysed in terms of overall objectives, principles, and concepts used, promoting a competence-based approach (precursor of the learning outcomes approach) to promote transparency and improve flexibility and mobility in learning acquired through both formal and non-formal settings. No explicit link between key competence frameworks and quality assurance initiatives (ESG and EQAVET) was found in reviewed official EU documents, but the 2018 recommendation on key competences urges Member States to 'support the right to quality and inclusive education, training and lifelong learning and ensure opportunities for all to develop key competences' (CEU, 2018a). Similarly, there seem not to be direct connections between competence frameworks and ECTS or the assignment of credit points (Bacigalupo et al., 2016; Vuorikari et al., 2022; European Commission, 2015c)

Competence framework learning outcomes formulation differs slightly from those in the EQF and QF-EHEA, with closer alignment to the EQF. Competence framework and the EQF refer to 'skills' and 'knowledge' with a difference in the third 'learning domain'; in the key competence this is 'attitude', while in the EQF 2008 version it was 'competence' and in the 2017 'autonomy and responsibility' (although this change in the heading name did not lead to changes in the content of the level descriptors). The EQF essentially serves as a 'translation device' between national frameworks; individual frameworks promote a common approach to the education and training of specific competences (CEU, 2018a). The EQF structure has been used in the 2018 version of DigComp 2.1 to expand the initial three proficiency levels to a more fine-grained eight level frameworks (Carretero et al., 2017; Digital Skill and Jobs Platform, 2021). Similarly, EntreComp also has an eight-level progression model which ensures its compatibility with the EQF (Bacigalupo et al., 2016). Some countries (e.g. Malta, Iceland, Finland) have expanded NQF learning-outcome descriptors by integrating EU key competence frameworks (Cedefop, 2018a), highlighting the rising importance of transversal skills and competences. Based on this, there is a moderate level of synergy between the EQF and the analysed competence frameworks. However, further work might be needed to explore conceptual coherence with other reference frameworks more deeply.

The Europass portal incorporates a self-assessment tool for digital skills, based on the levels and competences defined in DigComp (European

Commission, 2016c). Users can assess their proficiency in five key areas and receive suggestions for improvement and learning opportunities based on the DigComp framework (Europass, n.d. -b). In recent updates, ESCO has integrated the DigComp areas and competences into its skills and competences pillar (Vuorikari et al., 2022), contributing to the convergence of these tools (Vuorikari et al., 2016). The Europass portal also uses the Common European Framework of Reference (CEFR) self-assessment grids for foreign language skills.

Although ESCO and competence frameworks have different objectives, they share a common goal of breaking down complex concepts into smaller components to define the skills and knowledge required for specific jobs (ESCO) and a set of key competences and basic skills for personal development, employability, active citizenship, and social inclusion (competence frameworks) (European Commission, n.d. -b). Both tools support reflection on the development and analysis of learning outcomes. The key competence framework (2008, 2018) aims to guide education and training provision, while ESCO focuses on linking occupations and skills and promoting learning outcomes aligned with the labour market.

3.4. Validation of non-formal and informal learning

Since 2000, the European Union has prioritised policies that recognise the value of learning in diverse contexts and settings. Validation of non-formal and informal learning has been a key objective in both the Copenhagen and Bologna processes. Although there have been various policy initiatives in this area since 2000 ⁽¹⁶⁾, this section focuses primarily on the 2012 Recommendation on validation of non-formal and informal learning, while also considering the role of the European Guidelines and European inventory on validation of non-formal and informal learning.

The 2002 Copenhagen Declaration emphasised the need to develop a set of common principles related to the validation of non-formal and informal learning, which were adopted by the European Council in 2004 (CEU, 2004; Bjørnåvold &

⁽¹⁶⁾ The latter include such initiatives as the 2013 Council Recommendation (CEU, 2013) on a Youth Guarantee and its successor, the 2020 Council Recommendation on Reinforcing the Youth Guarantee, the launch of A New Skills Agenda for Europe in 2016 (European Commission, 2016a) and as part of it the Upskilling Pathways initiative (CEU, 2016) and the EU Skills Profile Tool for Third-Country Nationals; the launch of the European Pillar of Social Rights (European Commission, 2017c) and the Council Recommendation of 22 May 2018 on key competences for lifelong learning (CEU, 2018a) and the European Skills Agenda (European Commission, 2016a, 2020c).

Le Mouillour, 2009). Before the 2012 Council Recommendation on validation, Cedefop and the European Commission collaborated to create the European Guidelines on Validation (Cedefop, 2009a), which were updated in 2015 and 2023 (Cedefop, 2015, 2023a) to align with the evolving policy landscape. These guidelines support stakeholders responsible for designing, implementing, and operating validation systems across Europe. In addition to the guidelines, the European inventory, which is regularly updated, provides an overview of validation practices and arrangements in EU Member States, EFTA countries, and a number of non-EU countries (Souto Otero et al., 2005; Cedefop, 2008; Cedefop & GHK, 2011; Cedefop et al., 2014; Cedefop, 2017b; Cedefop et al., 2019). This inventory helps monitor and assess the implementation of the Validation Recommendation.

The 2012 Council Recommendation on the validation of non-formal and informal learning marked a significant milestone, calling on all Member States to establish validation arrangements by 2018. It aimed to increase the visibility and value of knowledge, skills, and competences acquired outside formal education and training through work, personal life, or voluntary activities (European Commission, 2020a; Villalba, 2016). The Recommendation defined validation as 'process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard', outlining four stages: identification of an individual's learning outcomes, documentation, assessment, and certification. The follow up of the recommendation is through the EQF Advisory Group and Cedefop is tasked with supporting implementation, including by reporting on the situation with regard to validation.

Although the 2012 Recommendation has had varying degrees of impact on national validation efforts, it has contributed to the wider and more consistent implementation of validation policies and practices across the EU, (European Commission, 2020a). 'The Recommendation has also supported existing validation systems by reinforcing and complementing national action (e.g. Belgium and Spain), increasing the comprehensiveness of validation approaches (e.g. Slovenia), providing a new strategic direction (e.g. Finland and Sweden), making validation more visible at the national level (e.g. Czechia), and influencing initiatives targeting specific groups such as vulnerable or disadvantaged groups (e.g. Belgium, Italy, Portugal and Slovenia)' (European Commission, 2020a).

The 2012 Recommendation can be considered to have raised the profile of validation in the policy debate and has driven action in some countries that might not have otherwise taken place (European Commission, 2020a). The 2018 inventory update and the evaluation of the Recommendation demonstrate steady progress towards its objectives, with validation becoming an increasingly common feature of the European educational landscape (European Commission, 2020a).

For instance, the number of Member States with validation arrangements in place increased from 20 in 2010 to 27 in 2023 (European Commission, 2020f; Cedefop & European Commission, 2024), and many of the measures outlined in the Member States' upskilling pathways implementation plans and progress reports are closely related to the establishment of validation arrangements, in line with the 2012 Recommendation (CEU, 2016).

Villalba and Bjørnåvold (2017) argue that validation in Europe has reached a 'tipping point' in terms of national policy formulation and has become an explicit and visible part of lifelong learning, employment, and social inclusion/integration policies. This has been achieved through extensive collaboration between stakeholders at national and European levels, adhering to the principles of subsidiarity. The EU's promotion of the Open Method of Coordination over the past few decades has facilitated fruitful cooperation between EU and Member States, with peer learning activities in the context of the EQF Advisory Group serving as an example (Villalba & Bjørnåvold, 2017).

While the evaluation of the 2012 Council Recommendation confirms significant progress, its ambitious objectives have not been fully achieved (European Commission, 2020f). Although progress has been made in designing, developing, and implementing validation arrangements across the EU, challenges persist. For example, the uneven spread of validation practices across various sectors (education, training, labour market, and third sector) within countries, differences in terminology, and inconsistent approaches continue to pose significant challenges. Additionally, low coordination among stakeholders and the limited awareness of validation opportunities among the broader public, particularly disadvantaged groups, hinder the uptake of validation services (Cedefop & European Commission, 2024).

Although challenges and limitations exist, more people now have access to validation across the EU due to Member States providing increased validation opportunities through improved arrangements and stakeholder coordination, as well as better information and guidance on validation services. However, there is little evidence of the use of validation across EU and whether it facilitates intra-EU mobility. Nevertheless, the 2012 Recommendation is considered to support the establishment of learning outcomes as a 'currency' for validation across the EU (European Commission, 2020f).

3.4.1. Coherence of validation initiatives

3.4.1.1. *External coherence: validation and other policy initiatives on quality assurance, credits and comparability*

The 2018 Recommendation on validation of non-formal and informal learning and the Validation Guidelines (Cedefop, 2015, 2021d) are not tied to any specific formal education and training subsystem. This process can lead to obtaining qualifications or parts of qualifications that align with or are equivalent to standards set by formal education programmes. Validation may also result in the acquisition of credits or exemptions leading to a qualification. Given its comprehensive and inclusive nature, validation is closely connected to many of the initiatives examined in this study.

The interplay between validation of non-formal and informal learning and quality assurance is recognised as crucial for promoting trust in validation outcomes and fostering synergies between different education and training sectors for the benefit of individuals. To this end, the 2012 Recommendation on validation highlights the importance of transparent validation arrangements aligned with existing quality assurance frameworks. Similarly, the European Guidelines on validation emphasise quality assurance. Although these areas share objectives and principles, their practical connection could be further developed.

The ESG Standard 1.4 highlights recognition of prior learning, including non-formal and informal learning, as an essential component for student progress and mobility. This has led to the promotion of definitions and procedures for assessing and validating informal and non-formal learning within higher education. However, an ENQA working group reported that ESG 1.4 implementation for the validation of informal and non-formal learning still has 'a long way to go,' with quality assurance agencies sometimes treating the recognition of prior learning superficially (ENQA, 2017a). Challenges include the lack of a common European position on non-formal and informal learning recognition and the fact that it is not a priority in many countries.

While the 2009 EQAVET Recommendation (European Parliament & CEU, 2009b) supports the implementation of common European principles for identifying and validating non-formal and informal learning, its focus has primarily been on formal training. As a result, there has been limited alignment between EQAVET and validation developments across Member States (European Commission, 2020f). Despite this, quality assurance mechanisms in validation have emerged since 2016, shifting towards tailored arrangements rather than relying on the application of existing quality assurance frameworks (Cedefop et al., 2019).

Validation is also intended to connect with credit system initiatives such as ECVET and ECTS. Despite the close links between validation objectives and credit systems, there is evidence that synergies in practices are limited (European Commission, 2020f; Cedefop et al., 2019). According to Cedefop (2014b, p. 54), 'a credit system is an instrument designed to enable accumulation of learning outcomes gained in formal, non-formal and/or informal settings, and ease their transfer from one setting to another for validation'. As such, credit systems are expected to promote access and transfer across different learning contexts. For example, as underlined by the 2012 Recommendation on validation, and supported by the ECTS Users' Guide (European Commission, 2015a), ECTS should facilitate the award of credits by higher education institutions for non-formal and informal learning, while ECVET could also be used similarly (European Commission, 2019c). According to the ECTS guide, HEIs should develop policies and procedures for recognising non-formal and informal learning. This would allow ECTS credits to be awarded by HEIs to acknowledge learning outcomes acquired outside the formal learning context through work experience, voluntary work, student participation, and independent study, as long as these learning outcomes meet qualification requirements. However, in practical implementation, validation of non-formal learning (or recognition of prior learning) is not an easy process; it varies across countries and much still needs to be done (ENQA, 2017b).

ECVET was intended for the 'transfer, recognition and accumulation of learning outcomes and accumulation of individuals' learning outcomes achieved in formal and, where appropriate, non-formal and informal contexts' (European Parliament & CEU, 2009a, p.3). A recent study on EQAVET and ECVET mentions that ECVET could 'provide (have provided) a framework for combining 'credit' from validation of non-formal and informal learning and 'credit' from formal learning'; it cites the results of a 2018 peer learning activity on ECVET and validation of non-formal and informal learning. However, ECVET was implemented as a credit system in only a few countries; where implemented, it primarily focused on formally awarded qualifications (European Commission, 2019c) limiting the use of credits for validation. At the same time, even if ECVET was not implemented, it helped in building a learning outcomes approach that is fundamental for validation.

One expert interviewee found a close link between the 2009 ECVET Recommendation and the 2012 Recommendation on validation, with many ideas in the former being 'duplicated' in the latter. Another expert mentioned 'fragmentation' at the implementation level, leading to a lack of communication between projects with similar elements working on ECVET and those working on validation; this resulted in limited progress. The fact that current credit systems in many countries operate within isolated sub-systems of education and training can

limit their potential to support validation and transfer of learning outcomes and progression across sectors (European Commission, 2019c).

Notable connections exist between validation and qualifications frameworks, especially EQF. One of the EQF's primary objectives is to bridge formal, non-formal, and informal learning, supporting the validation of learning outcomes acquired in different settings and contexts (European Parliament & CEU, 2008). The term 'qualification' is defined as the formal outcome of an assessment and validation process that an individual has achieved learning outcomes to a given standard (CEU, 2017a). The EQF's aim to support validation of non-formal and informal learning is reflected in one of the referencing criteria countries must use when demonstrating how their NQFs relate to the EQF. This includes that NQFs referenced to the EQF should be related to arrangements for validation of non-formal and informal learning. Validation of non-formal and informal learning (or recognition of prior learning) is not explicitly mentioned in the criteria for self-certification to QF-EHEA established in Bergen in 2005 and adopted at the Bologna ministerial meeting in London in 2007 (Dželalija and Maguire, 2016). However, this does not imply that there has been no increasing attention to this aspect in subsequent years.

The focus on fostering synergies between the development and implementation of the EQF and validation is underscored by the role of the EQF Advisory Group, which is responsible for following up on the 2012 Recommendation by including national representatives for validation. Several peer learning activities, specifically addressing validation issues, were organised between 2013 and 2019 and supported by the EQF Advisory Group (European Commission, 2020a). These support activities have been highly valued by participating stakeholders, helping raise awareness, deepen understanding, share experiences, and promote good practice in validation across Europe and ensuring regular exchanges between stakeholders responsible for NQFs and validation developments. In the context of the development of QF-EHEA, individual seminars and peer learning activities have addressed the topic of validation, but there seem to be no structures ensuring regular exchanges of views within the EHEA (Dželalija & Maguire, 2016).

Regarding the other tools included under comparability, both the Europass diploma and certificate include a reference to non-formal and informal learning, but this is more explicit in the certificate supplement. The diploma supplement includes a section for additional information, and the 2019 guidance note encourages indicating individual learning achievements outside the programme. Mobility periods, work placements, and voluntary work are all considered contributors to a graduate's learning outcomes, even without official credits or

recognition (UNESCO & CoE, 2019). In the certificate supplement, one core section is 'officially recognised ways of acquiring the certificate,' clarifying that it can be obtained through workplace learning or accreditation of prior learning schemes. Before the 2018 Decision, Europass tools were generally considered valuable for validation (including also the language passport or the mobility tools), though limited evidence exists of their use for this purpose across Member States (European Commission, 2020a, 2020g). The new 2020 Europass platform includes plans for validation information and tools, with an e-profile for recording and documenting experiences, skills, and qualifications, including digital credentials. Such credentials, issuable via Europass, can cover a wide range of learning achievements and activities, aiming to facilitate skill recognition across formal, non-formal, and informal contexts (Europass, n.d. -a; European Commission 2018b). The EU Council in the 2022 Recommendation on microcredentials invites Member States to support their development in non-formal and informal learning settings by considering adapting procedures for the recognition of prior learning and the validation of non-formal and informal learning (CEU, 2022).

Behind the development of ESCO lies the intention also to support validation processes: 'The clear and detailed learning outcomes that are provided through ESCO can be used to identify, document, assess and certify the skills and experience that an individual has acquired through informal or non-formal learning' (European Commission, n.d. -o). The idea is also to support users to see what knowledge, skills and competences are needed for jobs they are interested in or what jobs best suit their current skillset. The 2006 Recommendation on key competences for lifelong learning emphasised the importance of establishing appropriate validation and evaluation procedures in Member States using the Key competences for lifelong learning (European Parliament & CEU, 2006b). The 2018 Recommendation on key competences highlights the need to develop specific frameworks linked to the eight key competences and provide opportunities for the validation of these competences acquired in various contexts. It further encourages Member States to support the validation process through EU tools such as Europass and Youthpass, which can serve as documentation and self-assessment tools (CEU, 2018a).

3.4.2. Validation developments at national level

Since the turn of the century, EU countries have introduced several policy initiatives promoting validation of non-formal and informal learning. After the adoption of the 2012 Council Recommendation, countries expanded their validation arrangements, aiding transparency, flexibility, accessibility, and

inclusivity in education and training (Cedefop & European Commission, 2024). The objectives of national initiatives analysed in the eight countries can be summarised as:

- (a) supporting lifelong and life-wide learning by acknowledging, recognising, and certifying learning whenever and wherever it occurs;
- (b) facilitating connections within and between education and training subsystems and the labour market;
- (c) improving the employment, career, and learning opportunities of all learners, including disadvantaged groups;
- (d) supporting skills matching between labour demand and supply, and the upskilling and reskilling of individuals.

At EU level, the validation initiative is considered a transversal policy, not tied to a specific education and training sector. However, at national level, there is significant variation in frameworks and approaches, particularly at the institutional and implementation levels, as well as partial and uneven coverage across Member States (Kis & Windisch, 2018). Education, with its various sub-sectors (general, vocational, initial, continuous, higher education, and adult education), remains the primary sector for validation development, although with varying degrees of progress in specific sub-sectors (Cedefop & European Commission, 2024; Cedefop, 2017b; Villalba-García, 2017). Arrangements may not exist in all sub-sectors or may not cover all qualifications available in these sub-sectors. Following the 2008-09 financial crisis, countries shifted from mainly considering validation to link education and training subsystems to applying it as a labour market measure to support the reskilling of vulnerable individuals (Cedefop, et al., 2019). According to the 2023 European inventory of validation, two-thirds of countries now have arrangements in place in the labour market and the third sector (Cedefop & European Commission, 2024).

However, the effectiveness and bridging capacity of these systems depend on their implementation and the engagement of education, labour market, and third-sector stakeholders. This remains a challenge in many countries. The country case interviews hinted that general and higher education institutions often struggle to accept and use validation systems for qualifications acquired in non-formal and informal settings. In some cases, validation arrangements cover only specific education and training sectors or are differentiated across sectors. Although the 2012 Recommendation offers a shared definition and has helped establish a common understanding of validation across the EU, national-level challenges include inconsistent definitions and shared understanding of validation and associated terms within the same country or sector (European Commission 2020a, 2020g). For example, the definitions of sectors and sub-sectors relevant to

validation vary depending on the individual country context (Cedefop, 2017b; Villalba & Bjørnåvold, 2017).

Over the past decade, a transition has been observed as countries have moved from implementing project-based initiatives to introducing formal frameworks through legislation or strategies (Cedefop & European Commission, 2024). In countries with national skills or lifelong learning strategies, there is a trend toward a more integrated and collaborative approach to validation, fostering stronger links between education and the labour market (Luomi-Messerer, 2024). This study's country cases of, Ireland, France and the Netherlands indicate a move toward creating more structured validation systems to support the permeability of formal education and training systems to (full or partial) qualifications obtained in non-formal and informal contexts.

For example, in the Netherlands, through validation, learners can gain access or exemptions for an education programme, as well as obtaining a partial/full formal qualification in VET and higher education. A national system for the validation of prior learning (*Erkenning van Verworven Competentie*, EVC) has been in place since 1998. It was strengthened by the establishment of the EVC-Centre in 2001, and quality assurance came into focus in 2006. In 2013, a new National Policy on Validation was launched, based on stronger stakeholder participation in lifelong learning and increased focus on individualised learning. Since 2016, the validation system has been based on two separate validation routes: one for the labour market and the other for education access. In the education route, the objective is to validate competences acquired in non-formal/informal settings against national qualification standards to support further learning, either through exemptions in learning units or through partial/full formal qualifications in VET and higher education and for entry into formal education programmes. In the labour market route, validation of prior learning is aimed at adult career guidance and development to support employability, better skills matching, and on-the-job learning. The Dutch NQF supports the implementation of the validation system, making linkages between non-regulated labour market qualifications and formal qualifications more transparent, with level descriptors clarifying the wider value of skills and competences beyond their performance at occupational level (Cedefop, 2021c; Hawley-Woodall, 2019; Leushuis, 2014).

Germany currently lacks a comprehensive system for validating non-formal and informal skills acquisition (OECD, 2021a; Unterweger, 2024). Validation arrangements exist in all formal education and training sectors, with tailored approaches for each. For example, the KMK resolution 2002/08 aims to increase education system permeability by recognising knowledge and skills acquired outside higher education, which can replace up to 50% of a university degree.

Permeability between subsystems has also increased, as German professional learning outcomes from apprenticeships can be credited towards a relevant university degree up to 50% (Meyer, 2018). Romania exemplifies the challenges of implementing validation arrangements on the ground. Legislation for recognising informal and non-formal learning to support lifelong learning has been in place since the start of the century, with a formal structured implementation system (based on assessment centres). However, validation implementation remains limited, and the non-formal system operates separately from the formal one, while the connection between the two is still in development.

Although progress has been made since 2012, the fragmented nature of the validation landscape highlights the need for increased coherence across sectors (Villalba-García, 2017). Both evidence and stakeholder feedback suggest that lack of visibility and awareness of validation, along with the challenges mentioned, present a significant barrier to accessing validation (Cedefop, 2014c; Van den Brande, 2016), including disadvantaged groups such as the unemployed, low-skilled, and migrants/refugees. Reaching and engaging these groups that stand to benefit most from validation remains a challenge (Cedefop, 2017b; European Commission, 2020f).

To meet its goals, validation initiatives should link and expand across different education and training systems and connect with broader policy frameworks, including NQF, credits, and quality assurance. There has been a move towards more comprehensive strategies, with a greater emphasis on quality assurance in relation to validation (Cedefop et al., 2019). As an example, the validation system in the Netherlands, introduced in 1998, focuses on quality assurance that links national qualifications, sector standards, function profiles, career paths, and citizenship (Cedefop, 2023b). Credits can often be awarded through validation in higher education settings (Cedefop & European Commission, 2024). Italy introduced legislation (the Fornero Law 92/2012) requiring validation and certification services regulation, emphasising systematised quality assurance, and establishing a network for validation implementation at the local level. The follow-up 2013 Decree created the national competence certification system and the system for validating informal and non-formal learning. This is a comprehensive system, covering all qualification types from education, higher education, VET, and regulated professions. Despite strategic coherence at the national level, coherence in the context of the country case is perceived as hindered by distinct, sector-based quality assurance systems for VET and higher education, creating complexity and fragmentation in governance and implementation (see also, Musso, 2024).

Validation of non-formal and informal learning in Ireland is closely connected to quality assurance systems and credits. In Ireland, validation can grant access

to formal education, provide credits and exemptions within programmes, and increasingly lead to complete awards, particularly in further education and training (Hawley-Woodall, 2024). The Irish QQI's quality assurance guidelines, annual quality reports and reviews ensure that qualifications adhere to uniform guidelines. Institutions are evaluated based on their recognition of prior learning procedures, credit systems, and ATP policies in reference to the qualification framework. QQI core statutory quality assurance guidelines require that provider policies and procedures for learner admission, progression, and recognition include fair recognition of education and training qualifications, periods of study, and prior learning, including the recognition of non-formal and informal learning (QQI, 2021). Ireland has placed increasing emphasis on promoting permeability between sectors, but the impact of credit initiatives can be undermined by ineffective integration, and a national RPL policy absence is a challenge (QQI, 2023). The RPL Practitioners Network is a notable strength of the Irish approach, fostering collaboration and mutual trust in non-formal and informal settings, facilitating validation in other educational contexts (Murphy, 2019).

In Finland, common principles have also been established for recognising prior learning acquired outside formal education (Cedefop, 2020b; Puukka, 2024), and validation is satisfactorily linked to credit accumulation initiatives even though VET and higher education use different systems. They can be bridged by effective validation procedures used across general education, higher education, and VET, making transitions between education levels easier. In Poland, one significant goal of the 2016 Integrated Qualifications System (IQS) Act was to expand systemic quality assurance to all qualifications listed in the Integrated qualifications register and introduced a more consistent and quality-assured approach to validation. Overall measures were implemented to integrate existing validation arrangements, while specific validation procedures for each education level are individually adjusted. The learning-outcome-based Polish NQF serves as a reference point, indicating that qualifications at all levels can be acquired not only through formal education and training but also through non-formal and informal learning (Budzewski, 2024). In Poland, in higher education, validation of non-formal and informal learning offers an alternative pathway to enter or receive an exemption from a study programme (learners can obtain up to 50% of ECTS credits) (Cedefop, 2023c).

According to the evaluation of the 2012 recommendation, the implementation of validation was connected to the development of NQFs in several EU countries (European Commission, 2020a). Cedefop analysis has shown that many NQFs (16) are explicitly linked to validation policies, either in NQF legislation (e.g. Belgium-FR and Spain) or broader education policies (Cedefop, 2023e). According

to the European inventory on validation (Cedefop & European Commission, 2024), almost all EQF countries (41 in total) link validation and NQF qualifications in some way. In 36 systems, at least some NQF qualifications can be awarded (in full) through validation. In 34 systems, it is possible to have exemptions from modules or parts of a study programme based on validating prior learning. A vital aspect of NQF/EQF implementation is that it has promoted the use of learning outcomes approaches, which are fundamental to validation. Specific regulations and guidelines often describe how the NQF level descriptors or curricula and standards included in it are used as a reference point for validation (e.g. Estonia, Italy, and Malta). In Malta, occupational standards used in validation should align with the learning outcomes approach and NQF level descriptors, while validation arrangements should always use the NQF to determine the level, volume, and depth of evidence (Cedefop, 2024).

France has a consolidated validation system (*validation des acquis de l'expérience, VAE*), set-up before the 2012 Council Recommendation on validation (Cedefop, 2016a); this offers an example of how the interconnection of policies can provide mutual benefit and promote the transparency and transferability of learning outcomes. The French NQF is supportive of the validation system: a validation procedure must be in place for all NQF qualifications (Cedefop, 2023a). Qualifications obtained through validation are equivalent to those awarded through initial or continuous formal education and training or apprenticeships. However, the take-up is relatively low (DARES, 2016; 2017) due to the complexity of the validation process and a preference for degrees obtained through formal education and training. The recent introduction of 'blocks of competences' (*blocs de compétences*), as identifiable parts of qualifications, can be considered a way to further strengthen synergies between qualifications systems and validation (see also Hampe-Nathaniel, 2024).

3.5. Recognition of qualifications

The recognition of qualifications across the EU has been a long and complex topic, dating back to a period before 2000-20, the timeframe of this study. It predates the Bologna process, which began in 1999 and emphasised recognition as a cornerstone of the EHEA. At EU level, efforts have been made in the domain of education and training, where the EU has supporting competences, and in the domain of the internal market and free movement of workers, where the EU holds shared competence and can enact legally binding acts. This section highlights the following initiatives, whose primary purpose is to support qualification recognition:

- (a) Professional Qualifications Directive (PQ Directive) 2005/36/EC (European Commission, 2011) and 2013/55/EC (European Parliament & CEU, 2013)
- (b) Lisbon Recognition Convention (LRC) on the Recognition of Qualifications concerning Higher Education in the European Region 1997 (CoE, 1997a).
- (c) 2018 Recommendation on promoting automatic mutual recognition of higher education and upper secondary education and training qualifications and the outcomes of learning periods abroad; this is referred to as the Recommendation on automatic recognition (AR Recommendation) (CEU, 2018b).

3.5.1. Directive on the recognition of professional qualifications

The Professional Qualifications Directive (Directive 2005/36/EC, as amended by Directive 2013/55/EC) (PQ Directive), is a pivotal piece of legislation addressing the mutual recognition of professional qualifications within the EU (European Parliament & CEU, 2005, 2013). Between 1975 and 1985, several (sectoral) EU directives for the recognition of professional qualifications, primarily concerning health professions and the profession of architect, were adopted (European Commission, 2006). However, the need for a more streamlined system was recognised due to the time-consuming nature of this approach (European Commission, 1984). In July 1985, the Commission proposed a Council Directive for a general system for the recognition of higher education diplomas, which eventually led to the Council Directive on a general system for the recognition of higher education diplomas awarded on completion of professional education and training of at least 3 years' duration (CEU, 1989), the Council Directive on a second general system for the recognition of professional education and training to supplement Directive 89/48/EEC (CEU, 1992), and later to the Directive on the recognition of Professional Qualifications (European Parliament & CEU, 2005) as amended by Directive 2013/55/EC (European Parliament & CEU, 2013). The PQ Directive consolidates 15 earlier directives from 1960s to 1990s on separate professions⁽¹⁷⁾ and aims to facilitate the free movement of professionals and provide them access to the labour market across Europe. It is a legally binding EU measure directed at Member States and, with certain adaptations, other European Economic Area/European Free Trade Association (EEA/EFTA) countries and Switzerland (European Commission, 2022d). Its focus is on the recognition of

(17) Specifically, the 2005 Directive simplified and consolidated the rules for the recognition of qualification set out in 15 previous Directives adopted between the 1960s and 1990s (sectoral directives for craft, commerce and industry and for health professions and architects as well as three general mutual recognition directives). See European Commission. (2011). [Evaluation of the Professional Qualifications Directive](#) (Directive 2005/36/EC).

professional qualifications that allow access to regulated professions. It does not cover qualifications from other countries, unless their holder has worked at least 3 years in the other EU/EEA country which already recognises these qualifications.

A profession is regulated if the practitioner must hold a specific degree, sit special exams, or register with a professional body before practising that profession. According to the PQ Directive Article 11 (a) (i), professional qualifications are those which are attested by evidence of formal qualification and/or professional experience. The three routes for mutual recognition of qualifications according to the PQ Directive are:

- (a) automatic recognition for sectoral professions with harmonised training requirements. This applies to seven professions: nurses, midwives, doctors, dentists, pharmacists, architects and veterinary surgeons;
- (b) automatic recognition based on professional experience for craft, commerce/trade or industry sector. The required minimum duration and nature of the professional experience are laid down in Directive 2005/36/EC on the recognition of professional qualifications, Articles 17, 19 (European Parliament & CEU, 2005);
- (c) general system for other regulated professions.

To support implementation, the European Commission (DG GROW) has set up a permanent group of coordinators for the recognition of professional qualifications, with a wide remit: foster close cooperation between the Commission and the competent recognition authorities of Member States; monitor the evolution of policies that have an impact on regulated professional qualifications; facilitate the implementation of Directive 2005/36/EC, including by producing interpreting guidelines; and support exchange of experience and good practice between Member States (European Commission, n.d. -f). National assistance centres (European Commission, 2020g) provide information on the recognition of professional qualifications.

Despite its legal binding nature, obstacles persisted in mutual recognition. The 2010-11 evaluation of the PQ Directive highlighted that it has been effective in facilitating labour mobility within the EU, but issues such as cumbersome recognition procedures and the need for better access to information emerged (European Commission, 2011a). The Commission's EU Citizenship Report 2010 stressed the need to reduce uncertainty and delays in the recognition process and resistance at the national level, identified as increasing barriers to recognition (European Commission, 2010b).

The revised 2013 PQ Directive sought to address some of these concerns (European Parliament & CEU, 2013). It called on Member States to review the regulations on qualifications governing access to professions and includes a raft

of other new features, including modernisation of the definition for harmonised minimum training requirements for automatic recognition (Redondo, 2013), introduction of the European Professional Card (EPC) ⁽¹⁸⁾, and an alert mechanism (launched in 2016 and currently applicable to five professions) for streamlining the recognition processes. A more recent legislative development is Directive (EU) 2018/958 on a proportionality test before the adoption of new regulation of professions (European Parliament & CEU, 2018b). This Directive is a part of the EU's Services Package, published in 2017, and aims to prevent undue restrictions on access to, or the pursuit of, professional activities and improve transparency on the way certain professions are regulated in Member States.

More recent evaluations have shown varying degrees of success regarding Member State progress in implementing the amended PQ Directive (European Commission, 2018a and 2020f). Drawing on the evaluation and the Commission's Single Market Scoreboard, the Directive has generally been effective in increasing professional mobility across the Member States (European Commission, 2021b). The use of modern digital technologies, such as the Internal Market Information System (IMI), enhancing administrative cooperation and information exchange, the EPC and alert mechanism, facilitating electronic recognition procedure for selected professions, have significantly speeded up the process for certain professions in the recognition procedures, which can be considered a success (European Commission, 2018a and 2020f).

At the same time, the Commission's enforcement action for non-compliance by Member States seems to have played a role in improving the implementation of the revised PQ Directive across the EU. Despite progress achieved, challenges remain regarding the mutual recognition of professional qualifications, mainly due to resistance at Member State level (Lipiec, 2021). National and/or regional governments, and even private entities, often erect formal and informal barriers to professional mobility in the EU. These range from bureaucratic, complex and time-consuming procedures to document translation, the need for personal appearance, and insurance obligations, among others (Lipiec, 2021). The degree of persistent non-compliance by Member States concerning the full and proper implementation of the PQ Directive has been such that, on numerous occasions, the Commission

⁽¹⁸⁾ This is an electronic certificate that seeks to make it easier for professional qualifications to be recognised across the EU. This is the first fully online EU-wide procedure for the recognition of qualifications, speeding up this process for five professions to date: general care nurses, physiotherapists, pharmacists, real estate agents and mountain guides. All other professionals will continue to rely on the standard recognition procedures; however, it might be extended to other professions in the future.

took legal action in terms of infringement procedures against them, in some cases involving the Court of Justice of the EU (European Commission, 2020e).

In the context of the 2005 PQ Directive, the 2011 evaluation found that, among competent authorities, there was very limited knowledge and/or practical experience or even willingness to use learning outcomes for the recognition of professional qualifications. For example, nearly half of competent authorities (43%) interviewed were either 'not aware' or 'not at all familiar' with learning outcomes approaches. However, most competent authorities expected that, in view of the development and implementation of the EQF, together with the national qualifications frameworks and the general shift towards learning outcomes-based approaches, the use of learning outcomes in the recognition of professional qualifications would grow, though this could not be an alternative to the input-based recognition requirements of the Directive, which compared qualifications based on training duration and training subjects/content (European Commission, 2011a; GHK, 2011).

3.5.2. Lisbon Recognition Convention

A seminal legislative development in the mutual recognition of qualifications in higher education was the Lisbon Recognition Convention (LRC) (CoE, 1997a) – jointly drafted by the Council of Europe (CoE) and UNESCO – which promotes fair recognition of academic qualifications. The implementation of the LRC is closely linked to the Bologna Process which established the EHEA: mutual recognition of higher education qualifications within the EHEA is one of the fundamental long-term goals and key commitments of the Bologna Process (Waters, 2013; Tecilazić Goršić, 2019). This is an international agreement and the only legally binding instrument of the EHEA. Adopted in 1997, and entered into force in 1999, the LRC has so far been ratified by 55 countries across Europe and the North American region (ENIC-NARIC, n.d - c). It provides the legal framework for the recognition of higher education and upper secondary qualifications for access to higher education or next levels in the higher education qualifications system.

The network of national academic recognition information centres (NARIC) – set up in 1984 – is aimed at improving the recognition of academic qualifications and periods of study across the EU, EEA and Turkey (ENIC-NARIC, n.d. -a). From the start, the work of the NARIC network has been closely complimented by the European Network of Information Centres (ENIC) network, established in 1994 as a joint initiative of UNESCO and the CoE. One of its key remits is to uphold and assist with the practical LRC implementation by competent national authorities (ENIC-NARIC, n.d. -a). Following an external review of both networks in 2002, the Joint ENIC-NARIC Charter of activities and services (CoE & UNESCO, 2004) was

developed and adopted by the Lisbon Recognition Convention Committee (LRC Committee) in 2004. The ENIC-NARIC network plays a critical role in monitoring and implementing the LRC principles and in promoting the use of good recognition practices across Europe (Waters, 2013).

Ministerial communiqués subsequently adopted as part of the Bologna process (Bologna Process, 2012), stressed the need for mutual and, following the Bucharest Communiqué (2012), automatic recognition of comparable academic degrees. In the Bucharest Communiqué (Nuffic, 2020), the Ministers of Education from the EHEA also endorsed the European Recognition manual for higher education institutions (EAR Manual) (Nuffic, 2020). This ENIC-NARIC joint project is based on the LRC and its subsidiary texts and, as such, closely follows the LRC's provisions and provides practical guidelines on how to implement them (Centre for Quality Assessment in Higher Education Lithuania [SKVC] et al., 2019); it is an important means of spreading good practices, which was considered useful to drive national policy change (Waters, 2013). Since first published in 2012 (Nuffic, 2012), the European Recognition Manual for Higher Education Institutions has been revised twice (2016 and 2020) (Nuffic, 2016, 2020).

During the Yerevan 2015, Paris 2018, and Rome 2020 communiqués, countries highlighted significant progress in terms of student and graduate mobility within the EHEA due to the Bologna reforms, improving system comparability, transparency, and attractiveness. However, they also noted persistent challenges as the implementation of the Bologna reforms remains uneven between countries. More specifically, the Paris Communiqué stressed the need to ensure that recognition practice everywhere in the EHEA is fully compliant with the LRC.

The principles of the LRC are reflected in the legislation of most of its signatory countries, marking it as one of the CoE/UNESCO conventions with the highest political importance and widespread ratification (Zgaga, 2014). Successive LRC implementation reports reveal steady growth in the number of signatories and their compliance with LRC principles (UNESCO & CoE, 2016). The 2020 Bologna Process implementation report showed that the number of national education systems where all LRC main principles ⁽¹⁹⁾ are specified in national legislation has risen from 11 in 2015 to 23 in 2020 (EACEA & Eurydice, 2020). However, implementation varies significantly across countries and not all LRC principles are being implemented successfully or in the correct manner; this particularly so for

⁽¹⁹⁾ These are: (i) applicants have a right to fair assessment; (ii) recognition is granted unless there is a proven substantial difference; (iii) encouragement to compare learning outcomes rather than programme contents; (iv) in cases of negative decisions, the proof of burden is on the competent recognition authority to demonstrate the existence of a substantial difference; and (v) applicant's right to appeal of the recognition decision

Article VII, which relates to the situation of refugees and people displaced from their countries, which is still not a legal requirement in the majority of EHEA countries.

3.5.3. Recommendation on automatic recognition

During the Social summit for fair jobs and growth in Gothenburg on 17 November 2017, the main EU institutions jointly announced the European Pillar of Social Rights (EPSR) (European Parliament et al., 2017). EU leaders discussed ideas to further the EU education and culture agenda, including the mutual recognition of qualifications, encompassing secondary education diplomas (CEU, 2017b). In response, following a Commission proposal and online consultation in 2018, the Council adopted the Recommendation on promoting the automatic mutual recognition of higher education and upper secondary education diplomas and study periods abroad (CEU, 2018b) (AR Recommendation). Although this does not carry legal binding power, it contributes to the momentum around qualification recognition.

Building on existing initiatives, including developments related to the Bologna process and the LRC, the AR Recommendation envisages achieving the automatic recognition of qualifications and learning period abroad by 2025 throughout the EU. It is important to note that the automatic recognition promoted by the 2018 Council Recommendation concerns access as opposed to admission to further studies. This is because, given the institutional autonomy of HEIs, it is their prerogative to set specific criteria for admission to their programmes (ENIC-NARIC, n.d.-b). The 2018 AR Recommendation also addresses the recognition of upper secondary education in terms of learning periods spent abroad (and not only in terms of access to HE); it explicitly encompasses VET, going beyond the LRC and responding to a clear demand from stakeholders across the EU and setting an ambitious EU-driven approach promoting the use of transparent tools.

Looking at progress in Member States, it has been observed that they have made more headway at the system level than at the institutional level. The number of countries with national legislation for automatic recognition of higher education qualifications across the EU increased from eight (Denmark, Germany, France, Malta, Poland, Romania, Finland, and Sweden) in 2018 to 12 (with the addition of Spain, Croatia, Italy and Austria) in 2022. Some Member States are aligning their legislation with the recommendations for automatic recognition of higher education qualifications, while others have no such plans. Similarly, automatic recognition of higher education qualifications is possible for a limited number of countries or qualifications in nine Member States. Regarding upper secondary education and training qualifications, 15 Member States have fully automatic recognition systems

aligned with the Recommendation (Denmark, Germany, Ireland, Spain, France, Croatia, Italy, Cyprus, Hungary, Netherlands, Austria, Portugal, Romania, Finland, Sweden plus Poland for general school education only), while in six Member States automatic recognition includes qualifications only from a limited number of other Member States. Five Member States (Belgium, Bulgaria, Greece, Luxembourg, Malta, plus Poland for VET) do not have automatic recognition systems in place. Only eight Member States are aligned with the Council Recommendation on the recognition of outcomes of learning periods abroad for upper secondary education (European Commission, 2023b).

The progress report on the implementation of the 2018 AR Recommendation shows uneven implementation across institutions with inconsistencies in the implementation between higher education institutions, or even between different credential evaluators within the same institution (European Commission, 2023b). One main factor is the lack of a clear and commonly shared understanding of the meaning of 'automatic recognition' leading to confusion on the distinction between 'automatic recognition' and automated or simplified procedures for recognition (European Commission, 2023c). This confusion extends to differentiating between automatic recognition of qualifications which allow access to the next level of education, and automatic admission to an education institution's programme, with institutions still setting their own criteria for the latter. The survey conducted for the Recommendation's evaluation indicated that half of the responding education institutions either merge recognition and admission processes (38%) or are unsure about their separation/combination (15%) (European Commission, 2023c).

This combination of recognition and admission processes, the lack of clear and common understanding of what is meant by 'automatic' recognition, are both seen as contributing to the current confusion about and patchy implementation of the 2018 AR Recommendation at the institutional level, not only between Member States but also within the same country. This is further exacerbated by the institutional autonomy of HEIs. At the same time, it is difficult to assess the extent to which automatic recognition is de facto implemented in an education system as stressed also in the evaluation of the 2018 AR Recommendation, given the general lack of monitoring of recognition decisions at both country and institutional levels, with few countries systematically monitoring (European Commission, 2023b).

The 2018 AR Recommendation emphasised the role of NARICs in facilitating EU-wide automatic recognition of qualifications by, inter-alia, offering expert support and training to HEIs. However, NARIC capacities and resources had not significantly increased, limiting their impact primarily to information dissemination. Even so, as the evaluation of the Recommendation found, since its adoption, two thirds of NARICs have simplified the recognition processes and four (Denmark,

Estonia, Malta and Norway) attributed a fall in recognition requests to the Council Recommendation (European Commission, 2023b).

It has been argued that the 2018 Council Recommendation has given a boost to progress towards widespread automatic recognition, so providing further impetus to all Bologna Process member countries (EACEA & Eurydice, 2020). This Recommendation marks a significant milestone in the Commission's ambition to establish the European Education Area (EEA) by 2025, which, *inter alia*, entails automatic mutual recognition without separate recognition procedures across the EU (European Commission, 2020b; European Parliament, 2023).

3.5.4. Coherence of recognition initiatives

Internal coherence: PQ Directive, LRC and AR Recommendation

Although the initiatives on qualifications recognition share similar objectives, such as enhancing worker and learner mobility, lifelong learning and career progression across countries, their concepts, purposes and approaches differ. For example, the Recommendation on automatic recognition (AR Recommendation) is not a legally binding instrument, unlike the Professional Qualifications Directive (PQ Directive) and the Lisbon Recognition Convention (LRC) which are legally binding but operate within distinct legal frameworks: the first is an EU initiative and the second an international agreement, resulting in differences in their geographic scope. The PQ Directive is only directed to those qualifications that give access to regulated professions. These qualifications are most often connected to higher level qualifications from higher education institutions but can also concern qualifications considered as VET qualifications. Similarly, the LRC addresses higher education qualifications, which may lead to professional qualifications, and covers qualifications that grant access to higher education, which may encompass VET qualifications if they are considered as giving access to higher education in the 'issuing' country. The 2018 AR Recommendation explicitly covers qualifications that give access to higher education and expands its scope to learning periods abroad in secondary education and training, covering both general education and VET.

The LRC and the 2018 AR Recommendation have a clear link, with the latter building on the former and advocating for continuity. The 2018 AR Recommendation addresses the incomplete implementation of the LRC, noting that mutual recognition of upper secondary qualifications among signatory countries remains underdeveloped, while higher education degrees are inconsistently implemented in many Member States. In response, the 2018 AR Recommendation urges Member States to fully adhere to the LRC's provisions

(European Commission, 2018d). In contrast, the 2018 AR Recommendation and the PQ Directive appear to function independently. The quote 'this Recommendation is without prejudice to the system for mutual recognition of professional qualifications and harmonised minimum training requirements for several professions' pursued with the PQ Directive highlights this (European Commission, 2018d). Likewise, the relationships between the LRC and the PQ Directive are not explicitly defined. However, the 2010 LRC's supplementary text 'Revised recommendation on criteria and procedures for the assessment of foreign qualifications', suggests that, in evaluating foreign qualifications, competent authorities should consider both national laws and international conventions, directives, recommendations and good practices (UNESCO & CoE, 2010). It can be argued that LRC implementation incorporates the PQ Directive, at least regarding EU Member States, though the Directive does not directly mention the LRC. However, the amended PQ Directive refers to the Bologna Process in one of its recitals, highlighting the adaptation of higher education institutions to a two-cycle bachelor and master degree system and that levels 'd' and 'e' of the Directive are consistent with this structure.

Conceptual and approach differences are also evident among the initiatives. The LRC and the 2018 AR Recommendation align more closely compared to the PQ Directive, with the notion of learning outcomes being central to both. The 2018 AR Recommendation promotes the use of learning outcomes in developing learning agreements between institutions to facilitate the recognition process. In contrast, the PQ Directive adopts a more input-oriented approach, emphasising the duration and content of training programmes (European Commission, 2011a). Although the amended PQ Directive does not explicitly mention 'learning outcomes', a minor connection can be inferred. Specifically, article 49a stipulates that the common training framework - a set of minimum knowledge, skills, and competences necessary for a specific profession - must be based on levels of the EQF, which inherently rely on learning outcomes. An additional, though indirect, link to learning outcomes is suggested through the discussion on credits. The amended PQ Directive acknowledges the use of credits in higher education institutions and introduces the possibility to use ECTS, which measures both the workload and learning outcomes, to express the duration of a programme.

The implementation of these initiatives is governed by different entities. The European Commission oversees the PQ Directive and the 2018 AR Recommendation, with varying enforcement capabilities. The PQ Directive is a legally binding instrument monitored by DG GROW, which can enforce action. In contrast, the 2018 AR Recommendation, mainly launched by DG EAC, is not legally binding and relies more on peer learning and monitoring. The Council of

Europe and UNESCO oversee the LRC's implementation, with the Lisbon Recognition Convention Committee providing support and reporting on progress. Nationally, there seems to be stronger cooperation between authorities responsible for different recognition regimes as well as cross-fertilisation in terms of approaches, as in the cases of countries where the LRC principles are also applied for the recognition of VET qualifications, including qualifications at lower levels (e.g. in Sweden EQF level 3-5). However, since recognition decisions are often decentralised to institutions and providers, it is complex to assess how effectively synergies are promoted across different developments and approaches.

External coherence: recognition and links with other policy initiatives on quality assurance, credits, comparability and validation

While explicit links between the recognition initiatives and initiatives in other thematic areas vary, all previous developments can be considered supporting recognition of qualifications. By also including VET qualifications in its scope and including a reference to existing initiatives associated to both VET and HE, the 2018 AR Recommendation distinguishes itself for its integration with numerous initiatives. The LRC developments also connect with various initiatives, but these are mainly ones oriented towards higher education (e.g. ECTS, diploma supplements). In contrast, the PQ Directive is the initiative which exhibits weaker connections to the other initiatives analysed in this study. For some cases, this can be because they were developed after its adoption in 2013.

This study has identified significant and explicit links between quality assurance initiatives and the LRC and the 2018 AR Recommendation. EQAVET 2009 or 2020 is not referred to in the amended PQ Directive or 2020 Directive User guide; the 2020 VET Recommendation, which incorporates the EQAVET framework, mentions that the Recommendation is without prejudice to the PQ Directive and the regime of automatic recognition provided therein. Many qualifications granting access to regulated professions under the PQ Directive are issued within the context of higher education, making developments in this area applicable or beneficial for these types of qualifications.

The LRC does not mention 'quality assurance' directly but emphasises the quality of individual qualifications, institutions and teaching and refers to the assessment of institutions and programmes as well as the wide availability and ease of access to information about relevant quality assurance mechanisms (CoE, 1997b). Its subsidiary texts focus on quality assurance, considering it an essential mechanism for generating trust and improving transparency among relevant parties, including higher education institutions, competent recognition authorities, and learners. The 2006 Recommendation on quality assurance in higher education

(European Parliament & CEU, 2006a), which helped to establish the European Quality Assurance Register for Higher Education (EQAR), explicitly called on Member States to promote cooperation between agencies to build and strengthen mutual trust and the recognition of quality assurance and accreditation assessments, which contribute to the recognition of qualifications for study or work across borders. The link between quality assurance and recognition has been further strengthened with the adoption of the 2015 ESG (EACEA & Eurydice, 2018). One of the ESG standards for internal quality assurance refers to recognition (Standard 1.4), including recognition of higher education qualifications, periods of study abroad, and prior learning, including non-formal and informal learning. Quality assurance agencies now have responsibility for addressing recognition issues in their quality assurance processes. Synergies between quality assurance in higher education and recognition of qualifications were also explored, aiming to support synergies in their development and implementation. In 2015, ENQA established a Working Group specifically around quality assurance and qualifications recognition. Challenges identified included variability among quality assurance agencies in relation to the level of awareness and approaches applied towards the fulfilment of ESG 1.4, and that recognition is not a priority for many quality assurance agencies (ENQA, 2017a). In the Paris Communiqué (2018) and Rome Communiqué (2020), the links between quality assurance and recognition processes were further highlighted.

The 2018 AR Recommendation emphasises the importance of quality assurance, calling for the further development of quality assurance instruments in VET, in line with EQAVET and its further developments. Within the EQAVET framework, one of the indicative descriptors at the VET-system level is 'Standards and guidelines for recognition, validation, and certification of competences of individuals have been defined'. The 2020 VET Recommendation aims to remove obstacles for recognition of higher education and upper secondary education and training qualifications and learning periods abroad. At national level there might be stronger synergies between quality assurance developments and recognition, but at European level there seems to be limited evidence of processes on promoting stronger connections in development and implementation between EQAVET and initiatives on recognition of qualifications. This suggests potential areas for strengthening synergies.

Regarding credit accumulation and transfer, recognition developments in the context of the LRC place high relevance on credits, with the 2010 Revised Recommendation on the Criteria and Procedures for the Assessment of Foreign Qualifications encouraging education institutions to provide information about qualifications, including credits such as the ECTS (UNESCO & CoE, 2010). The

2013 Recommendation on the Use of Qualifications Frameworks in the Recognition of Foreign Qualifications emphasises that, while qualifications should be assessed based on learning outcomes, recognition authorities can also be guided by workload expressed in credits. More recently, the 2019 revised template of the Diploma Supplement states that student workload should be described in terms of credits, with EHEA countries expected to indicate this workload using ECTS (UNESCO & CoE, 2019).

The PQ Directive has some, but weaker, links with credits. The 2015 ECTS Users' Guide considers ECVET and ECTS relevant for qualifications that form part of continuing professional development, depending on the level. The amended PQ Directive acknowledges the use of credits across countries and refers to the possibility of expressing the duration of a programme in ECTS, without mentioning ECVET. The 2009 ECVET Recommendation clarifies that it should not imply any new entitlement for citizens to obtain automatic recognition of learning outcomes or points.

The 2018 AR Recommendation highlights both ECTS and ECVET as tools to facilitate recognition of learning outcomes, but with more references to ECTS due to its greater maturity. Countries are asked, by 2025, to recognise automatically outcomes from a learning period abroad at higher education level using ECTS-based learning agreements and transcripts. ECTS guidelines are also highlighted as a foundation for developing national guidance for higher education institutions in producing and implementing transparency tools supporting recognition. Regarding ECVET tools, the use of learning-outcomes-based learning agreements, such as the Memorandum of understanding and learning agreement, is encouraged to facilitate recognition of outcomes of learning periods abroad during upper secondary education and training.

Both the LRC and the 2018 AR Recommendation acknowledge the importance of qualifications frameworks. While the PQ Directive includes minor references to the EQF and developments related to the Bologna process, the LRC emphasises the use of qualifications frameworks in recognition practices. The 2010 Revised Recommendation on the criteria and procedures for the assessment of foreign qualifications (UNESCO & CoE, 2010) and the 2013 Recommendation on the use of qualifications frameworks in the recognition of foreign qualifications (UNESCO & CoE, 2013) highlight the value of NQF, EQF, and other similar frameworks in the assessment process. The LRC subsidiary text recognises the QF-EHEA as crucial to providing generic learning outcomes descriptors for the first, second, and third-cycle qualifications.

The 2018 AR Recommendation emphasises the importance of referencing (and updating the referencing) NQFs to the EQF and self-certification of NQFs to

the QF-EHEA to facilitate recognition of upper secondary education and training qualifications. The Bologna Process has consistently promoted the connections between recognition and the QF-EHEA in their further development and implementation. The EQF and NQF roles in supporting recognition practice is increasingly documented and acknowledged in various national developments but has few efforts at the European level to nurture and improve this relationship in implementation and developments.

The amended PQ Directive includes minor references to the Bologna process and acknowledges the EQF as a useful additional source of information for examining professional qualifications issued in other Member States. However, there seems to be a conceptual difference between the five qualification levels present in the Directive and the EQF levels, which are based on learning outcomes. The EQF Recommendation mentions that reference to EQF levels on qualifications should not affect access to the labour market where professional qualifications have been recognised in accordance with the Directive. Discussions and processes at the European level on promoting stronger synergies between developments and implementation of qualifications frameworks and the PQ Directive seem to have been limited.

Synergies with other tools and initiatives associated to the comparability area vary. The Diploma supplement is considered an important tool for the implementation of the LRC (UNESCO & CoE, 2019). Its relevance is stressed also by the 2018 AR Recommendation which, in addition, invites to use the certificate supplements as well as EU tools included in the Europass portal to support recognition of qualifications (CEU, 2018b). The 2020 VET Recommendation also called Member States to make best use of the EU transparency tools, including Europass, to facilitate automatic mutual recognition of qualifications and the outcomes of learning periods abroad (CEU, 2020). The PQ Directive and the 2020 User guide of the Directive do not include any reference to Europass supplements but both the diploma and certificate supplements include an information field on whether the acquired qualification gives access to a regulated profession.

The 2018 Europass Decision takes a general approach in requiring the Europass portal to provide information or links to information on recognition practices and relevant legislation in different countries, including third countries. It includes links to information on the PQ Directive and to ENIC-NARIC as centres providing information on academic recognition. Digital developments in Europass related, for example, to the possibility of issuing and also verifying the authenticity and validity of digital credentials, are considered key developments for supporting the evaluation and recognition of all types of qualifications.

The Microcredentials Recommendation places much attention on recognition, providing a list of standard elements for their comparable descriptions (CEU, 2022). The recommendation invites providers to supply information on their policy on the recognition of microcredentials issued by other entities. For those issued by formal education and training providers, it is advised to apply standard recognition procedures akin to those for foreign qualifications and learning periods abroad, promoting links with existing developments. Member States should support the ENIC-NARIC networks, or similar entities, to create clear recognition processes for microcredentials from various providers (including the development of guidance and training). This should also explore the feasibility of automatic recognition of microcredentials in line with the AR Recommendation. Within the Bologna process framework, discussions on how to recognise microcredentials continue. According to a recent study on the state of play of microcredentials in the EHEA, although most EHEA countries have in place policies relating to the recognition of qualifications, many do not have recognition policies specifically targeted at microcredentials (Microbol, 2021). In either case, it seems that the main routes for recognition of microcredentials are recognition/validation of prior learning applied to microcredentials, and recognition of courses delivered by HEIs as part of a full study programme and microcredentials awarded by HEIs and other authorised bodies (Microbol, 2021). There seem to be no specific links between microcredentials and the PQ Directive, where the former is without prejudice to the latter.

ESCO is not referred to by the PQ Directive, the LRC or the 2018 AR Recommendation. The same is true of the key competence frameworks. However, the 2020 VET Recommendation (CEU, 2020), among other things, recommends that Member States make best use of the EU transparency tools, including ESCO, to facilitate automatic mutual recognition of qualifications and the outcomes of learning periods abroad. ESCO provides a reference to the Regulated professions database together with a link to the PQ Directive (European Commission, 2017b).

When addressing coherence with validation of non-formal and informal learning and recognition of qualifications, it is important to take into account their conceptual differences. Although there are different uses and interpretations of the terms (See e.g. Villalba-Garcia, 2021 or Aggarwal, 2015), for this study the distinction is considered in box below.

Box 2. **Validation of non-formal and informal learning and recognition of qualifications**

Recognition of qualifications stresses the official acknowledgment by countries or organisations of the similarity of value of qualifications (certificates, diplomas, or titles) awarded in (or by) one or more other countries or organisations, including the associated rights and duties (Cedefop, 2024b). Validation of non-formal and informal learning is related to the confirmation that an individual has acquired learning outcomes against a relevant standard (COE, 2012; Villaba-Garcia, 2021). Therefore, the key objective is not to establish 'equivalence' between e.g. national-foreign qualifications; but to value (or recognise) all types of learning by certifying them in the form of credits, partial or full qualifications. In this regard, it is possible to have a recognition process, after a validation process, in which there is an 'official acknowledgement' of the similarity of a qualification acquired through validation and another qualification acquired in the traditional way. Many of the developments relevant for recognition of qualifications can be relevant for validation of non-formal and informal learning. This includes, for example, Europass digital developments that can provide richer information on learning acquired and certified both by providers considered part of the formal education and training system and other entities.

Source: Cedefop.

To explore the synergies between recognition and validation of non-formal and informal learning, the study mainly considers to what extent learning taking place outside formal learning is considered or interlinked in the recognition process. In this sense, all three initiatives on recognition seem to align with the main objectives and principles of validation, as stipulated in the 2012 Recommendation on validation, especially if considering recognition of prior learning can be a proxy for validation. The LRC refers to considering 'non-traditional qualifications' issued outside the formal systems. The LRC's 2010 'Revised Recommendation on criteria and procedures for the assessment of foreign qualifications' states that in assessing foreign qualifications, competent recognition authorities should acknowledge recognition of prior learning, which can shorten the duration of some academic qualifications without diminishing learning outcomes (UNESCO & CoE, 2010).

The LRC, especially in its subsidiary texts (UNESCO & CoE, 2013), calls on competent recognition authorities to focus on learning outcomes, the quality of a study programme, and recognition of prior learning when assessing foreign qualifications, including credit transfer, different forms of access to higher education, joint degrees, and lifelong learning. The 2018 AR Recommendation on automatic recognition encourages exploring good practices in the recognition of prior learning, as it improves access to learning mobility for under-represented groups.

The PQ Directive allows professional experience to be considered if a professional qualification is not available, and national authorities may impose compensation measures, such as tests, when there are substantial differences between qualifications. These measures should be transparent and impartial. Although the 2020 User guide does not expand on these aspects, some connections between the concepts used in the PQ Directive and the Validation Recommendation can be inferred. The Validation Recommendation, which covers validation of knowledge, skills, and competence acquired through work experience, company training, or other courses, mentions that individuals can obtain full or partial qualifications without prejudice to the PQ Directive. While conceptual and principal links can be argued, few EU-level activities promoting synergies in terms of coordinated management, implementation, or developments between the initiatives have been identified.

3.5.5. Recognition developments at the national level

National policies on recognition primarily aim to enable and promote the recognition of qualifications obtained in other countries, but in some cases they also promote recognition of qualifications from different regions (e.g. Italy). Main objectives include facilitating the mobility of students and workers across countries (also by providing information and advice on qualifications obtained abroad); and supporting the recognition of qualifications of specific groups of individuals, such as refugees.

Most countries have developed national initiatives for EU and international recognition of qualifications through legal bilateral and multilateral agreements, non-legal agreements (e.g. among the Nordic-Baltic countries), national/legislative regulation (e.g. in Belgium, France, Italy), or legally binding, unilateral lists of degrees (e.g. RO) (UNESCO & CoE, 2022). Some countries integrated the Lisbon Recognition Convention (LRC) requirements into national legislation, while others do not regulate some or all the LRC provisions at the national level, granting higher education institutions complete autonomy in how they comply with its principles.

Of the EU-27, Germany, Ireland, Italy, the Netherlands and Austria are among the latter, i.e., countries where the HEIs enjoy full decision-making freedom and total autonomy in terms of criteria and procedures for assessing qualifications. Crucially, in countries where criteria and procedures are regulated at national level, the nature, content and level of regulation vary considerably. Although, in most countries, the assessment and recognition procedures are detailed and clear, the assessment criteria are general or missing, or difficult to understand from national legislation. It seems that only a few countries have a detailed list of criteria and rules set out in legislation (UNESCO & CoE, 2016). According to 2016 Monitoring

Report of the LRC implementation in 32 countries (out of 50 that replied to the survey) criteria for the assessment of foreign qualifications are regulated at national level. A total of 15 countries replied that learning outcomes are considered as a criterion in accordance with the legislation, and 20 countries confirmed that the level in the qualifications framework(s) was a criterion. In national legislation the most frequent criteria when assessing qualifications remain input criteria, e.g. nominal duration (26 countries) and/or a list of courses/content (25 countries), more than output criteria, e.g. formal rights (24 countries) and/or learning outcomes (15 countries). Two countries report that outcomes were the sole or most decisive criterion in their assessment of foreign qualifications (UNESCO & CoE, 2016).

All EU countries have transposed the Professional Qualifications (PQ) Directive and adopted automatic recognition for specific regulated professions (pharmacists, architects, doctors, midwives, nurses responsible for general care, vets, dentists), though a focus on learning outcomes and links with other transparency initiative tools has been limited. Progress in implementing the 2018 Recommendation on automatic recognition is also considered limited. Many countries have adopted a centralised decision-making approach for automatic recognition, typically carried out by a competent system-level recognition authority. In most Member States the decision-making responsibility for the recognition of qualifications is delegated to higher education institutions, with evidence showing that ‘such a decentralised application of a system-level legal framework increases the risk of inconsistent application of automatic recognition’ (European Commission, 2023a).

In some Member States automatic recognition is possible for qualifications from a limited number of countries. This is the case with regional collaborations and agreements that, according to the evaluation of the 2018 Recommendation, some countries regard as a way forward in implementing automatic recognition for all EU Member States which use the European and Bologna transparency tools. Examples are the Nordic declaration on recognition of qualifications concerning higher education (Reykjavik Declaration), signed in June 2004 and revised in the following years (Nordic Cooperation, 2022; Vukasovic et al., 2018) or the bi-regional Treaty on the automatic mutual recognition of higher education degree levels, signed in September 2021 between the Benelux ⁽²⁰⁾ countries and the Baltic States ⁽²¹⁾ (Treaty on the Automatic Recognition of Higher Education Qualifications, 2021).

⁽²⁰⁾ Belgium, Luxembourg and the Netherlands.

⁽²¹⁾ Estonia, Latvia and Lithuania.

Many countries have established national academic recognition information centres (NARICs) that are part of the ENIC-NARIC network, which was envisaged in the Lisbon Recognition Convention. ENIC-NARICs are crucial in verifying the authenticity of qualifications and their appropriate level, though their roles and remit may vary among countries. Typically, they offer (online and offline) information services and guidance/recommendations on the assessment of equivalence; they do not always provide advice on both higher education and upper secondary education. National assistance centres for the PQ Directive are usually departments, directorates, or agencies of ministries, such as education and/or higher education (e.g. Czechia, Denmark, Germany, Ireland, Greece, Spain, Luxembourg, Malta, Slovakia), labour/employment (e.g. Cyprus, Austria, Portugal, Slovenia), or the economy/finance/competitiveness (e.g. Belgium, France, Italy, Lithuania) (European Commission, n.d. -h). However, there are countries where ENIC-NARICs serve as or support the recognition of professional qualifications (e.g. Bulgaria, Estonia, Croatia, Latvia, Hungary, Netherlands, Romania, Finland, Sweden) and some cases where they even provide legally binding recognition decisions. This trend can be seen as a movement towards centralising recognition procedures across different areas (European Commission, 2023a).

The German Zentralstelle für ausländisches Bildungswesen (ZAB) is responsible for coordinating activities related to the EU PQ Directive, the Lisbon Recognition Convention, various bilateral State agreements on equivalence in higher education (equivalency agreements), higher education laws of the federal states, and the study and examination regulations of higher education institutions. Despite inconsistencies in implementation, coherence is supported by an effective online database and initiatives like Network IQ to implement the 2012 Federal Recognition Act. Germany implemented automatic recognition for EU Member States in higher education at the federal level in 2007 and has several bilateral agreements managed by the German NARIC. In 2012, the Federal Recognition Act simplified and unified the previous assessment and recognition procedures for foreign vocational qualifications for over 600 professions. Before the Act, only EU citizens and late German ethnic resettlers were legally entitled to determine the equivalence of their qualifications in Germany. The law includes the Vocational Qualifications Recognition Act (BQFG) and provides individuals with the right to have their foreign qualifications matched to a German qualification by an appropriate authority. The Federal Recognition Act promoted a simplification and unification of the previous assessment and recognition procedures, which are closely monitored and reported on annually. Replacement documents can be provided through a skills analysis if documents are missing, and integrative courses can be offered to complement a training path and have it formally

recognised. The Chamber of Industry and Commerce (IHK, Industrie- und Handelskammer) and the IHK Foreign Skills Approval (IHK FOSA) are responsible for assessing and recognising foreign vocational qualifications (Cedefop, 2020c).

Among the measures encouraging the recognition of qualifications in Finland, the LRC is the key legal instrument regulating the recognition of higher education qualifications. The rapid ratification of the LRC in the early 2000s positioned Finland at the forefront of making Finnish degree programmes, structures, and qualifications transferable to other countries and vice versa. EDUFI, as the Finnish NARIC centre, provides guidance to individuals seeking the recognition of their foreign qualifications in Finland. They also advise and provide training for education providers, HEIs, and other stakeholders, such as employers, on questions concerning the academic and professional recognition of education qualifications. The agency assesses foreign qualifications and provides statements of comparability, which help individuals understand how their qualifications correspond to the Finnish education system. EDUFI also maintains a national online portal for applicants with foreign qualifications (European Commission, 2023b). Information on regulated professions and overall recognition procedures is gathered on the EDUFI webpages, and the application process is fully digitalised. These recognition processes have an internal evaluation system.

In the Netherlands, the International Credential Evaluation (*internationale diplomawaardering*, IDW), operating under the authority of the Dutch Ministries for Education and Social Affairs and Employment, represents a joint structure consisting of SBB and Nuffic (the NARIC center). Within IDW, foreign qualifications are evaluated against comparable Dutch vocational and higher education qualifications. Data on recognition decisions are collected at the national level by Nuffic. This database is used by Nuffic for periodic evaluations (e.g. incoming mobility trends in higher education from 2006 to 2022), although such decisions are not formally monitored on an annual basis. Nuffic provides guidance and overviews on the comparability of foreign higher education and upper secondary foreign qualifications.

Some countries, such as the Nordic countries, align the recognition of foreign VET qualifications, including those at the upper secondary level, with the principles of the Lisbon Recognition Convention. For example, Sweden does not have separate national legislation for recognising upper secondary VET (EQF 3-5) qualifications from abroad. Instead, its recognition procedure and assessment criteria are informed by and aligned with the LRC principles. Similarly, for the recognition of foreign VET qualifications (as well as all other qualifications) at that level, Denmark uses the Lisbon Recognition Convention together with its 2014 Assessment of Foreign Qualifications Act (NOKUT, 2022).

In France, recognition procedures are primarily limited to higher education and are mainly aligned with the LRC. However, a recently adopted legal framework supports the mobility of VET students, with recognition arrangements based on learning agreements between VET schools prior to mobility. Additionally, an optional 'mobility unit' has been created to validate general and transversal professional achievements during a mobility period abroad, leading to a so-called *MobilitéPro* certificate being attached to the learner's diploma (European Commission, 2023a).

In Poland, automatic recognition of higher education diplomas from other EU and OECD countries was introduced with the 2011 amendment of the Law on Higher Education (*ustawa Prawo o szkolnictwie wyższym*). Different acts and regulations regulated academic and professional recognition (Eurydice, 2023). While Poland has in place procedures to support the automatic recognition of upper secondary qualifications to access higher education, this applies only to general education and not to VET qualifications (European Commission, 2023b).

In Romania, some forms of 'automatic' recognition procedures were already implemented prior to 2018 for higher education and for upper secondary education and training qualifications. Law no. 200/2004 introduced the recognition of diplomas and professional qualifications of regulated professions. In 2011, with the Education Act, a system of automatic recognition for pre-university and tertiary degrees was established which is valid for all professions and degrees (except for regulated professions). Addressing the Romanian diaspora, a specific framework has recently been developed to support expat Romanians in having their qualifications recognised. The National Centre for Recognition and Equivalence of Diplomas (CNRED), through automatic recognition procedures, allows the recognition of professional experience and diplomas in Romania from qualifications obtained in other EU Member States or outside the Union.

Apart from ratifying the LRC in 2002 and transposing the EU PQ Directive, Italy has launched in 2006 the citizen's training portfolio (*Libretto Formativo*). This tool has facilitated the mutual recognition and transferability of qualifications across Italian regions, enabling mobility across different regions and learning and work experiences (ISFOL, 2007).

The reliance on robust quality assurance mechanisms is crucial for the recognition of qualifications obtained in other countries, as it allows education and training providers to trust the quality of the learning process and outcomes achieved in different contexts/settings. Enhanced reputation, trust, and reliability of education/training providers and assessment processes represent a significant change in the education and training landscape. In Romania, according to some interviewees, adoption of the quality assurance framework has led to an increase

in the international reputation of Romanian higher education institutions, with potential positive effects on the recognition of Romanian learning outcomes abroad.

Synergies between credits and recognition, although primarily related to higher education qualifications, have played a significant role in this area. As ECTS credits are widely used across higher education institutions in most countries, they are often extensively used to accredit outcomes from learning periods abroad. In many cases, the share of successful accreditation procedures is very high (for instance, over 85% in Finland and 90% in France). These initiatives on credits have contributed to increased recognition of diplomas, certificates obtained in other countries, and learning outcomes from learning periods abroad, promoting international mobility, typically between higher education institutions.

In Germany, the ECTS system facilitates credit recognition and transfer between education institutions, with its significance highlighted by the increasing number of international students pursuing higher education. By 2008, 92% of all bachelor or master courses used ECTS. For master degree students, 24% changed university, which is considerably higher than rates shown for students with traditional *Diplom*, *Magister*, or *Staatsexamen*. However, only 1% of bachelor degree students changed university within Germany (without changing their subject). In Italy, the Decree 509/99 introduced the ECTS system as a response to the Bologna process, leading to modernisation and increased flexibility in higher education. According to the literature review and interviewees, the credit system has favoured student mobility between higher education courses and universities, both nationally and internationally, reduced the time required to obtain degrees, and stimulated the possibility of returning to university at any time of life, especially when recognition of work activities/experience is possible.

The NQF has become increasingly relevant for the recognition of qualifications, as it provides a tool for supporting comparability, which is often at the basis of recognition. Most EU countries (20) use the NQF level descriptors in recognition of foreign qualifications, though this is done to varying degrees. In some cases, the use of the NQF for recognition of qualifications is introduced by law (e.g. Croatia, Luxembourg). In other countries, NQF/EQF levels are actively used in the recognition process (e.g. Lithuania, Netherlands). In some, NQFs are only used as a complementary source of information about qualifications (e.g. Germany). This function of the NQFs is crucial for countries that recruit many international workers (e.g. Ireland, Luxembourg).

In Poland, the Integrated qualifications system (IQS) and NQF support the mutual recognition of skills and qualifications by facilitating the process of comparing and recognising qualifications obtained in different countries, regions,

and education systems. This system enables a clear indication of what is required to achieve a certain level of qualification, allowing for faster and more efficient recognition of qualifications. In Ireland, the area of mutual recognition of qualifications is strongly influenced by the activities of Quality and Qualifications Ireland (QQI). More specifically, NARIC Ireland is the main body responsible within QQI for mutual recognition. Through the advisory services and tools offered by NARIC, there is increased comparability of academic qualifications, encouraged by its strong alignment to the NQF. In Finland, EDUFI also uses the NQF as an information source in the comparison and recognition of foreign qualifications (Cedefop, 2021a).

CHAPTER 4.

Discussion and conclusions

In this final chapter, the key messages gained from the study are presented, assessing the coherence and contribution of the 14 analysed European policy initiatives. The discussion begins by interpreting the synergies among the different policy initiatives, considering both internal and external policy coherence, as well as their overarching thematic areas, as conceptualised for this study. Next, the joint contribution of these specific policy initiatives to European and national policy developments regarding the transparency and transferability of learning outcomes is discussed. The primary challenges hindering their effective implementation are then identified, drawing also from the study's survey findings.

4.1. **Assessing the coherence and contribution of European policy initiatives**

The study mapped the main policy initiatives across education and training sectors that, since the turn of the century, have promoted the transparency and transferability of learning outcomes in Europe, exploring their objectives, synergies, and combined impact. Acknowledging the limited available data and evidence and, thus, the need for improved evaluation and monitoring of the respective policy initiatives, the study offers the first effort to review these initiatives through a long-term perspective (2000-20). For analytical purposes, the policy initiatives identified were grouped into five policy thematic areas: quality assurance, credit transfer and accumulation, comparability of skills and qualifications, validation of non-formal and informal learning, and recognition of qualifications.

Drawing from the concept of policy coherence, as presented in the study's introductory chapter, Table 2 provides an overview of the level of coherence among the different policy initiatives, considering their internal coherence (synergies within the same policy area) and external coherence (synergies across policy areas).

Table 2. Coherence among European policy initiatives across the five thematic areas

Policy areas / Policy initiatives	Quality assurance	Credit transfer and accumulation	Comparability of skills and qualifications (*)	Validation of non-formal and informal learning	Recognition of qualifications
ESG	Moderate with EQAVET	High with ECTS	High overall	Moderate overall	Moderate overall
EQAVET	Moderate with ESG	Limited with ECVET	Moderate overall	Limited overall	Limited overall
ECTS	High with ESG	Limited with ECVET	High overall	Moderate overall	High overall
ECVET	Limited with EQAVET	Limited with ECTS	Limited overall	Limited overall	Limited overall
QF-EHEA	High with ESG	High with ECTS	High overall	Moderate overall	High overall
EQF	Moderate overall	Moderate overall	High overall	High overall	Moderate overall
Europass diploma supplement	High with ESG	High with ECTS	High overall	Moderate overall	Moderate overall
Europass certificate supplement	Limited overall	Limited overall	Moderate overall	Moderate overall	Limited overall
Europass new portal (digital credentials, etc) (*)	Potentially high	Potentially high	Potentially high	Potentially high	Potentially high

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Policy areas / Policy initiatives	Quality assurance	Credit transfer and accumulation	Comparability of skills and qualifications (*)	Validation of non-formal and informal learning	Recognition of qualifications
Microcredentials (*)	Potentially high	Potentially high	Potentially high	Potentially high	Potentially high
ESCO	No explicit links found	No explicit links found	Moderate with EQF	Moderate overall	Limited overall
Key competence framework	No explicit links found	No explicit links found	Moderate with EQF	Moderate overall	No explicit links found
VNFIL Recommendation	Moderate overall	Moderate overall	High overall	n/a since only one examined initiative	Limited overall
Professional Qualifications Directive	Limited overall	Moderate with ECTS	Moderate overall	Limited overall	Moderate overall
Lisbon Recognition Convention	High with ESG	High with ECTS	High overall	Moderate overall	Moderate overall
Automatic Recognition Recommendation (**)	Potentially high	Potentially high	Potentially high	Potentially high	Potentially high

NB: Green indicates high coherence among policy initiatives, light-green indicates moderate coherence, and yellow indicates low coherence. High coherence implies that synergies exist in terms of objectives, principles, coordinated management, implementation, and further developments; moderate coherence implies alignment in terms of objectives and principles used, but limited synergies in terms of coordinated management, implementation and further developments; and limited coherence implies alignments only in terms of objectives, but limited synergies in principles, coordinated management, implementation, and further developments. Where coherence applies to only one policy initiative, this is specifically mentioned; otherwise, the term 'overall' implies coherence with all initiatives analysed within the specific thematic area. White cells indicate that no clear evidence could be retrieved, either due to a lack of synergies, or because certain initiatives have been explored less systematically than others. The assessments in the table are based on the analysis presented in the report, as well as earlier Cedefop studies and experience.

(*) Although the thematic area comparability included six initiatives this column includes information only regarding qualifications frameworks.

(**) As recently adopted initiatives, it was not possible to gather enough evidence to assess their level of synergies with other initiatives considering also governance and implementation.

Source: Cedefop.

The analysis of synergies among policy initiatives revealed a moderate to high coherence among most European initiatives examined. These initiatives generally share compatible objectives, with the learning outcomes approach being integrated in most of them, furthering their coherence. However, the analysis also highlighted initiatives with more limited synergies. This can be attributed to several factors, such as limited compatibility in their design, like the case of ECVET-ECTS, limited implementation of initiatives, and limited interactions between the various European actors responsible for their development and implementation. Additionally, the absence of regular communication and exchanges between these groups can contribute to this limitation.

Specifically, despite variations in the implementation of quality assurance initiatives in higher education (ESG) and VET (EQAVET) across countries, these initiatives serve as widely accepted common reference frameworks. They have boosted the visibility of quality assurance, spurred national reforms and changes, encouraged cross-country dialogue and cooperation, primarily within their respective education and training sectors. However, their adoption, usage, and implementation have differed, with VET experiencing more variation and challenges compared to higher education. Both initiatives have continuously evolved to remain relevant and have increasingly focused on the significance of learning outcomes, even though studies highlight challenges in integrating the learning outcomes approach and a more learner-centred approach into national practices. While the two quality assurance systems share similar objectives and principles, they appear to operate independently. At the national level, some countries have fostered synergies by organising regular meetings (e.g. France) or having a single organisation responsible for both education and training sectors (e.g. Ireland). Although rare, EU-level meetings have brought together stakeholders from various sectors to discuss quality assurance issues, fostering mutual understanding and cooperation, including among national stakeholders, and advocating for more collaborative efforts.

Quality assurance is integral to most policy initiatives, as it forms the basis of trust, which is essential for cooperation among stakeholders. In higher education, initiatives on quality assurance, credit systems, higher education qualifications frameworks, and recognition of academic qualifications appear more interlinked and mutually reinforcing compared to VET. For example, most national quality assurance agencies for higher education qualifications are members of ENQA, which includes adherence to the ECTS in its standards and is reflected in many national legislations (e.g. Italy, Poland and Romania).

Synergies between quality assurance and other initiatives in VET exist but are less pronounced. Strong synergies between EQAVET and ECVET did not occur,

partly because ECVET was not widely adopted by countries. Synergies with qualifications frameworks are more prominent at the national level than at the European level. EQAVET does not stand out for its synergies with major European recognition initiatives, although its relevance might be more apparent at the national level. Quality assurance developments, in both higher education and VET, are increasingly emphasising learning outside the formal system, yet this remains a challenge.

Although synergies between credit systems in higher education (ECTS) and VET (ECVET) have been promoted, compatibility was not achieved, limiting their contributions in supporting transferability of learning across sectors. Finland is one of the few exceptions where compatibility between different credit systems has been attained, and this approach is also promoted in Ireland, though its effectiveness in promoting transferability between VET and higher education remains to be seen. Compared to ECTS, the impact of ECVET has been more limited, as it did not lead to a common credit system in VET. Nevertheless, ECVET is considered to have promoted the use of learning outcomes and the use of units of learning outcomes in VET qualifications (one of its key principles, retained also in the 2020 VET recommendation). Both tools have influenced the design of qualifications and programmes within their respective domains, increasing transparency and comparability and encouraging greater modularisation. However, there are cases, such as in Germany, where there is resistance towards a more modularised approach to learning and training pathways.

Over the years, ECTS has increased its emphasis on learning outcomes; while its implementation remains challenging, it has led to the development of a common credit system in higher education, enabling transferability, primarily across higher education institutions. Given the broad acceptance and use of ECTS, it is not surprising that it demonstrates stronger connection with other policy areas compared to ECVET, particularly those related to the recognition of qualifications. However, these links mainly concern higher education qualifications. In principle, both ECTS and ECVET have encouraged a focus on the validation of non-formal learning, although in practice, this has been limited for both tools, as they primarily target formal education and training systems. This report has previously mentioned how some interviewed experts see strong connections between ECVET, the recommendation of validation of non-formal and informal learning, and the one on microcredentials, considering ECVET as paving the way for the development and acceptance of other initiatives.

Among comparability initiatives, the EQF stands out for its numerous connections with other initiatives and policy areas. Regarded as the most successful initiative by the study's experts, the EQF has played a crucial role in

triggering the development of learning outcome-based national qualifications frameworks that are increasingly open to different types of qualifications. Strong synergies between QF-EHEA and EQF, ranging from conceptual to governance aspects, have fostered coordinated developments and cooperation among national actors. Both tools serve as reference frameworks for programmes and qualifications, influencing their design. The QF-EHEA, which can be considered more prescriptive than the EQF, has driven convergence in higher education programmes. The EQF has mainly promoted the use of level descriptors for developing and comparing a wide range of qualifications and has played a key role in increasing the relevance of learning outside formal systems. Although learning outcomes are increasingly used in qualifications and curricula, challenges persist in integrating this approach into teaching practice and assessment. The visibility of these tools, along with awareness beyond the expert community and the ability to reach employers and learners, remains a challenge.

Both the EQF and the QF-EHEA contribute to and benefit from all policy areas. While the EQF has numerous connections with almost all initiatives from both higher education and VET, the QF-EHEA mainly connects with higher education policy initiatives. Synergies with quality assurance initiatives, credit systems and recognition of qualifications are more prominent regarding the QF-EHEA compared to the EQF, particularly at the European level. However, at the national level, significant synergies with these policy areas have emerged through the establishment of NQFs. For example, the Netherlands demonstrates strong ties between NQFs and the quality assurance of qualifications, extending beyond the formal system. Many countries use NQFs to compare and recognise foreign qualifications. The EQF has given strong relevance to validation of non-formal and informal learning: this is evident at national level, where explicit links between NQFs and validation exist in many countries (Cedefop 2024; Cedefop and European Commission 2024). Although qualifications frameworks are integrated into national education and training policies, their progress is challenged by evolving methods of documenting and certifying learning, testing their adaptability in a changing landscape of qualifications and (micro) credentials.

The Europass diploma supplement (EDS) for higher education qualifications and the certificate supplement (ECS) for VET qualifications (and to some extent also the Europass CV) have significantly contributed to promoting transparency and comparability of qualifications and learning outcomes, even if only within their respective education and training sectors, facilitating recognition and mobility. The EDS has undergone updates and digitalisation to remain aligned with higher education developments and connect with digital credentials. However, the ECS has had limited connections with other policy areas. Its upcoming digitalisation and

possible revision can address this by supporting new developments that can deepen work on transparency and comparability of qualifications, as well as promote stronger synergies with other policy areas. New developments related to Europass, such as digital credentials and e-portfolios, provide more comprehensive ways of documenting learning achievements, allowing for richer data using common standards and connecting with other tools and services like registers of accredited providers. This can impact the recognition of qualifications and validation of non-formal and informal learning, supporting flexible learning pathways by, for example, allowing for accumulation and stackability of (micro-) credentials, and bridging the gap between formal, non-formal, and informal learning.

European developments on microcredentials are still too recent to assess their synergies and contributions; however, they have increased policy attention on flexible learning pathways and can play a crucial role in bridging formal and non-formal learning. It is essential to ensure that microcredentials build upon existing developments in all policy areas to promote a coherent approach across education and training sectors. In the absence of a coherent approach, there is the risk of diminishing their effectiveness in promoting flexibility. Incorporating microcredentials into the NQFs referenced to the EQF can enhance their visibility and trustworthiness, ultimately promoting the sustainability of EQF/NQFs and their adaptation to evolving needs.

ESCO and the key competence framework have promoted a competence-based and learning outcomes approach, providing standardised common terminologies for skills, knowledge, and competences. Both frameworks serve as reference points to support the description and comparison of qualifications, as well as the development of assessment criteria for validating non-formal and informal learning. Recent ESCO developments emphasise the importance of better defining and promoting transversal skills and competences. However, ESCO's limitations, when it comes to the comparison of qualifications, include the lack of a dimension on learning progression. Despite this, ESCO remains the most advanced and comprehensive tool for digital interoperability of information in the skills and competences domain. This includes matching the skills, qualifications, and interests individuals record in their e-portfolios (such as Europass) with available jobs or courses.

Developments related to validation of non-formal and informal learning (VNFIL) range from the VNFIL guidelines and inventories to the 2012 VNFIL Recommendation which has politically affirmed the value of learning outside formal contexts and established the concept of learning outcomes as fundamental for VNFIL. The development of NQF level descriptors referenced to the EQF and the

development of learning-outcomes-based qualifications that can be used as reference points to validate non-formal and informal learning, have been crucial developments to give visibility to learning taking place outside formal contexts. All Member States now have validation arrangements in place, and progress has been made in designing and implementing such arrangements across the EU. European developments have encouraged cooperation and peer learning among countries, influencing national policy and practices.

While uneven take-up across countries and sectors and inconsistencies in approaches and outcomes persist as challenges, implementation is becoming more consistent, and countries are moving towards more comprehensive approaches. Attention to non-formal learning has increased in the areas of credits and quality assurance, which have traditionally prioritised formal learning. However, fragmented approaches in these areas, depending on the education and training sector, can hinder more coordinated validation efforts. Synergies with European initiatives on the recognition of qualifications seem limited, although learning outside formal contexts can be considered in the recognition process. For instance, the Professional Qualifications (PQ) Directive allows individuals without formal qualifications to have their professional experience assessed through mechanisms for 'evaluating skills and knowledge.' The limited collaboration at the European level in these areas may indicate opportunities for more collaborative developments.

The report highlighted continuous and concerted efforts in recognition of foreign qualifications over the past 20 years, primarily for specific types of qualifications, such as those granting access to higher education or regulated professions. With the recent adoption of the Recommendation on automatic recognition, the scope has expanded to include lower levels and explicitly encompasses VET. The PQ Directive and the Lisbon Recognition Convention (LRC), both legally binding instruments, have played significant roles in improving the recognition of qualifications across borders and promoting labour market and learning mobility. While VET qualifications can fall under their scope, the focus has mainly been on higher-level qualifications, particularly academic ones. Some countries (e.g. Denmark and Sweden) adopt LRC principles for recognising upper secondary VET (EQF 3-5). There have been substantial improvements in the recognition of qualifications across borders, but challenges remain, such as asymmetrical implementation, partial compliance with defined principles or regulations across countries, and administrative burdens. The landscape is complex, comprising a range of tools with different purposes, legal powers, reach, governance, and implementation modalities.

All policy areas studied can contribute to the recognition of qualifications by increasing trust in systems, institutions, providers, and qualifications (e.g. ESG, EQAVET), making systems and qualifications more transparent and comparable (e.g. EQF/NQFs, Europass, KCF/ESCO), and providing tools for showcasing and accumulating various types of learning (e.g. initiatives on credits or supporting validation of non-formal learning). However, synergies are more apparent for some initiatives than others. For example, synergies between LRC developments and quality assurance and credits initiatives in higher education, the Europass diploma supplement and qualifications frameworks promote the recognition of higher education qualifications. The PQ Directive, however, exhibits weaker synergies with the considered initiatives.

Developments related to the LRC have increasingly emphasised learning outcomes, while the PQ Directive gives more emphasis to input factors such as course duration, especially when defining qualification levels. However, terms like skills, knowledge, and competence frequently appear in the text. The amended PQ Directive can be seen as a step forward in promoting synergies with other European-level policy developments and linking with the learning outcomes approach by introducing the possibility to use ECTS to measure workload and referring to the EQF in relation to common training frameworks. The automatic recognition Recommendation stands out as more comprehensive in scope and its connections to other developments compared to other recognition initiatives studied. This could potentially promote further synergies across sectors. Overall, the recognition of qualifications, including VET and lower-level qualifications, has become more relevant compared to past efforts.

4.2. **Joint contribution to the transparency and transferability of learning outcomes**

Taking into account the contribution of each policy initiative analysed and considering their interconnections, Table 3 aims to highlight the main contributions, changes in orientation, and challenges in each policy thematic area. Contributions refer to concrete outcomes of these policy initiatives in terms of increasing the transparency and transferability of learning outcomes. Changes in orientation point towards the development of policy initiatives, considering how they have shifted their focus towards specific objectives over time. Challenges indicate the barriers that must be overcome to accomplish the intended objectives, ultimately contributing to the sustainability of policy initiatives. After the table, the information is further synthesised to offer some overarching conclusions

Table 3. **Main contributions, changes in orientation, and challenges of European policy initiatives**

Policy thematic areas	Main contributions	Changes in orientation	Challenges
Quality assurance	<ul style="list-style-type: none"> • Common reference frameworks in higher education and VET • Increased awareness and visibility, dialogue and cooperation across countries • Increased common understanding and trust in national systems and qualifications • Promoting changes/reforms at national level 	<ul style="list-style-type: none"> • Increased relevance of learning outcomes and student-centred approach 	<ul style="list-style-type: none"> • Uneven implementation • Insufficient resources • Inexperience in integrating learning outcomes • Lack of measures on the integration of a student-centred approach • Risk of treating procedures as formalities • Bridging between sectors • Limited attention to learning taking place outside formal settings
Credit transfer and accumulation	<ul style="list-style-type: none"> • ECTS: development of common credit systems in higher education • ECVET: encouraged use of units of learning outcomes • Both impacted on the structure of qualifications/programmes, increasing their transparency, comparability and encouraging modularisation and flexible pathways 	<ul style="list-style-type: none"> • Objectives expanded from transfer to accumulation across programmes • Increased emphasis on learning outcomes 	<ul style="list-style-type: none"> • Uneven implementation • Lack of compatibility between credit systems and common approaches • Insufficient resources • Difficult application of learning outcomes and lack of training • Risk of resistance to top-down approach • Complicated process • Recognition issues
Comparability of skills and qualifications	<p>QH-EHEA and EQF:</p> <ul style="list-style-type: none"> • Common reference frameworks for programmes and 	<ul style="list-style-type: none"> • Common reference frameworks for programmes and qualifications, influencing 	<ul style="list-style-type: none"> • Challenges in filtering down learning outcomes approaches to practitioners • Low visibility

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Policy thematic areas	Main contributions	Changes in orientation	Challenges
	<p>qualifications, influencing their design and comparability</p> <ul style="list-style-type: none"> • Influenced national development and promoted cross-country cooperation • EQF: fostered the development of comprehensive NQFs • Promoted the use of learning outcomes • Fostered cooperation across education and training sectors • High relevance to learning taking place outside formal systems • Parity of esteem between qualifications <p>Diploma and certificate supplements:</p> <ul style="list-style-type: none"> • Improved visibility, transparency and comparability of learning • Supported recognition processes <p>Microcredentials:</p> <ul style="list-style-type: none"> • Emphasis on flexibility <p>ESCO/KCF:</p> <ul style="list-style-type: none"> • Common reference terminology to bridge between skills/competence (or learning outcomes) the needs of society and the labour market • Support for designing and comparing qualifications, 	<p>their design and comparability</p> <ul style="list-style-type: none"> • EQF increased focus on quality assurance, credits, international qualifications, third-country developments, microcredentials, etc. • Europass: modernised for digital interoperability digital credentials e-portfolios • ESCO strengthened approach to transversal skills 	<ul style="list-style-type: none"> • Reach out by labour market actors and individuals • Adaptability to alternative qualifications/credentials/units of learning • Quality of new forms of certification • Consistent reference frameworks for comparability of qualifications

Policy thematic areas	Main contributions	Changes in orientation	Challenges
	programmes, assessment standards, etc.		
Validation of non-formal and informal learning	<ul style="list-style-type: none"> • Increased visibility and value of learning taking place outside formal learning • Influence on validation policy and practices • Increase in number of countries with validation arrangements • Cooperation between stakeholders • Promote use of learning outcomes 	<ul style="list-style-type: none"> • Development of more comprehensive validation strategies 	<ul style="list-style-type: none"> • Uneven development • Fragmentation and inconsistent approaches across sectors • Low coordination among stakeholders • Limited awareness • Limited comparability between validation outcomes
Recognition of qualifications	<ul style="list-style-type: none"> • Legally binding initiatives, impacting on national legislations • Improved labour market and learning mobility 	<ul style="list-style-type: none"> • More inclusive approach regarding upper secondary qualifications and learning periods abroad (general education and VET) • Increasing use of digitalisation to facilitate recognition procedures, with a possible tendency towards centralisation 	<ul style="list-style-type: none"> • Uneven implementation • In case of decentralised approaches risk of inconsistencies • Cumbersome recognition procedures • Limited access to information • Varying understanding of terms

Based on the examined evidence, the policy initiatives analysed in this study have jointly contributed to the transparency and transferability of learning outcomes over the past two decades in the following manner:

Increasing the focus on learning outcomes-based approaches in various education and training sectors and shifting towards learner-centred systems

Over the past 20 years, several policy initiatives have contributed to the widespread use and acceptance of learning outcomes across education and training sectors. This has already become visible with the 2004 adoption of Europass, a set of documents for highlighting acquired skills and knowledge, facilitating individual evaluation by employers and education providers. The adoption of the EQF in 2008 and the development of NQFs in Member States increased interest in qualifications and learning outcomes. This was further supported by the development of mutual trust and transferability tools in VET through quality assurance and credit systems. The 2012 Recommendation on Validation solidified the concept as a cornerstone for its implementation. Programmes like Leonardo da Vinci and Erasmus+ also played a key role in promoting and exploring the learning outcomes approach.

As policy initiatives evolved, they increasingly emphasised learning outcomes, including initiatives on quality assurance. The ESG were revised in 2015 with a stronger focus on learning outcomes and student-centred learning, and EQAVET+ also gave more relevance to learning outcomes. The continuing work on ESCO highlights the importance of focusing on learning outcomes and competences in both education and employment sectors. The efforts related to key competences, initiated in 2005, also contributed to promoting learning outcomes.

The implementation of policy tools such as ECTS, ECVET, EQF, and validation initiatives has led to a broader acceptance of learning outcomes for whole programmes, smaller units of learning, and non-formal settings. European efforts to promote a learning outcomes-based approach are building on existing national developments. The adoption of learning outcomes has been most visible in higher education and VET, with recent developments in general education as well. As new policies, such as microcredentials, further promote this approach, it is expected that the use of learning outcomes will continue to grow across education and training sectors.

Increasing attention to learning experiences outside formal settings

The landscape of education and training policies within the EU has evolved significantly over recent decades, gradually shifting its focus from the labour market and worker mobility to a more inclusive approach that emphasises learning and learner mobility, paying particular attention to non-formal learning. The

concept of 'learner' has become more inclusive, and there is an increasing awareness of the need to ensure all individuals have access to upskilling and reskilling opportunities throughout their lives. New initiatives, such as the Individual learning account, reflect this shift in focus (CEU, 2022b).

The development of qualifications frameworks and credits tools aiming to support the transferability of learning, initially focusing on formal settings and contexts. Over time, the scope of transparency initiatives was broadened to include skills and knowledge developed in other contexts, such as work experience or voluntary activities. While there are tools designed for VET qualifications and systems, such as EQAVET and ECVET, there has been a push to broaden their scope and increase the recognition of learning that takes place outside formal systems. Similar trends are visible in higher education tools and initiatives.

The 2012 Recommendation on the Validation of non-formal and informal learning politically affirmed the value and role of informal and non-formal learning. The EQF and associated NQFs are widely accepted reference points and the most advanced tools in promoting transferability of learning, regardless of the learning context. The analysis of broader policy developments, such as lifelong learning and mobility programmes, showcases how they fostered a culture of cross-country cooperation in sectors that were previously overlooked, like adult education. Participants in expert workshops also noted that there is now more cross-sectoral collaboration on projects and greater consideration for the role of informal and non-formal learning. However, there is a consensus that additional efforts are necessary to support fully the learning that takes place outside formal systems.

Fostering convergence across initiatives and countries

The analysis of coherence indicates increasing synergies between European initiatives in terms of objectives and concepts, driven by a focus on learning outcomes. Recent developments also suggest that initiatives are increasingly considering the wider ecosystem of existing policies, improving interconnections among them at both EU and national levels and addressing individuals' needs. Initiatives such as the new Europass Decision, the Microcredentials Recommendation, and the Recommendation on automatic recognition demonstrate this direction.

The analysis of national developments in the five policy thematic areas reveals convergence over the past two decades across EU Member States towards promoting the transparency and transferability of learning outcomes acquired in different sectors and contexts, although the degree of implementation varies due to national specificities. This can be attributed to the diverse national conditions,

institutional settings, and the level of policy commitment and implementation capacity. However, the policy objectives of initiatives across countries often converge.

The interplay between EU and national levels is bidirectional, with EU policies influencing national developments and national developments and priorities shaping EU initiatives. This convergence or alignment between the EU and national levels, as well as across countries, is crucial for building a coherent policy framework benefiting individuals. In this context, the role of EU 'working methods' in the area, such as programmes, projects, pilot initiatives, advisory groups, working groups, committees, peer learning activities, consultations, and networks, is essential in promoting a bottom-up approach and supporting convergence across approaches and countries.

Technical cooperation across countries, which takes place in various ways, is fundamental for promoting common understanding and mutual learning, leading to either convergence or building mutual trust where different approaches are understood and respected. EU cooperation and processes can also mobilise national actors and promote more convergence between developments nationally, as seen in the process of referencing NQFs to the EQF and the involvement of various stakeholders.

Promoting commitment to transparent, comparable, and recognised qualifications

Most of the policy initiatives explored in this study have encouraged an increased commitment to promoting the transparency, comparability, and recognition of qualifications across sectors and levels of education and training. The legally binding nature of the Lisbon Recognition Convention and the Professional Qualifications Directive has been a strong driver for discussions and cooperation on cross-border recognition of qualifications. The Europass diploma and certificate supplements have also aimed to increase transparency and comparability by providing additional information on the level, content, and context of a qualification.

The introduction of the EQF has been a key driver for discussions on transparency and comparability by providing a common reference point for better communication on the scope and complexity of qualifications, promoting a more comprehensive approach to the topic. Tools related to credits, such as the ECTS, have also increased clarity on qualification structures, supporting transparency and recognition across borders. While the Europass diploma and certificate supplements and the EQF have had a significant impact on promoting the transparency and comparability of qualifications, there is less evidence of the impact of tools focused specifically on VET (such as EQAVET and ECVET) on

supporting the comparability of skills and qualifications. However, these tools have influenced some national developments and strengthened the quality culture in the VET sector.

The ongoing efforts surrounding the EQF, NQFs, and the growing use of transparency tools like the ECTS demonstrate a strong and ongoing commitment to these objectives. Almost all Member States have developed or implemented NQFs and referenced them to the EQF, promoting comparability of qualifications. The recent adoption of the Recommendation on Automatic Recognition confirms the growing commitment to these goals. The launch of the new Europass portal, particularly the work on the European Learning Model and digital credentials, opens opportunities for cross-country cooperation to improve transparency, comparability, and recognition of different types of learning in an increasingly digital world. This supports a view that there is a growing commitment across EU Member States to ensuring the comparability and transparency of qualifications across sectors to support their recognition.

Emphasising the need for more permeable education and training systems and flexible learning pathways

Several policy initiatives explored in this study have encouraged a greater awareness among EU and national policymakers about the need for more flexible learning systems and pathways. The adoption and implementation of these initiatives have sustained discussions on increasing system flexibility and exploring ways to achieve it. Recent evidence suggests a tendency towards introducing modularised programmes and changes in the structure of VET qualifications, breaking them down into units of learning outcomes to support flexible learning pathways, which are likely to be sustained.

Initiatives like ECVET have encouraged greater flexibility of VET by promoting the modularisation of qualifications in some countries, although they did not establish an effective credit transfer system like ECTS. The 2012 Recommendation on Validation of non-formal and informal learning can be seen as encouraging greater flexibility of learning pathways by allowing outcomes from non-formal or informal learning to be assessed and certified, potentially supporting credit systems like ECTS or ECVET to transfer learning outcomes across contexts. This promotes the possibility for learners to progress according to their needs and circumstances.

The increased role of EQF and NQFs has improved parity of esteem between different education and training sub-sectors and different types of learning, stimulating reflections and developments that support flexible learning pathways

mixing formal and non-formal learning. While discussions about the degree of system flexibility or permeability, and the potential for promotion at the European level, are important, it ultimately falls to national governments to take concrete actions. The analysis of national developments in the eight case study countries revealed other developments beyond the five thematic areas, such as the creation of more bridging programmes and the blurring of distinctions between sectors, which may be linked to a broader cultural shift that emphasises flexibility.

4.3. Main implementation challenges

Despite progress in policy development, challenges persist in the implementation and effectiveness of European policy initiatives addressing the transparency and transferability of learning outcomes. This section leverages insights from the analysis of policy developments, the survey conducted in the context of the study and discussions with experts. Uneven implementation of European initiatives across countries poses challenges across all thematic areas. This challenge is compounded by difficulties in measuring their impact and effectiveness, as well as insufficient monitoring, with some notable exceptions like the regular monitoring conducted by Cedefop for NQFs and validation arrangements. The lack of recent evidence also presented a challenge for this study. Policy experts participating in workshops emphasised the importance of continually informing policy discussions with evidence.

Examining the synergies between European initiatives reveals that, while a more coherent framework is emerging, there are areas where synergies can be improved. Limited synergies in some cases stem from limited cooperation between actors at the European level. Most initiatives focus on specific education and training sectors, and existing studies show that they have positively impacted those sectors. However, it remains unclear to what extent these parallel developments have fostered permeability across education and training sectors. According to the survey, weak or missing coordination and integration between national stakeholders representing different education and training institutions, systems, or sectors is considered the most pressing challenge to transparency and transferability of learning outcomes⁽²²⁾. Additionally, education and training systems operating in silos⁽²³⁾ and limited possibilities of accumulating, combining,

(22) 33% to a high extent, 39% to a moderate extent 26% to a low extent and 2% not at all

(23) 30% to a high extent, 35% to a moderate extent 25% to a low extent and 10% not at all

and transferring learning across sectors and institutions also rank high ⁽²⁴⁾. While expert views suggest that cooperation among education and training sectors has improved over the years, there is a clear need to promote further cooperation and trust between education and training systems.

Policy experts participating in workshops for the study have noted challenges related to changes in language and terminology over the years, often driven by shifts in policy cycles. This can impede the ability of new developments to build upon existing and past initiatives, promoting consistent coherence over time. Introducing new initiatives may be perceived as repackaging older measures, while simultaneously maintaining attention on important issues. However, it may also risk diverting focus from the implementation of existing initiatives. The importance of discussing common objectives and establishing a shared understanding of terms and concepts was emphasised. The debate surrounding the meaning of 'microcredentials' in national contexts illustrates the time, discussion, and research required to build a common understanding.

Differences in concepts (e.g. incompatibility between ECVET and ECTS) or limited shared understanding of concepts and terms (such as the ambiguity found in the use of the term automatic recognition) are factors that hinder implementation and synergies between European initiatives. Almost half of the survey respondents view weak technical and conceptual alignment between policy initiatives as a strong or moderate challenge in national contexts ⁽²⁵⁾. Over 60% of respondents identified the weak development of concepts and tools supporting the comparison of learning outcomes across different institutions and sectors at the national level as a strong or moderate challenge ⁽²⁶⁾. Policy initiatives on transparency and transferability of learning outcomes are considered to have fostered collaboration by providing shared languages and concepts, but the challenges mentioned indicate the need to strengthen these areas of work.

Partly connected to these challenges, most initiatives recognise the importance of non-formal and informal learning but struggle to account for it; overall progress in these areas has not met expectations. The existence of diverse and fragmented approaches within specific sectors limits the transferability of learning. The practical implementation and integration of the learning outcomes approach

⁽²⁴⁾ 29% to a high extent, 44% to a moderate extent, 25% to a low extent and 2% not at all.

⁽²⁵⁾ 21% to a high extent, 28% to a moderate extent, 43% to a low extent and 7% not at all.

⁽²⁶⁾ 19% to a high extent, 43% to a moderate extent, 32% to a low extent and 6% not at all.

and a more learner-centred approach have emerged as recurring challenges across all thematic areas. Although promoted at the policy level, these objectives may not always result in full awareness, understanding, and commitment among practitioners. Studies on the implementation of European policies attribute this to the lack of training on emerging concepts and limited sharing of experiences between practitioners. This risk also includes initiatives being implemented merely to fulfil formal requirements. Resistance in the implementation of initiatives can occur when developments are perceived as top-down.

Another common challenge across policy areas is their visibility. Awareness about initiatives is often limited to expert communities. Experts generally agree that individuals do not need to be aware of the specific initiatives or the intricate workings of systems, but just of the available opportunities. However, this seems to be a challenge as well. Survey respondents perceive low individual awareness of existing opportunities as the second-highest barrier in the promotion of transparency and transferability of learning outcomes. Other barriers concern difficult access to information or complex and cumbersome procedures, for example, for recognition of qualifications.

4.4. Concluding remarks

The study sought to map the main policy initiatives across education and training systems that, since the turn of the century, have promoted the transparency and transferability of learning outcomes, exploring their coherence and contributions. Acknowledging the limited available data and evidence and, thus, the need for improved evaluation and monitoring of the respective policy initiatives, the study offers the first effort to review these initiatives through a long-term perspective (2000-20).

The study highlights the political commitment of Member States to flexible systems, fostering learning mobility across countries, sectors, and institutions. While European cooperation in education and training takes place at a voluntary level, in accordance with the subsidiarity principle, numerous developments and changes took place over the past two decades, exemplifying the successful application of the open method of coordination in developing and implementing policy initiatives. The 14 European initiatives analysed show increased coherence and integration supporting learning mobility and progression, with the learning outcomes approach contributing to their coherence. The synergies between initiatives show how most build upon and support each other. However, varying levels of synergy highlight areas for strengthening cooperation.

To explore these synergies, the study first examined internal coherence within the same policy area across various education and training sectors. Then, it analysed external coherence across different policy areas. The analysis revealed that stronger synergies often occur within the same education and training sectors rather than within the same policy area. For instance, initiatives related to quality assurance and credits in higher education show robust synergies, while those across VET and higher education exhibit only moderate or limited synergies, despite sharing a policy focus. This points to an opportunity for improving bridges between education and training sectors, advocating for increased cooperation along policy areas to foster permeability between systems. Limited synergies can result from conceptual barriers or limited cooperation between European stakeholders responsible for the development of such initiatives, highlighting the need for open discussions among relevant policy actors.

The analysis shows that stronger synergies exist among European initiatives related to higher education compared to those associated with VET. Initiatives in higher education, such as those on quality assurance, credits, qualifications frameworks, and recognition, appear more integrated and collaborative. In contrast, similar synergies are less evident in VET, indicating areas where further work at the European level could be promoted. The more heterogeneous nature of VET systems compared to higher education increases the challenges in promoting coherence across developments.

A growing emphasis on learning outside formal settings is evident across all policy areas. However, integrating and accounting for it remains a common challenge across many initiatives. This is also demonstrated by lower/moderate synergies with other policy areas, except for work with EQF/NQFs, highlighting areas that require more attention and collaboration. The EQF stands out as the initiative with the most connections across policy areas and education and training sectors. The degree of coherence with other initiatives varies, with strong synergies observed with the qualification framework for higher education and the validation of non-formal and informal learning. European cooperation on recognition, quality assurance, and credits can be further promoted, considering the increasing connections among these policy areas in national contexts.

The initiative with the fewest synergies, without undermining its impact on fostering labour mobility, is the Professional Qualifications (PQ) Directive. It includes references to the EQF and ECTS, which can be considered steps toward integration with existing initiatives. Validation of non-formal and informal learning is partly promoted in its context, namely in its general systems (and not for the professions for which automatic recognition takes place after harmonised training),

where professional experience can be considered if a professional qualification giving access to a regulated profession is unavailable. However, there is no active cooperation in the EU on how developments promoted in the context of the 2012 Recommendation on validation and the PQ Directive align together. Apart from initiatives strongly related to the recognition of qualifications, all other initiatives promoting transparency can be considered as supporting recognition. This makes the landscape quite complex, as it includes different tools, purposes, varying degrees of legal bindingness, governance, and implementation measures, pointing to areas where further work could be explored.

The analysis reveals a trend towards more comprehensive actions that promote connections between different types of learning, sectors and policy areas in Europe. This is exemplified by the implementation of the 2018 Europass Decision and the 2022 Recommendation on Microcredentials, which encompass formal, non-formal, and informal learning and consider initiatives across various policy areas. A similar tendency is observed in the 2018 Recommendation on automatic recognition, which covers learners in higher education, VET, and general education.

Recent digital developments, particularly in the context of Europass (Europass portal, Digital Credentials, European Learning Model, E-portfolio, NQF databases, etc.), hold the potential to streamline efforts across all policy areas and facilitate their interactions for the benefit of individuals. To achieve this, cooperation across education and training sectors should be improved to explore how digital innovations can be leveraged to strengthen trust, transparency of qualifications, and transferability of learning.

This report identifies some key challenges, such as the integration of learning outcomes into national practices, as a means to bridge education and training sectors (as well as the labour market and societal needs). This implementation challenge is often linked to the need for more exchanges among practitioners within and across countries to discuss approaches and implications. Encouraging discussions and peer exchanges can help overcome resistance, particularly when initiatives are perceived as top-down and merely formalities. Continuous dialogue is necessary to shared understanding and alignment in terms and concepts, supporting coherent implementation. The complexities of achieving common understanding and definitions are particularly evident in areas such as validation of non-formal and informal learning, automatic recognition, and microcredentials.

In conclusion, the study provided a comprehensive and long-term perspective, reflecting on the successes and shortcomings of the past 20 years, identifying potential areas for deeper cooperation. The report aims to inform future policy

discussions and processes, encouraging the expansion of synergies between existing and future policy developments.

Acronyms

ACVT	Advisory Committee on Vocational Training
AR	automatic recognition
ATP	access, transfer, progression
BFUG	Bologna Follow-up Group
CoE	Council of Europe
CQAF	Common quality assurance framework
CEU	Council of the European Union
CVET	continuing vocational education and training
DEQAR	database of external quality assurance results
EaFA	European Alliance for Apprenticeships
ECTS	European credit transfer and accumulation system
ECVET	European credit system for vocational education and training
EEA	European Economic Area
EFTA	European Free Trade Association
EES	European employment services
EHEA	European higher education area
ELM	European Learning Model
ENIC	European Network of Information Centres
ENQA	European Network for Quality Assurance in Higher Education
ENQA-VET	European Network for Quality Assurance in VET
EQAR	European Quality Assurance Register for Higher Education
EQAVET	European quality assurance reference framework for vocational education and training
EQF	European qualifications framework for lifelong learning
ESCO	European skills, competences, and occupations
ESG	Standards and guidelines for quality assurance in the European higher education area
EURASHE	European Association of Institutions of Higher Education
FET	further education and training
IVET	initial vocational education and training
KCF	key competence framework
LLP	lifelong learning programme
LdV	Leonardo da Vinci
LRC	Lisbon Recognition Convention
NARIC	National Academic Recognition Information Centre
NQF	national qualifications framework

PLOTEUS	Portal on Learning Opportunities and Qualifications in Europe
PQ	professional qualifications
QF-EHEA	Framework for qualifications of the European higher education area
RPL	recognition of prior learning
VET	vocational education and training
VNFIL	validation of non-formal and informal learning
WBL	work-based learning

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Transparency and transferability of learning outcomes: a 20-year journey

Analysis of developments at European and national level

This report offers a comprehensive review of European policy initiatives (2000-20) aimed at improving learning outcome transparency and transferability, to support mobility and lifelong learning.

Adopting a long-term perspective across education and training sectors, the study assesses policy coherence and impact. Findings reveal increasing synergies among initiatives, especially in terms of objectives and principles, supported by the adoption of the learning outcomes approach.

However, opportunities for further European cooperation exist and could be strengthened, including across education and training sectors. Key contributions include a stronger emphasis on learning outcomes, increasing attention to learning outside formal settings, fostering policy alignment, promoting transparent qualifications, and advocating for flexible learning pathways.



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