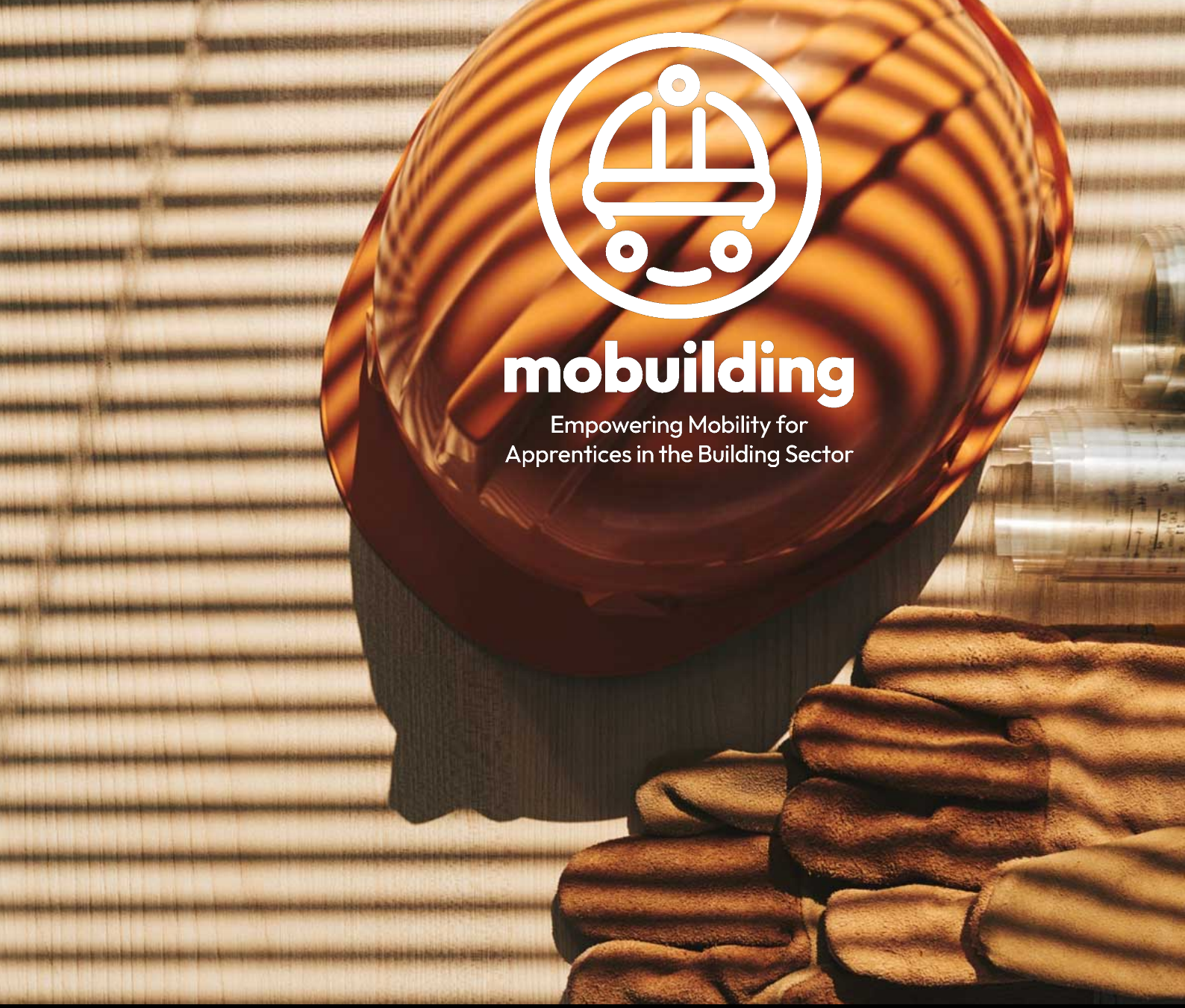


mobuilding

Empowering Mobility for
Apprentices in the Building Sector

Deliverable 2.2

ACTION PLAN TO FOSTER APPRENTICESHİP MOBILITY IN THE BUILDING SECTOR IN EUROPE



Project No.: 101196116
Funded by the European Union. Views and opinions expressed are however those of the autor(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsibe for them.

Co-funded by
the European Union

mobuilding

Empowering Mobility for Apprentices in the Building Sector

Deliverable 2.2: Action Plan to foster Apprenticeship Mobility in the Building Sector in Europe
Date: August, 2026

Developed by:

INSTITUTO PARA EL FOMENTO DEL DESARROLLO Y LA FORMACION SL (INFODEF) – Spain

CONSEJERIA DE EDUCACION DE LA JUNTA DE CASTILLA Y LEON (EDUCACYL) – Spain

ISTANBUL PROVINCE (GOI) – Türkiye

TURK GIRISIM VE IS DUNYASI KONFEDERASYONU (TURKONFED) – Türkiye

ENAIP NET IMPRESA SOCIALE SOCIETA CONSORTILE SRL (ENAIP) – Italy

CARDET CENTRE FOR THE ADVANCEMENT OF RESEARCH & DEVELOPMENT IN EDUCATIONAL TECHNOLOGY LIMITED (CARDET) – Cyprus

INNOQUALITY SYSTEMS LIMITED (INQS) – Ireland

EVROPAIKO KENTRO KATARTISIS GIA TIN APASCHOLISI ANONYMI EKPAIDEFTIKI ETAIREIA (ECTE) – Greece

DRUSHTVO ZA TRGOVIJA, USLUGI I KONSALTING EMKICE KIC DOOEL SKOPJE (EMKICE KIC) – North Macedonia

Technical References

Project Acronym	MOBUILDING
Project Title	A strategic approach to support mobility of apprentices in the building sector
Project Coordinator	INFODEF
Project Duration	March 2025 – February 2028 (36 months)
Dissemination Level	PU - Public
Work Package	WP2
Task	T2.3 Definition of an Action Plan to foster Apprenticeship Mobility in the Building Sector in Europe
WP Leader	ECTE
Lead Author (D2.2)	TÜRKONFED
All Contributing Partners	INFODEF, EDUCACYL, GOI, TÜRKONFED, ENAIP, CARDET, INQS, ECTE, EMKICE KIC
Version	Final
Submission Deadline	August 2026
Actual Submission Date	August 2026

Table of Content

1. Executive summary *5*

2. European Policy context *7*

2.1 The European VET Mobility Agenda 7

2.2 European Policy Frameworks supporting apprenticeship mobility 7

2.3 Recognition frameworks 8

3. Key findings from Deliverable 2.1 ..... *10*

3.1 Overview of the D2.1 Research 10

3.2 Stakeholder perspectives 10

3.3 Summary of key barriers ıdentified 11

3.4 Cross-country findings 12

3.5 Transferable good practices 12

3.6 How the findings shaped this Action Plan 12

4. Strategic vision and objectives *14*

4.1 Strategic vision 14

4.2 Overall Objective 14

4.3 Strategic Objectives 14

5. Governance and local ecosystems *16*

5.1 The Role of Governance in Apprenticeship Mobility 16

5.2 Multi-Level Governance Framework 16

5.3 The MOBUILDING European Platform as a governance hub 17

5.4 Regional ecosystems in practice: The Castilla y León Experience 17

6. SME Engagement and incentives *19*

6.1 The SME challenge 19

6.2 Strategic Actions for SME Engagement 19

6.3 Building the employer value proposition 20

7. Social Dialogue and Partnerships *21*

7.1 The importance of Social Dialogue 21

7.2 Strategic Actions for Social Dialogue 21

7.3 The Role of the Governorship of İstanbul within the VET Governance System 21

7.4 Existing Social Dialogue and partnership mechanisms in İstanbul 22

7.5 Policy implications for the construction sector 23

7.6 A Proposed Regional Apprenticeship Mobility Partnership Model 23

7.7 Cooperation with specialist civil society and professional organisations 25

8. Inclusion, Equity and Accessibility *26*

8.1 The inclusion ımperative 26

8.2 Key inclusion challenges 26

8.3 Strategic Actions for inclusion 26

8.4 An Inclusive Apprenticeship Mobility Framework 27

8.5 The Cypriot experience and lessons learned 27
8.6 Inclusive support measures 28
8.7 Recommendations for Implementation 28
8.8 Proposed Inclusion Performance Indicators 29
9. Green and Digital Transition 31
9.1 The Twin Transition imperative 31
9.2 Green Transition skills for construction 31
9.3 Digital Transition skills for construction 31
9.4 Embedding the Twin Transition in mobility programmes 31
9.5 Preparation, Learning Agreements and assessment 32
9.6 Building information modelling as a bridge between the Two Transitions 32
9.7 Sustainable construction in practical workplace tasks 32
9.8 Thematic mobility pathways 33
9.9 Curriculum ıntegration, recognition and staff development 33
9.10 Good Practices from Türkiye 33
10. Implementation Roadmap 35
10.1 Phased implementation approach 35
10.2 Phase 1. Foundation and Framework (March 2025 – August 2026) 35
10.3 Phase 2. Piloting and Learning (September 2026 – August 2027) 35
10.4 Phase 3. Scaling and Sustainability (September 2027 – February 2028 and beyond) 36
11. Monitoring Framework and KPIs 38
11.1 Purpose and principles 38
11.2 Key Performance Indicators 38
11.3 Data Collection 39
11.4 Reporting rhythm 40
11.5 Alignment with European Quality Assurance 40
12. Governance and Sustainability 41
12.1 Long-Term Governance Architecture 41
12.2 Key sustainability principles 41
12.3 The role of North Macedonia and Türkiye 41
12.4 A Two-Level Governance Model 41
12.5 A Three-Year post-project plan 42
12.6 Financial sustainability 42
12.7 SME involvement and knowledge management 42
12.8 Regional Integration 43
12.9 Measuring Sustainability 43
13. Conclusions 44
References 46

1. Executive summary

This document constitutes Deliverable 2.2 (D2.2) of the MOBUILDING project, the Action Plan to Foster Apprenticeship Mobility in the Building Sector in Europe. Building directly upon the evidence base established in Deliverable 2.1 (D2.1), which analysed the institutional, structural, economic, cultural and sector-specific barriers affecting cross-border apprentice mobility across the seven MOBUILDING partner countries (Spain, Türkiye, Italy, Cyprus, Greece, Ireland and North Macedonia), this Action Plan translates those findings into an evidence-based strategic framework and a set of actionable recommendations for strengthening apprenticeship mobility in the European building sector.

The European construction sector is at a critical juncture. It provides approximately 18 million direct jobs and contributes around 9% of the European Union's Gross Domestic Product (‘Internal Market, Industry, Entrepreneurship and SMEs’. Construction sector. EC data 2023), yet it is simultaneously facing severe and persistent labour shortages, an ageing workforce and an urgent skills mismatch driven by the green and digital transitions. Cross-border apprenticeship mobility represents a powerful but underused instrument to address these challenges, enabling the transfer of skills, the modernisation of VET systems and the development of a resilient, adaptable European construction workforce.

Yet, as documented in D2.1, the current reality is that mobility remains predominantly peripheral, ad-hoc and under-resourced. The key barriers identified span five major categories:

- **Legal and structural:** national legislation, such as Ireland’s Industrial Training Act of 1967, Türkiye’s Vocational Education Law No. 3308 and Italy’s Legislative Decree 81/2015, defines apprenticeship as a contractual relationship with a single employer and contains no explicit provisions for temporary placements abroad, so that its application to cross-border mobility depends on case-by-case interpretation and remains uncertain for the actors involved.
- **Administrative:** heavy bureaucratic workloads on VET staff, the absence of dedicated internationalisation capacity, and a lack of sector-specific safety tools for high-risk construction environments.
- **Economic and financial:** insufficient grant coverage for learners, an absence of financial incentives for SMEs, and the fear of "brain drain" undermining employer participation.
- **Cultural and social:** a pervasive stigma positioning VET as a second-rate pathway, safety-critical language barriers on active worksites, and entrenched gender imbalances in the construction sector.
- **Sector-specific:** divergent safety standards, fragmented skill certification mechanisms, and the overwhelming dominance of micro and small and medium-sized enterprises with limited operational capacity.

The Action Plan responds to these challenges through an integrated strategic framework built around six complementary objectives. First, it aims to support a more enabling regulatory and policy environment by encouraging cooperation between national authorities, VET systems and European mobility actors. Second, it strengthens the organisational capacity of VET providers, intermediary organisations and employers through practical guidance, digital tools, standardised documentation and capacity-building activities. Third, it seeks to increase SME participation by reducing administrative burdens, providing intermediary support and promoting financial and non-financial incentives.

The fourth objective is to promote inclusive, accessible and learner-centred mobility by addressing financial, linguistic, cultural and social barriers while strengthening apprentice participation and ensuring that learners’ experiences and perspectives inform the design, monitoring and improvement of mobility schemes.

The fifth objective focuses on future-ready skills by integrating green construction, digital technologies, occupational safety and innovation into international work-based learning. Finally, the Action Plan aims to establish a sustainable and resilient mobility ecosystem supported by long-term partnerships, governance mechanisms, monitoring systems and diversified cooperation models.

Throughout the document a distinction is maintained between actions that can be taken forward by the actors directly involved in mobility, including VET providers, employers, intermediary organisations and the MOBUILDING partnership, and recommendations addressed to competent public authorities, whose adoption depends on national and regional decision-making. The Action Plan also indicates, for each governance level, which actors are expected to initiate and coordinate the corresponding actions.

Implementation is organised through a phased approach, moving from the establishment of enabling conditions and stakeholder coordination to the testing, refinement and progressive scaling of effective mobility approaches. MOBUILDING's subsequent activities, including the *European Platform*, *Training Programme*, *Building Apprenticeship Mobility Network*, *pilot mobility programme* testing mobility placements, platform functions, learning materials and monitoring mechanisms across partner countries, and *Policy Toolbox*, will provide practical mechanisms through which several of the Action Plan's priorities can be supported, tested and translated into further evidence and policy recommendations to continue beyond the project period.

The MOBUILDING European Platform will provide the project's main digital infrastructure for networking, capacity building, mobility management and support for accreditation, validation and recognition. Alongside the Platform, the Training Programme will strengthen the capacity of VET providers and companies to manage apprenticeship mobility effectively, while the Building Apprenticeship Mobility Network will foster cooperation between education providers, employers, public authorities, sectoral organisations and other relevant stakeholders across Europe.

The expected impact is both individual and systemic. Apprentices will gain recognised technical, linguistic, intercultural, green and digital competences, increasing their employability and adaptability. VET providers will improve their internationalisation capacity and integrate mobility more effectively into curricula. SMEs will benefit from simplified participation models, access to skilled learners and stronger European cooperation. Policymakers and regional authorities will be targeted through the Policy Toolbox, supporting improvements in regulation, funding, recognition and quality assurance.

The Action Plan also proposes a monitoring framework covering mobility participation, SME engagement, organisational capacity, inclusion, stakeholder cooperation and the integration of relevant skills dimensions. For each indicator the framework identifies the evidence used to verify it, the actor responsible for collecting that evidence and, where relevant, the baseline and reference period against which progress is measured. These indicators are intended to support learning and the assessment of progress and should be distinguished from the KPIs used to monitor MOBUILDING project implementation.

Ultimately, MOBUILDING seeks to transform apprenticeship mobility from a fragmented and occasional activity into a structured, recognised and sustainable element of construction-sector VET. By connecting policy reform, institutional capacity, employer participation, inclusion, innovation and European cooperation, the Action Plan provides a practical pathway towards a more skilled, mobile and resilient European construction workforce.

2. European Policy context

2.1 The European VET Mobility Agenda

Apprenticeship mobility has become a strategic priority within the European Union's vision for vocational education and training (VET), skills development and labour market resilience. No longer regarded solely as an educational opportunity, international mobility is increasingly recognised as a catalyst for developing a highly skilled, adaptable and competitive workforce capable of responding to Europe's economic, environmental and technological transformations.

The need to strengthen apprenticeship mobility is particularly evident in the building sector. Across Europe, construction faces persistent labour shortages, an ageing workforce and rapidly evolving skills requirements driven by the twin green and digital transitions. New approaches to energy-efficient construction, digital technologies such as Building Information Modelling (BIM), circular economy principles and advanced construction techniques demand professionals who can learn, adapt and collaborate across borders. International work-based learning enables apprentices to acquire these competences while exposing them to diverse working environments, technologies and professional practices.

European institutions have therefore placed mobility at the centre of the modernisation of VET systems, encouraging Member States to expand international learning opportunities and strengthen cooperation between education providers and employers.

The 2024 Council Recommendation "Europe on the Move" sets a target for at least 12% of VET learners, including apprentices, to benefit from learning mobility abroad by 2030, raising the level of ambition beyond the previous 8% EU benchmark. Recent European Commission monitoring confirms that significant progress is still required: the latest available estimate places the EU-level VET mobility rate at 5.3% in 2023, compared with 5.0% in 2022 and still well below the 12% target for 2030. The European Committee of the Regions has called for even greater ambition, proposing in 2024 a 20% mobility target for VET learners and a specific target to increase apprentice mobility to 40% of all VET learners. Although these higher targets were not incorporated into the final Council Recommendation, they illustrate the growing political ambition to make international mobility a more systematic component of vocational and apprenticeship pathways.

However, as demonstrated by the MOBUILDING research in Deliverable 2.1, achieving these ambitions requires addressing the legal, administrative, financial and sector-specific barriers that continue to limit apprenticeship mobility in the building sector. The present Action Plan responds to this challenge by translating European priorities into practical actions that support high-quality, inclusive and sustainable mobility, and is explicitly designed to contribute to closing the participation gap in the construction sector.

2.2 European Policy Frameworks supporting apprenticeship mobility

The MOBUILDING Action Plan is closely aligned with the combination of European policy recommendations, strategic initiatives and funding instruments that support vocational education, skills development and international cooperation. While these instruments perform different functions, together they provide the policy direction, cooperation mechanisms and practical support needed to expand high-quality apprenticeship mobility across Europe.

Policy recommendations and frameworks

European policy recommendations and cooperation frameworks provide the broader direction for VET internationalisation and mobility. The *2020 Council Recommendation on VET* and the *Osnabrück Declaration* promote more resilient, inclusive and internationally connected VET systems, while the *2024 Council Recommendation "Europe on the Move"* reinforces the objective of making learning mobility a more systematic feature of vocational pathways. The *European Framework for Quality and Effective Apprenticeships (EFQEA)* provides an additional quality reference, ensuring that the expansion of mobility remains grounded in high-quality learning and working conditions.

Funding and implementation instruments

Erasmus+ remains the European Union's main funding programme for learning mobility, while *ErasmusPro* supports extended work-based learning experiences of three to twelve months that are particularly relevant to apprenticeship training. These instruments provide the main EU framework for implementing VET mobility in practice, supporting cross-border learning experiences and cooperation between VET providers, companies and other mobility actors. Despite reinforced funding for the 2021-2027 period, MOBUILDING research shows that participation in the building sector continues to be constrained by institutional capacity and SME engagement barriers.

Strategic initiatives

European strategic initiatives connect apprenticeship mobility with wider skills, competitiveness and labour market priorities. The European Skills Agenda, the *Pact for Skills* and, more recently, the *Union of Skills* reinforce cooperation between education providers, employers and public authorities while promoting the development of future-oriented competences. The Union of Skills also seeks to facilitate the mobility of VET learners and workers, including through work towards a potential European VET diploma/label. This direction is further reflected in the *Herning Declaration 2026-2030*, which opens a new cycle of European VET cooperation in which mobility, attractiveness, excellence and inclusion remain important priorities.

These priorities are particularly relevant to the building sector, which plays a key role in Europe's twin green and digital transition. The *European Green Deal*, *Renovation Wave* and *Clean Industrial Deal* highlight the need for a workforce capable of delivering sustainable, energy-efficient and increasingly digitalised construction. Apprenticeship mobility can contribute by exposing learners to different technologies, working methods and professional environments, facilitating the transfer of knowledge and good practice across European construction ecosystems.

The *European Alliance for Apprenticeships (EAfA*) complements these initiatives by promoting quality apprenticeships through cooperation between governments, social partners, businesses and other stakeholders, with priorities closely aligned with MOBUILDING in areas such as SME engagement, local and regional involvement, social dialogue, apprentice representation and mobility.

Beyond EU funding programmes, bilateral institutional agreements, employer-led partnerships and business-to-business cooperation can complement Erasmus+ by connecting VET provision more directly with labour market needs. Such approaches can diversify cooperation opportunities and contribute to more flexible and sustainable mobility ecosystems, particularly in sectors such as construction where employer involvement is essential.

2.3 Recognition frameworks

The success of cross-border apprenticeship mobility depends not only on the opportunity to learn abroad, but also on the ability of learners, employers and education providers to recognise, understand and value the competences acquired during international placements.

Effective recognition frameworks create the mutual trust necessary for mobility to become a meaningful component of vocational education rather than an isolated learning experience.

At European level, the European Qualifications Framework (EQF) supports the transparency and comparability of qualifications across national systems, while Europass tools help document and communicate skills, qualifications and learning experiences acquired abroad. In mobility activities, Learning Agreements provide a common basis for defining expected learning outcomes and the arrangements for their assessment and recognition. These mechanisms are complemented by learning outcomes-based approaches and by the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET), which supports common principles for quality assurance and continuous improvement in VET.

However, recognition frameworks alone cannot guarantee successful mobility. Their effectiveness depends on the capacity of VET providers, employers and intermediary organisations to apply them consistently through robust planning, documentation, assessment and cooperation. As documented in D2.1, practical implementation remains weak: interoperability between instruments is inconsistent, institutional capacity is limited, and mobility is frequently treated as extracurricular rather than credit-bearing.

By promoting transparency, quality assurance and mutual trust between organisations, apprenticeship mobility generates recognised learning outcomes, facilitates labour market mobility and contributes to a stronger, more integrated European skills ecosystem.

3. Key findings from Deliverable 2.1

3.1 Overview of the D2.1 Research

Deliverable 2.1 constituted a comprehensive research report, Institutional and Structural Barriers to Apprenticeship Mobility in the Building Sector, developed collaboratively by all MOBUILDING consortium partners. It employed a robust, mixed-method research design comprising three core pillars: an extensive literature review of national and EU-level policies and VET frameworks; primary qualitative research through semi-structured interviews and focus group discussions involving apprentices, VET trainers, employers and policymakers across seven partner countries; and the systematic documentation and analysis of institutional practices within training centres and host workplaces.

The qualitative research phase produced a multi-perspectival evidence base documented in full in D2.1. These findings deepen the barriers identified in the literature review and directly inform the strategic framework set out in this Action Plan.

3.2 Stakeholder perspectives

Apprentices

For apprentices, motivations for mobility cluster around personal aspiration (independence, cultural exploration and confidence-building) and professional curiosity. A consistent set of barriers precedes departure across all countries: language, cited everywhere as the most significant fear given the safety-critical nature of on-site communication in construction; financial anxiety arising from insufficient grant coverage; and uncertainty about social and workplace integration. Apprentices who completed mobility reported profound personal development, but professional gains were uneven. One cohort of German apprentices hosted in Greece reported limited technical learning and described local worksite safety standards as unacceptable in comparison with their home country, a finding that directly shaped the quality assurance framework proposed in this Action Plan.

Employers

Employers showed structural ambivalence. Some larger companies, notably in Italy and Cyprus, treat hosting as a strategic investment and operate structured mentoring systems. The dominant reality, however, given that construction is overwhelmingly dominated by micro and small and medium-sized enterprises across all partner countries, is reluctance rooted in an absent return on investment. Italian employers consulted during the D2.1 fieldwork estimated that effective hosting requires around sixteen hours of senior staff time per week per apprentice, diverting experienced personnel from active project work. This figure reflects estimates provided by a limited number of employers interviewed in Italy and should be understood as an indicative order of magnitude reported by practitioners rather than as a statistically representative sectoral average. Irish employers exemplified the pragmatic fear of "brain drain", training an apprentice who will simply return home is seen as a net operational loss, a concern also documented in Türkiye, Cyprus and Greece and addressed directly in Chapter 6 of this Action Plan.

VET Providers and Policymakers

VET providers face a dual burden: a heavy administrative workload covering partner matching, insurance, learning agreements and compliance monitoring, combined with an almost total absence of sector-specific tools for a high-risk working environment. Trainers in Spain, Cyprus and Greece described the current process as unsustainable without dedicated internationalisation staff, and visa bottlenecks for non-EU participants from Türkiye emerged as a severely underappreciated barrier, forcing institutions to cancel planned mobilities at short notice.

Policymakers confirmed the core structural problem: in most partner countries apprenticeship is legally classified as employment, creating fundamental incompatibilities with temporary cross-border transfers. Ireland's Industrial Training Act of 1967, Italy's Legislative Decree 81/2015 and Türkiye's Vocational Education Law No. 3308 each bind apprentices to employers in ways that make international placements legally ambiguous or contractually impractical without targeted national reform.

3.3 Summary of key barriers ıdentified

The research categorised the primary barriers to apprenticeship mobility into five interconnected areas, all of which are directly addressed by the strategic actions and recommendations set out in this Action Plan:

- **Legal and structural barriers:** national legislation defines the contractual status of apprentices in ways that were not designed with cross-border mobility in mind. In formal terms, Ireland's Industrial Training Act of 1967 establishes apprenticeship as an employment relationship governed by a contract of apprenticeship; Türkiye's Vocational Education Law No. 3308 provides for a training contract concluded with a single employer for the full three to four year training period; Italy's Legislative Decree 81/2015 defines apprenticeship as a form of open-ended employment contract, so that salary and social security obligations continue during training; Spain regulates work-based learning through several coexisting contract and training-agreement types; and Cyprus regulates traineeships through a number of separate instruments. Stakeholders consulted in D2.1 reported that, because none of these frameworks contains explicit provisions for temporary placements abroad, their application to cross-border mobility is difficult in practice: the status of the apprentice during the placement is frequently unclear, responsibility for salary, insurance and social protection is not always resolved in advance, and institutions rely on case-by-case interpretation. The barrier identified by the research therefore lies less in the content of the legislation itself than in the absence of established procedures for applying it to mobility situations.
- **Administrative barriers:** VET staff face an intensive bureaucratic workload encompassing partner matching, learning agreement design, risk assessments and insurance documentation, often without dedicated internationalisation support. A critical gap exists in sector-specific safety tools tailored to the high-risk realities of construction sites.
- **Economic and financial barriers:** existing grants, including Erasmus+, frequently fail to cover the true cost of living in destination countries. SMEs, which dominate the construction sector in all partner countries and account for the large majority of construction firms according to the national analyses compiled in D2.1, lack financial resilience, with the mentoring effort required to host an apprentice estimated by the Italian employers interviewed at up to sixteen hours per week. Fear of brain drain and of a lost return on investment is pervasive among employers.
- **Cultural and social barriers:** language barriers constitute both a deterrent and a direct safety-critical risk on active construction sites. A pervasive cultural stigma positions VET as a second-rate choice, reducing the pool of motivated candidates. The construction sector remains heavily male-dominated, limiting diversity and inclusion in mobility programmes.
- **Sector-specific barriers in construction:** diverging national safety standards create professional culture shock for incoming apprentices. Skill certification differences and fragmented recognition mechanisms undermine the formal value of placements. Employer reluctance is amplified by the operational realities of tight project schedules and the absence of structured mentoring capacity in most SMEs.

3.4 Cross-country findings

Despite differing national VET architectures, common structural themes emerged across all partner countries. The construction industry universally faces severe labour shortages, an ageing workforce and an urgent need for workers trained in modern, sustainable and digital building practices. The heavy reliance on SMEs creates a shared bottleneck: small companies lack the administrative capacity, supervisory time and financial resilience to manage cross-border mobilities.

The comparative analysis conducted in D2.1 distinguishes challenges that are genuinely universal from those rooted in country-specific legislation or culture. Five patterns cut across all seven partner countries:

- Administrative overload on VET staff and smes.
- Language as both a communication barrier and a direct safety hazard on active construction sites.
- Employer reluctance driven by the absence of a measurable return on investment.
- Financial inadequacy of existing Erasmus+ grants relative to the true cost of living in many destination countries.
- Cultural stigmatisation of VET as a second-rate pathway, reducing the pool of motivated candidates.

At a country-specific level, Ireland's rigid seven-phase national curriculum allows almost no flexibility to substitute a training phase with mobility abroad, making systemic reform a prerequisite for scaling participation. Italy's legal obligation to continue paying apprentice salaries during placements abroad constitutes a financial disincentive that no administrative simplification can resolve. Türkiye's national qualification gap (the MYK framework is not formally recognised in most EU Member States) means that skills gained abroad cannot easily be reintegrated into the national qualification record. Greece's case studies of incoming apprentices exposed institutional failures in pre-departure preparation, on-site mentorship and post-mobility certification, reinforcing the need for mandatory quality standards for receiving institutions as set out in Chapter 11.

3.5 Transferable good practices

Despite these barriers, D2.1 identified a number of transferable good practices. Pre-mobility site visits by sending coordinators, undertaken three to four days in advance in order to verify safety arrangements, cultural fit and curriculum alignment, proved highly effective in Cyprus. Italy's accompanying tutor model, deploying a dedicated group leader alongside young apprentices, was a critical factor in overcoming initial anxiety and language barriers. In Cyprus, host companies such as Cyfield Group assign formal site mentors, run structured health and safety inductions and use a buddy system attentive to psychological safety. In Spain, curriculum reforms under Organic Law 3/2022 are progressively embedding internationalisation, digital competences and sustainability as core modules.

3.6 How the findings shaped this Action Plan

These findings directly shaped the architecture of this Action Plan. The governance framework in Chapter 5 responds to legislative fragmentation; the SME engagement strategy in Chapter 6 targets employer reluctance and the brain-drain concern; the social dialogue chapter addresses coordination failures between VET providers, employers and public authorities; the inclusion and equity framework in Chapter 8 responds to the financial strain and gender imbalance findings; and the green and digital transition chapter addresses the documented skills mismatch. The monitoring framework in Chapter 11 is anchored in the specific quality

failures recorded in Greece and Ireland, ensuring that the Action Plan is not only strategic but also accountable.

4. Strategic vision and objectives

4.1 Strategic vision

The MOBUILDING Action Plan is driven by a long-term vision of apprenticeship mobility as an integral component of high-quality vocational education and training within the European building sector. Rather than being perceived as an occasional or project-based activity, international mobility should become a structured, accessible and sustainable element of apprenticeship pathways, enabling learners to acquire technical, digital, green and work-readiness competences in authentic workplace environments across Europe. In concrete terms, the ambition is to transform cross-border apprenticeship mobility from an ad-hoc, extracurricular activity into a structured, recognised and systematically supported component of formal VET pathways.

This vision responds to the profound transformation currently affecting the construction sector. Labour shortages, demographic change, rapid technological innovation and the transition towards more sustainable construction practices require a workforce that is adaptable, internationally connected and equipped with future-oriented skills. Apprenticeship mobility offers a unique opportunity to expose learners to different working methods, technologies and organisational cultures while strengthening cooperation between VET providers, employers and public authorities. By fostering high-quality, inclusive mobility experiences, the Action Plan seeks to contribute to addressing skills shortages, skills mismatches and challenges affecting the attractiveness and long-term competitiveness of the European construction industry.

The Action Plan is founded on the principles of quality, inclusion, partnership, sustainability and evidence-based decision-making. It promotes a mobility ecosystem in which learners, SMEs, training providers, intermediary organisations and policymakers share responsibility for creating high-quality international learning opportunities. By strengthening governance, promoting mutual trust and facilitating the recognition of learning outcomes, MOBUILDING seeks to contribute to a more resilient, innovative and competitive European building sector.

4.2 Overall Objective

The overall objective of the MOBUILDING Action Plan is to establish a practical, scalable and evidence-based strategic framework that supports the sustainable development of apprenticeship mobility within the European building sector. Building upon the challenges and opportunities identified in Deliverable 2.1, the Action Plan translates research findings into concrete, actionable and scalable recommendations addressed to the different actors with a role in apprenticeship mobility, including VET institutions, employers, intermediary organisations, social partners and public authorities at local, regional, national and European levels.

Beyond increasing participation in international mobility, the Action Plan aims to improve the quality, accessibility and long-term sustainability of apprenticeship mobility systems. It seeks to strengthen organisational capacity, foster stronger cooperation between education and industry, and create the conditions necessary for mobility to become a recognised driver of skills development, workforce innovation and sectoral competitiveness.

4.3 Strategic Objectives

To achieve this vision, the MOBUILDING Action Plan is structured around six complementary strategic objectives that collectively address the barriers identified through the project's research while supporting the future development of apprenticeship mobility across Europe.

SO1. Enable a supportive regulatory and policy environment. Promote targeted policy recommendations and institutional cooperation aimed at reducing legal and structural barriers, clarifying the legal status and conditions of apprentices during cross-border mobility, and improving alignment between national VET systems and European mobility objectives.

SO2. Strengthen organisational capacity for mobility management. Support VET providers, intermediary organisations and employers through practical tools, templates, guidance, digital solutions and capacity-building measures that improve the planning, implementation and quality assurance of apprenticeship mobility while reducing the bureaucratic burden on institutions and SMEs.

SO3. Increase SME participation and engagement. Encourage the active involvement of small and medium-sized enterprises by promoting simplified procedures, appropriate financial and non-financial support mechanisms, stronger partnerships and collaborative approaches that reduce the administrative and operational challenges associated with hosting or sending apprentices.

SO4. Promote inclusive, accessible and learner-centred mobility. Expand participation by addressing financial, cultural, linguistic and social barriers while ensuring equal opportunities for apprentices regardless of gender, socioeconomic background, nationality or geographical location. Strengthen apprentice voice and representation by creating opportunities for learners to contribute their experiences and perspectives to the design, monitoring and continuous improvement of mobility schemes.

SO5. Develop future-ready skills for the building sector. Align apprenticeship mobility with the evolving skills needs of the European construction industry by integrating green competences, digital technologies, occupational safety, innovation and international collaboration into work-based learning experiences.

SO6. Build a sustainable and resilient apprenticeship mobility ecosystem. Promote and support the establishment of governance mechanisms, monitoring frameworks and long-term partnerships that enable continuous improvement, facilitate knowledge sharing and allow apprenticeship mobility to expand beyond individual projects or funding programmes. The Action Plan recognises Erasmus+ as the cornerstone of European VET mobility while encouraging complementary forms of international cooperation, such as bilateral institutional agreements, employer-led initiatives and emerging Global Skills Partnerships, to strengthen the resilience and long-term sustainability of mobility opportunities across the building sector.

The strategic objectives provide the organising framework for the actions developed in the following chapters. Their implementation requires contributions from different actors according to their respective competences, while the roadmap and monitoring framework presented in Chapters 10 and 11 translate these priorities into implementation pathways and indicators for assessing progress. Each strategic objective is associated with at least one indicator in the monitoring framework set out in Section 11.2, so that progress towards the objectives can be assessed on the basis of evidence rather than intention.

These strategic objectives establish the intervention logic of the MOBUILDING Action Plan. By combining policy alignment, organisational capacity building, stakeholder engagement and continuous quality improvement, they bring within reach a coherent framework for transforming apprenticeship mobility into a strategic instrument for skills development, innovation and competitiveness within the European building ecosystem.

5. Governance and local ecosystems

5.1 The Role of Governance in Apprenticeship Mobility

Effective governance is the backbone of any sustainable mobility ecosystem. The MOBUILDING Action Plan recognises that mobility cannot be driven by individual institutions alone: it requires a coherent, multi-level governance architecture that connects local VET providers, regional authorities, national policymakers and European bodies into a coordinated network of shared responsibilities, aligned incentives and transparent accountability mechanisms.

As documented in D2.1, a fundamental challenge across all partner countries is the absence of unified national strategies for cross-border long-term apprentice mobility. In Ireland, mobility is not a national policy priority. In Cyprus, fragmented coordination between the Ministry of Education and training institutions leads to inefficiencies and duplication. In Spain, the devolved VET system creates inconsistent application of recognition tools across autonomous communities. Addressing these governance gaps is therefore a foundational priority for this Action Plan.

5.2 Multi-Level Governance Framework

The MOBUILDING Action Plan proposes a multi-level governance framework structured around three interconnected layers:

- **European level:** alignment with EU policy frameworks such as Erasmus+, the EQF and the Osnabrück Declaration; engagement with European sectoral bodies including the Construction Blueprint and the European Alliance for Apprenticeships; and advocacy for harmonised legal standards for apprentice mobility.
- **National level:** development of coordinated national strategies for cross-border long-term apprentice mobility; inter-ministerial collaboration between ministries of education and labour and employer organisations; and the establishment of fast-track recognition mechanisms for learning outcomes acquired abroad.
- **Local and regional level:** creation of regional mobility consortia that pool resources, expertise and partner networks on behalf of smaller VET providers; engagement of local authorities as active intermediaries and facilitators; and the development of local ecosystems that connect training centres, employers and community organisations.

The distribution of responsibilities across these three levels can be described as follows, on the understanding that the concrete allocation of tasks will depend on the administrative arrangements of each country and region.

At European level, relevant European institutions, sectoral networks and apprenticeship organisations should take the lead in promoting policy alignment, facilitating the exchange of good practices, providing common guidance and supporting cooperation among stakeholders across countries. European-level actors are also expected to encourage the use of existing transparency and recognition tools, monitor emerging barriers to mobility and advocate for regulatory and operational improvements that facilitate long-term cross-border apprenticeship mobility. Their role is therefore to create an enabling framework that supports coordinated action at national and regional levels while ensuring consistency with broader European VET and mobility objectives.

At national level, ministries responsible for VET, National Erasmus+ Agencies and employer organisations are expected to initiate and support the policy, recognition and stakeholder engagement actions identified in the Plan. At regional level, public authorities, such as the Directorate-General for Vocational Education of Castilla y León, together with regional mobility consortia and participating VET providers, coordinate operational activities including partner

identification, apprentice selection, mobility management, learner support and collaboration with employers.

During the MOBUILDING implementation period, the consortium partners act as the initiating and coordinating actors for these functions in their respective countries: INFODEF and EDUCACYL in Spain, GOI and TÜRKONFED in Türkiye, ENAIP in Italy, CARDET in Cyprus, ECTE in Greece, INQS in Ireland and EMKICE KIC in North Macedonia, each working with the competent authorities, VET providers and employer organisations of its own context. The indicative allocation of responsibilities per implementation phase is summarised in the roadmap table in Chapter 10.

5.3 The MOBUILDING European Platform as a governance hub

The MOBUILDING European Platform for Apprenticeship Mobility in Building (D3.1) serves as the central digital governance hub for the Action Plan. Its four integrated spaces — the Partnership and Networking Lounge, the Capacity Building Space, the Apprenticeship Mobility Management Tool, and the Accreditation, Validation and Recognition Centre — provide the infrastructure needed to translate governance commitments into operational reality.

5.4 Regional ecosystems in practice: The Castilla y León Experience

The successful implementation of apprenticeship mobility in the construction sector requires governance models that combine strategic coordination, institutional commitment and strong cooperation between education providers, public authorities and employers. In Spain, and particularly in the Autonomous Community of Castilla y León, the development of regional mobility ecosystems has demonstrated how coordinated governance structures can significantly increase the participation of VET learners and companies in international mobility programmes. The experience of the Erasmus+ VET Consortium EDUCACYL provides a relevant example of how regional authorities can facilitate and scale mobility opportunities through a structured and collaborative approach.

Castilla y León operates within Spain's decentralised VET governance framework, in which Autonomous Communities are responsible for the management and implementation of vocational education policies. In this context the Regional Ministry of Education, through the Directorate-General for Vocational Education and Special Regime Education, plays a central coordinating role by supporting VET centres, promoting internationalisation strategies and facilitating participation in European initiatives. Mobility is therefore embedded within broader regional policies aimed at improving employability, promoting innovation in VET and strengthening links between education and the labour market.

One of the most significant governance mechanisms developed in Castilla y León is the EDUCACYL Erasmus+ VET Consortium, which acts as an intermediary structure enabling VET institutions to access international mobility opportunities while reducing the administrative burden associated with Erasmus+ implementation. The consortium allows participating centres to benefit from a common governance framework, shared procedures, coordinated partner management and centralised technical support. This model is particularly valuable for smaller VET institutions that may lack the financial, administrative or human resources required to organise international mobility activities independently.

The consortium approach demonstrates how regional coordination can generate economies of scale and increase the overall quality of mobility experiences. Through EDUCACYL, participating centres receive support in areas such as partner identification, mobility planning, quality assurance, dissemination, reporting and the recognition of learning outcomes. The model also promotes consistency in mobility management while maintaining sufficient

flexibility to respond to the specific needs of different vocational sectors, including construction and building-related trades.

A key feature of the Castilla y León model is the active involvement of local and regional stakeholders in the mobility ecosystem. Effective mobility programmes require cooperation between several actors, including VET providers, companies, sectoral organisations, local authorities, chambers of commerce and intermediary organisations. Within the EDUCACYL consortium these stakeholders contribute to identifying labour market needs, facilitating placements, supporting apprentices during mobility periods and promoting the recognition of international learning experiences. This collaborative approach helps ensure that mobility activities remain aligned with both educational objectives and labour market demands.

The construction sector presents specific challenges that make stakeholder coordination particularly important. Occupational health and safety requirements, technical specialisation and the predominance of SMEs require careful planning and communication between all actors involved. The Castilla y León experience shows that mobility programmes are more effective when employers are engaged from the initial planning stages and when placements are linked to clearly defined learning outcomes. Collaboration with companies also facilitates the transfer of innovative construction practices, digital technologies and sustainability-related competences between participating countries.

Another relevant good practice developed through the EDUCACYL consortium is the promotion of learner support mechanisms throughout the mobility cycle. Participating centres provide guidance before departure, support during the placement period and follow-up activities upon return. This integrated approach contributes to higher completion rates, improved learner satisfaction and stronger recognition of acquired competences. It also helps address common barriers such as language difficulties, cultural adaptation and administrative complexity, all of which were identified through the MOBUILDING research process.

The governance model implemented in Castilla y León also highlights the importance of international partnerships based on long-term cooperation and mutual trust. Over several years of Erasmus+ participation, the EDUCACYL consortium has established a growing network of reliable European partners capable of supporting high-quality mobility experiences. Such stable partnerships reduce organisational risks, simplify mobility management and create opportunities for the continuous exchange of good practice between VET systems. The MOBUILDING European Platform can build upon these principles by facilitating partner matching, sharing operational resources and strengthening transnational cooperation across the construction sector.

From a strategic perspective, the EDUCACYL Erasmus+ VET Consortium demonstrates that regional authorities can play a crucial enabling role in apprenticeship mobility without replacing the initiative of VET providers or employers. By acting as coordinators, facilitators and capacity-builders, public authorities can create favourable conditions for mobility, support stakeholder engagement and promote the long-term sustainability of international cooperation. This experience offers a transferable governance model for MOBUILDING, particularly in regions where fragmented institutional structures or limited organisational capacity continue to hinder participation in apprenticeship mobility programmes.

Ultimately, the Castilla y León experience confirms that successful apprenticeship mobility depends not only on funding opportunities but also on the existence of coordinated regional ecosystems capable of connecting education, industry and public policy. The EDUCACYL consortium provides a practical example of how governance, stakeholder cooperation and shared responsibility can contribute to expanding high-quality, inclusive and sustainable mobility opportunities for apprentices in the construction sector and beyond.

6. SME Engagement and incentives

6.1 The SME challenge

Small and medium-sized enterprises, and particularly micro and small enterprises, form the backbone of the European construction sector. Yet it is precisely these companies that face some of the most significant barriers to participating in cross-border apprenticeship mobility. SMEs often operate with small teams and tight project schedules, with limited administrative capacity, financial resilience and supervisory time to host or send apprentices without affecting day-to-day operations.

As documented in D2.1, key challenges for SMEs include the operational and productivity costs associated with supervising international apprentices; concerns about the return on investment and potential loss of trained workers; liability and safety requirements in high-risk construction environments; and limited or uneven access to financial support capable of offsetting the additional costs of mobility.

6.2 Strategic Actions for SME Engagement

The MOBUILDING Action Plan identifies a targeted package of measures to strengthen SME participation in apprenticeship mobility. Depending on their respective competences, public authorities, VET providers, employer organisations, intermediary bodies and other relevant actors are invited to consider and adapt the following measures to their national, regional and sectoral contexts:

- **Financial incentives:** competent national and regional authorities are invited to consider targeted mechanisms (including, where appropriate, tax benefits, wage subsidies or direct funding) to help offset the additional operational costs and mentoring time associated with hosting or sending apprentices.
- **Practical sector-specific resources:** VET providers, intermediary organisations and mobility support structures are encouraged to provide SMEs with ready-to-use guidance, templates and practical resources adapted to cross-border mobility in construction, particularly in areas such as occupational health and safety, insurance, risk assessment, workplace tasks and mobility documentation. Such resources can reduce administrative burden and address liability and safety concerns that may discourage SME participation.
- **Intermediary support structures:** VET providers, employer organisations, mobility consortia and other intermediary bodies are encouraged to centralise functions such as partner matching, administrative coordination and practical mobility arrangements, reducing the workload placed on individual SMEs. The MOBUILDING European Platform can complement these structures by facilitating networking, capacity building and mobility management.
- **Recognition and awareness:** employer organisations, sectoral bodies and public authorities are invited to consider recognition mechanisms for SMEs actively engaged in quality apprenticeship mobility, such as “mobility-friendly employer” labels, badges or sectoral recognition initiatives. Such mechanisms can increase visibility and provide non-financial incentives for participation.
- **The TÜRKONFED employer network model:** TÜRKONFED's established networks of employer confederations and sectoral working groups provide a potentially transferable model for industry-VET coordination, providing a ready-made channel for reaching SMEs, disseminating mobility opportunities and securing employer buy-in.

6.3 Building the employer value proposition

Experience gathered through TÜRKONFED's regional business networks indicates that incentives alone are insufficient unless they are accompanied by a clear and demonstrable value proposition for the employer. Engagement activities should therefore present mobility not as a compliance exercise but as an instrument of workforce development: access to motivated learners, exposure to construction techniques and digital tools applied in other markets, strengthened international business contacts, and enhanced visibility among clients and public authorities that increasingly value sustainability and skills investment.

Capacity building is equally important in translating this value proposition into participation. Employer organisations, VET providers and mobility intermediaries are encouraged to complement awareness-raising with practical support that strengthens employers' capacity to host international apprentices, including guidance on mentoring arrangements, learning agreements, occupational safety obligations and the assessment of learning outcomes. MOBUILDING will contribute to this objective through the capacity-building activities and resources developed within the project.

Finally, SME engagement is likely to be more effective when organised collectively rather than company by company. Collective approaches such as mobility consortia can provide a particularly suitable route for micro and small construction firms by allowing several enterprises to participate through a coordinating VET provider, employer organisation or intermediary body that centralises part of the administrative and logistical workload. This approach can help overcome the limited capacity of individual SMEs and is therefore reflected in the implementation roadmap presented in Chapter 10.

7. Social Dialogue and Partnerships

7.1 The importance of Social Dialogue

Sustainable apprenticeship mobility ecosystems are not built by individual institutions in isolation: they are the product of sustained, structured social dialogue between the full spectrum of stakeholders, including employers and their confederations, trade unions, VET providers, regional and local authorities, and the apprentices themselves. As documented in D2.1, a critical policy gap identified across all partner countries is the disconnection between stakeholders: business organisations, VET providers and government bodies frequently operate in silos, without the collaborative structures needed to design and implement effective mobility frameworks.

7.2 Strategic Actions for Social Dialogue

- **Strengthen industry–VET cooperation:** policies must focus on strengthening direct cooperation between business organisations and VET providers, creating more flexible mobility formats adapted to the specific operational realities of SMEs rather than relying solely on academic or school-driven mobility models.
- **Establish multi-stakeholder mobility councils:** at regional and national levels, dedicated multi-stakeholder mobility councils for the construction sector should bring together employer representatives, VET institutions, trade unions and public authorities to co-design, co-finance and co-evaluate mobility programmes.
- **Apply the GOI provincial coordination model:** the Governorship of İstanbul has accumulated substantial experience in coordinating large-scale vocational training initiatives within the construction and skilled trades sectors at provincial level. This institutional experience represents a scalable model for public authority involvement in apprenticeship mobility programmes, demonstrating how provincial and local authorities can actively bridge VET institutions and industry partners.
- **Develop international partnerships and consortia:** transnational partnerships between construction sector employers' federations across the MOBUILDING partner countries can enable the creation of structured bilateral and multilateral mobility pathways.

7.3 The Role of the Governorship of İstanbul within the VET Governance System

As the representative of central government at provincial level under Provincial Administration Law No. 5442, the Governorship of İstanbul holds a general coordinating mandate over the activities of state institutions operating within the province, including the İstanbul Provincial Directorate of National Education, which is directly responsible for the implementation of vocational and technical education, including apprenticeship training under Vocational Education Law No. 3308.

Through its Provincial Directorate of Planning and Coordination, the Governorship conducts research on regional socio-economic development, supports public investment planning, coordinates provincial institutions, promotes coherence among public education programmes and facilitates employment-oriented initiatives, including support for entrepreneurship.

The operational responsibility for VET rests with the Ministry of National Education, which develops vocational education in cooperation with economic and social sectors through labour market-oriented modular curricula, alignment with national and international standards, support for graduates' employability, and the development of competences required for the digital transformation of industry.

Consequently, within the İstanbul context, institutional responsibilities should be understood as follows: the Governorship acts as the umbrella coordination body bringing together the İstanbul Provincial Directorate of National Education, the Turkish Employment Agency (İŞKUR), the Vocational Qualifications Authority (MYK), local authorities and representatives of the business community, while the İstanbul Provincial Directorate of National Education remains the principal public institution responsible for implementing vocational education and training.

7.4 Existing Social Dialogue and partnership mechanisms in İstanbul

Current governance arrangements demonstrate that social dialogue in İstanbul is organised through a multi-stakeholder governance model rather than a school-centred approach.

According to the Ministry of National Education's official "My Profession, My Life" (Mesleğim Hayatım) platform, Vocational Education Centres are designed to strengthen the connection between education and working life. Apprentices typically spend one day per week receiving theoretical instruction at school and four days undertaking practical training in enterprises. Enrolment requires a formal training agreement with a company, and each host enterprise must employ a certified master trainer holding a Master Instructor Certificate. Likewise, within the Anatolian Vocational Education Programme, Grade 12 students complete their compulsory workplace-based vocational education course primarily in enterprises. These arrangements demonstrate that employer participation is not an additional element of the Turkish VET system but one of its core institutional foundations.

The principal formal mechanism for social dialogue at provincial level is the Provincial Employment and Vocational Education Board, jointly regulated by the Ministry of Labour and Social Security, the Ministry of National Education and İŞKUR. The Board brings together the İstanbul Provincial Directorate of İŞKUR, the İstanbul Provincial Directorate of National Education, employer and employee organisations, chambers and other relevant public institutions. Its statutory responsibilities include preparing provincial employment and vocational education policy proposals, conducting and evaluating labour market analyses, providing opinions on the alignment of vocational and technical education curricula with labour market needs, and supporting the resolution of disputes arising from vocational education practice. Decisions adopted by the Board are binding on the responsible institutions and are implemented through follow-up action plans, creating a structured and accountable mechanism for translating labour market evidence into vocational education planning.

This mechanism is particularly relevant to the construction sector. Since 2007, İŞKUR has conducted annual provincial Labour Market Research identifying occupations facing recruitment difficulties, and these findings inform the Board's Annual Workforce Training Plan, including construction-related occupations where appropriate. The Board is also authorised to recommend the opening or closure of vocational programme branches in response to labour market demand, including construction-related programmes in vocational and technical schools. In addition, it has coordinated occupational health and safety training and awareness activities for enterprises, most recently in relation to the Ministry of National Education's 2024 occupational health and safety circular for vocational education. This demonstrates an existing institutional capacity to mobilise public and private stakeholders around safety-critical vocational training for apprentices working on active construction sites.

A practical example of this collaborative approach was the Vocational Education Workshop in İstanbul, organised by the İstanbul Provincial Directorate of National Education in June 2026. The workshop examined the sectoral relevance of the fifty vocational fields delivered by Vocational and Technical Anatolian High Schools and Vocational Education Centres, while also addressing internship opportunities, graduate employability and future skills needs. Participants included school principals, vocational department heads, career guidance

teachers, sector representatives, academics and officials from İŞKUR, demonstrating broad institutional participation.

During the same event, the contribution of İstanbul's business chambers to vocational education was highlighted in the context of the Patronage School Model (*Hamilik Modeli*), established in 2019 through cooperation between the Ministry of National Education, the Ministry of Industry and Technology, İstanbul Technical University, the İstanbul Chamber of Industry and the İstanbul Chamber of Commerce.[1] The İstanbul Chamber of Commerce has reported supporting 59 vocational schools across İstanbul under this initiative,[2] while at the workshop the İstanbul Chamber of Industry reported supporting 44 schools together with approximately 150 industrialists.

7.5 Policy implications for the construction sector

Within the construction sector, one of the most important institutional linkages concerns vocational qualifications and occupational safety. The Vocational Qualifications Authority operates a dedicated Construction Sector Committee, bringing together representatives from the Ministry of Labour and Social Security, the Ministry of National Education, the Council of Higher Education, relevant public institutions, employers' organisations, trade unions, professional organisations and the Authority itself. Through this tripartite governance structure, the Committee reviews National Occupational Standards and National Qualifications, provides technical opinions and recommends revisions to ensure that vocational qualifications remain aligned with evolving labour market needs and sectoral developments.

7.6 A Proposed Regional Apprenticeship Mobility Partnership Model

Building upon the institutional practices and cooperation mechanisms already operating in İstanbul, the MOBUILDING Action Plan proposes a Regional Apprenticeship Mobility Partnership Model that is transferable across different governance systems rather than dependent on a single national or regional institutional structure. The model does not advocate the creation of new statutory bodies or parallel governance arrangements. Instead, it identifies the essential governance functions that every regional apprenticeship mobility ecosystem should perform by mobilising existing public authorities, labour market institutions, vocational education providers, employer organisations and enterprises within their respective legal responsibilities.

Strategic coordination and policy coherence. Experience in İstanbul demonstrates that apprenticeship systems operate most effectively when a public authority with an established coordination mandate facilitates cooperation among institutions responsible for education, employment and regional development. Depending on the administrative arrangements of each country, this role may be undertaken by a regional authority, a provincial administration or another competent public institution responsible for coordinating public services. Its primary function is not to regulate vocational education directly but to promote structured dialogue, facilitate institutional cooperation and ensure that apprenticeship mobility is integrated into wider regional skills, employment and economic development strategies.

Vocational education governance and quality assurance. Competent vocational education authorities and training providers should work closely with employers to ensure that apprenticeship programmes remain responsive to labour market needs and that learning outcomes achieved through international mobility can be effectively integrated into formal vocational education pathways. Existing work-based learning arrangements, such as those implemented through Vocational Education Centres and Vocational and Technical Anatolian High Schools in Türkiye, illustrate how strong employer participation can provide a robust

institutional basis for international apprenticeship mobility without requiring fundamental changes to national vocational education systems.

Labour market intelligence and skills anticipation. Public employment services and relevant labour market institutions should provide regular evidence on regional workforce demand, occupations experiencing recruitment difficulties, emerging skill requirements and sectoral developments. This information should guide the identification of priority occupations for mobility, support the selection of participating enterprises and ensure that apprenticeship placements respond to genuine regional labour market needs. For the construction sector, continuous monitoring of skills shortages associated with sustainable construction, energy-efficient renovation, digital construction technologies and Building Information Modelling is particularly important.

Qualification recognition and occupational standards. National qualifications authorities and sectoral standard-setting mechanisms play a crucial role in ensuring that learning outcomes acquired through international mobility remain compatible with national qualification systems. In Türkiye, the Vocational Qualifications Authority fulfils this role through sector committees, including the Construction Sector Committee, which reviews National Occupational Standards and National Qualifications with the participation of ministries, employers' organisations, trade unions and professional bodies. Although institutional arrangements vary across Europe, equivalent qualification bodies can provide an important foundation for improving the transparency, comparability and recognition of competences acquired through apprenticeship mobility.

Employer engagement and enterprise participation. Chambers of commerce and industry, organised industrial zones or equivalent business clusters, sectoral employer organisations and individual construction companies should act not only as placement providers but also as strategic partners in identifying skills needs, supporting workplace mentoring, evaluating apprenticeship outcomes and promoting mobility opportunities among SMEs. Evidence from İstanbul, including cooperation between the Ministry of National Education, the İstanbul Chamber of Commerce, the İstanbul Chamber of Industry and vocational schools through the Patronage School Model, demonstrates the value of sustained employer engagement in strengthening vocational education partnerships.

Occupational health and safety and mobility preparedness. Given the particular characteristics of the construction sector, the proposed partnership model also assigns a dedicated function to occupational safety. International apprenticeship mobility in construction requires apprentices to operate safely within unfamiliar regulatory environments, workplace cultures and technical standards. Regional partnerships should therefore integrate structured pre-departure preparation covering occupational health and safety, workplace induction, task-specific risk assessment, sector-specific terminology, intercultural communication and site safety procedures. Existing occupational health and safety resources developed by the Ministry of National Education provide a practical foundation upon which these mobility preparation activities can be built.

Continuous evaluation and stakeholder dialogue. Public authorities, vocational education providers, employers, labour market institutions and qualification bodies should regularly review apprenticeship outcomes, employer satisfaction, labour market relevance and learner experiences to ensure that mobility programmes evolve in response to changing economic conditions and technological developments.

Rather than prescribing a uniform institutional architecture, the proposed model identifies the core governance functions that every regional apprenticeship mobility ecosystem should perform. This functional approach enables adaptation across different administrative traditions while maintaining a common objective: strengthening cooperation between vocational education, labour market institutions and the construction industry in order to deliver high-quality, safe, inclusive and labour market-responsive apprenticeship mobility throughout Europe.

7.7 Cooperation with specialist civil society and professional organisations

Türkiye's regional apprenticeship mobility ecosystem can also benefit from the active involvement of specialist civil society and professional organisations. A stakeholder contribution from EYODER highlighted the potential role of organisations with expertise in energy efficiency, sustainable buildings, vocational education and capacity building. Such organisations can act as technical knowledge partners by supporting curriculum development, training VET teachers and company mentors, contributing to the design of green-skills mobility pathways and connecting VET institutions with universities, municipalities, public authorities and private-sector actors.

The cooperation models described by EYODER demonstrate the value of partnerships that combine technical expertise with educational and institutional capacity. In this context, specialist organisations should be represented in regional mobility partnerships and thematic working groups, particularly where mobility activities address energy-efficient renovation, renewable-energy systems and sustainable construction. Their contribution can strengthen the relevance of workplace learning, improve the technical quality of training materials and help ensure that mobility programmes respond to both national climate objectives and construction-sector skills needs.

8. Inclusion, Equity and Accessibility

8.1 The inclusion ımperative

The MOBUILDING Action Plan is grounded in a firm commitment to ensuring that the benefits of cross-border apprenticeship mobility are accessible to all, regardless of socioeconomic background, gender, ethnic origin, disability or nationality. As documented in D2.1, the current mobility landscape in the construction sector is characterised by significant exclusions: the sector remains heavily male-dominated; minority learners face discrimination and isolation in host environments; learners from lower socioeconomic backgrounds are disproportionately burdened by insufficient grant coverage; and older apprentices face family and financial constraints that render long-term mobility unfeasible.

8.2 Key inclusion challenges

- **Gender imbalance:** the construction sector's heavily male-dominated workforce perpetuates entrenched cultural patterns that limit female participation in mobility programmes. Targeted measures are needed to attract, support and retain women in construction apprenticeships and international placements.
- **Financial barriers:** many VET learners come from lower socioeconomic backgrounds. Existing grants frequently fail to cover the true cost of living, transport and accommodation in destination countries, and this disparity is particularly severe for apprentices from Türkiye, where the cost-of-living gap with high-cost EU destinations is two to three times greater than between EU Member States.
- **Language and communication:** language barriers are both a social integration challenge and a direct safety-critical risk on active construction sites. Targeted language preparation linked to construction-specific vocabulary and safety protocols is essential.
- **Learner readiness and support:** many apprentices, particularly younger learners, face profound anxiety, homesickness and insufficient pre-departure preparation. Structured support systems, including accompanying tutors, buddy systems and psychological safety mechanisms, are critical success factors.

8.3 Strategic Actions for inclusion

The Action Plan identifies the following priority measures for consideration by mobility providers, public authorities, funding bodies, VET organisations and employers, according to their respective competences:

- **Adequate financial support:** competent funding bodies and public authorities are encouraged to ensure that mobility support reflects actual participation costs and to make appropriate top-up mechanisms available to learners facing financial barriers.
- **Comprehensive pre-departure preparation:** sending organisations are encouraged to provide preparation covering workplace communication, construction-specific vocabulary, workplace culture, intercultural competence and occupational safety expectations.
- **Gender and diversity measures:** mobility providers and relevant sectoral actors are encouraged to adopt targeted measures to increase the participation and support of women and underrepresented groups in construction apprenticeships and mobility programmes.

- **Accessible mobility formats:** flexible mobility pathways, including shorter mobility experiences where appropriate, can provide an accessible entry point for learners who may face barriers to longer placements.

8.4 An Inclusive Apprenticeship Mobility Framework

Building upon the priorities set out above, the MOBUILDING Action Plan proposes an Inclusive Apprenticeship Mobility Framework that integrates equity, accessibility and learner support throughout the mobility cycle. Inclusion should not operate as an additional measure activated only when difficulties arise. It should inform outreach, learner selection, preparation, host placement, mentoring, monitoring and the recognition of learning outcomes.

This approach reflects the Erasmus+ Inclusion and Diversity Strategy, which identifies economic, social, cultural, geographical and disability-related barriers as potential obstacles to participation. The 2026 Erasmus+ Programme Guide also requires organisations to offer mobility opportunities in an inclusive and equitable manner and to make project activities accessible to participants from diverse backgrounds.

This requirement is especially important in construction. Apprentices complete practical tasks in safety-critical workplaces where language competence, clear instructions, accessibility arrangements and effective supervision affect both learning outcomes and occupational safety. Sending and host organisations should therefore identify potential barriers before confirming a placement and agree on the support, responsibilities and communication procedures required during mobility.

8.5 The Cypriot experience and lessons learned

The Cypriot context provides practical lessons for the development of inclusive apprenticeship mobility. Cyprus has a publicly regulated VET system in which mainstream technical and vocational education, evening technical schools and apprenticeship programmes are provided free of charge. The national apprenticeship system serves young people aged fourteen to eighteen, while the preparatory apprenticeship pathway may last up to two school years, depending on the learner's age and educational level.

Existing arrangements already recognise that some apprentices require support beyond occupational instruction. Cedefop reports that learners in the New Modern Apprenticeship system receive continuous assistance from trained career teachers, psychologists and social workers. This provides a useful foundation for international mobility, but cross-border placements require these support functions to be connected systematically with host employers, mobility coordinators and services in the destination country.

The Cypriot construction context also creates specific placement considerations. Eurostat data show that building construction generated more than half of the sector's value added in Cyprus in 2019, indicating the importance of active building-site environments within the national sector. For young apprentices entering unfamiliar construction sites abroad, inclusion planning must therefore address workplace induction, task allocation, communication, transport, accommodation, supervision and emergency procedures.

The main lesson from Cyprus is that existing educational support cannot simply stop at departure. Sending organisations should establish continuity between the support available within the national apprenticeship system and the arrangements provided by host organisations. This is particularly important for younger learners, participants with disabilities, learners with limited financial resources and those experiencing anxiety, homesickness or difficulties communicating in the host language.

8.6 Inclusive support measures

For **learners with disabilities**, sending organisations should complete an individual needs and accessibility assessment before selecting the host placement. The assessment should cover the accessibility of the workplace, accommodation and transport, as well as task adaptations, working schedules, communication support and assistive technologies. An Individual Inclusion Plan should define the reasonable accommodations required, the responsible persons and the review arrangements. Mobility activities should apply Universal Design principles wherever feasible while ensuring individual reasonable accommodation. EU policy specifically supports access to apprenticeships and training for persons with disabilities through accessibility and reasonable accommodation.

For **gender equality**, recruitment and selection procedures should actively challenge occupational stereotypes that discourage women from entering construction-related training. Participating/sending organisations should use gender-inclusive communication, female role models and mentors, transparent selection criteria and outreach activities aimed at women in VET. Host employers should provide gender-sensitive induction, suitable facilities and protective equipment, equal access to meaningful technical tasks, and zero-tolerance procedures for discrimination and harassment.

For **learners from disadvantaged socioeconomic backgrounds**, participating/sending organisations should provide clear information about available funding before recruitment and assess whether standard grants cover accommodation, transport, meals, insurance and local living costs. Where gaps remain, partners should use inclusion support, top-up grants or complementary funding. Payments should be made early enough to prevent learners from having to pre-finance essential mobility expenses.

All participants should complete **mandatory language and safety preparation**. Training should combine everyday communication with construction terminology, warning signs, personal protective equipment, emergency instructions, reporting procedures and the learner's workplace rights. MOBUILDING can contribute to this preparation through the learning resources and capacity-building activities developed under WP3.

During mobility, each learner should have a named contact in the sending organisation and a trained workplace mentor in the host organisation. Regular wellbeing check-ins, peer buddy arrangements and confidential reporting channels should allow problems to be identified early. Learners should receive clear instructions on whom to contact in cases of harassment, unsafe work, discrimination, accommodation problems or psychological distress.

8.7 Recommendations for Implementation

The MOBUILDING partnership recommends that participating organisations:

1. introduce a standard pre-mobility inclusion and accessibility assessment for every participant;
2. develop an Individual Inclusion Plan whenever additional educational, accessibility, financial or wellbeing support is identified;
3. verify workplace, accommodation and transport accessibility before confirming placements for learners with disabilities;
4. deliver compulsory construction-specific language, safety, intercultural and safeguarding preparation;
5. provide transparent funding information and flexible financial top-ups based on documented learner costs;
6. implement gender-responsive recruitment, mentoring and anti-harassment measures;

7. assign sending and host mentors and establish regular wellbeing monitoring and confidential reporting procedures;
8. review inclusion data after each mobility cycle and integrate the findings into programme improvement.

8.8 Proposed Inclusion Performance Indicators

The following indicators are proposed as a practical reference for organisations wishing to monitor the inclusion and accessibility of apprenticeship mobility. They are not additional contractual MOBUILDING KPIs; rather, they provide a framework that can be adapted to the scale, participant profile and national context of individual mobility schemes.

Objective	Indicator	Measurable target	Means of verification	Responsible actor
Complete inclusion planning	Participants receiving a documented needs assessment before placement	100%	Completed pre-mobility needs and accessibility assessment forms	Sending organisation
Support learners with identified needs	Required Individual Inclusion Plans agreed before departure	100%	Signed Individual Inclusion Plans held in the participant file	Sending organisation, with the host organisation
Ensure accessible placements	Identified accessibility arrangements confirmed before travel	100%	Placement confirmation checklist and host organisation declaration	Sending and host organisations jointly
Improve learner preparation	Participants completing language, safety and safeguarding preparation	100%	Preparation attendance and completion records	Sending organisation
Strengthen learner support	Participants assigned both sending and host contacts	100%	Mentor and contact-person assignment records; learning agreements	Sending and host organisations jointly
Improve gender inclusion	Female participation compared with the previous mobility-cycle baseline	Year-on-year increase	Participant registers disaggregated by gender	Sending organisation; consolidated by the mobility coordinator
Promote equitable access	Participation of learners with fewer opportunities compared with baseline	Year-on-year increase	Participant registers, using the Erasmus+ fewer-opportunities categories	Sending organisation; consolidated by the mobility coordinator
Maintain mobility quality	Participants reporting that support was accessible and timely	At least 90% positive responses	Post-mobility participant survey	Mobility coordinator, with methodological support from the evaluation partner

For each indicator the table also identifies a means of verification and the actor responsible for collecting the corresponding evidence, so that inclusion monitoring relies on records

generated by the mobility process itself rather than on additional reporting. Where a mobility scheme is managed by a consortium or intermediary body, the responsibilities attributed here to the sending organisation may be exercised jointly with the coordinating body. These indicators provide a practical reference for integrating inclusion, equality and accessibility into mobility quality assurance. They can inform participant preparation, placement planning, monitoring and continuous improvement within MOBUILDING and can also be adapted by other organisations implementing apprenticeship mobility schemes.

9. Green and Digital Transition

9.1 The Twin Transition imperative

The European construction sector is at the epicentre of the twin transition — the simultaneous shift towards green, sustainable building practices and digital construction methodologies. European climate, energy and construction policies, including the European Green Deal, the Renovation Wave and the Energy Performance of Buildings Directive, are accelerating demand for energy-efficient renovation, sustainable materials, renewable energy systems and more digitalised approaches to building design, construction and management. These transformations are creating growing demand for new and updated technical competences across the construction workforce.

As documented in D2.1, apprenticeship mobility is a powerful conduit for the transfer of these competences. Learners who undertake international placements gain hands-on experience with new materials, digital tools and diverse construction techniques not yet standard in their home countries. When they return, they bring innovative perspectives and good practices back to their home institutions and local SMEs, accelerating the sector's overall modernisation.

9.2 Green Transition skills for construction

- energy-efficient retrofitting and renovation techniques;
- sustainable and green building materials, including timber construction;
- renewable energy source installations, covering solar, wind and geothermal systems;
- green certification and compliance with EU energy directives, including the Energy Performance of Buildings Directive;
- circular economy principles applied to construction waste and material reuse.

9.3 Digital Transition skills for construction

- Building Information Modelling and digital design tools;
- smart infrastructure and Internet of Things applications on construction sites;
- three-dimensional printing and advanced manufacturing techniques;
- digital project management and site management platforms;
- drone technology and remote sensing for site inspection and monitoring.

9.4 Embedding the Twin Transition in mobility programmes

The MOBUILDING Action Plan recommends that green and/or digital competences be integrated into apprenticeship mobility wherever relevant to the learner's occupational profile, learning objectives and host-company activities. This can be supported through learning agreements that identify appropriate green and digital learning outcomes, thematic mobility pathways focused on areas such as sustainable construction or BIM, and the progressive integration of these competences into VET curricula. The expectation is therefore that green and digital learning outcomes are considered systematically for every placement, while the corresponding monitoring target used within MOBUILDING, set out in Section 11.2, refers to the share of pilot placements in which such outcomes are explicitly included in the learning agreement.

The green and digital transition should be integrated into the full apprenticeship mobility process rather than treated as a separate training topic. This includes participant preparation, company matching, learning agreements, workplace activities, mentoring, assessment and

the transfer of mobility results into VET curricula. In the construction sector, international mobility can offer learners direct experience with sustainable materials, energy-efficient renovation techniques, BIM applications and digital site-management tools that may not yet be widely used in their home institutions or local companies.

The Italian context provides a relevant basis for this approach. The construction sector is gradually adopting digital information management, BIM-based processes, energy-efficient renovation methods and more sustainable building solutions, and public procurement requirements have encouraged the increased use of BIM and digital construction processes. At the same time, Italy has a large building stock requiring energy renovation, creating growing demand for workers who understand insulation systems, renewable energy technologies, sustainable materials and digital building management.

9.5 Preparation, Learning Agreements and assessment

Before mobility, each learner should complete a basic skills assessment covering sustainable construction, BIM and general digital competences. Based on the results, the sending institution and the host company should prepare a structured learning agreement with clear and measurable outcomes. Depending on the learner's occupational profile, outcomes may include interpreting a BIM model, identifying energy-efficiency problems, installing insulation materials, using digital site documentation, recording construction waste or supporting the installation of renewable energy systems.

The learning agreement should also define how competences will be demonstrated. Evidence may include photographs, digital checklists, model screenshots, technical drawings, supervisor observations, short videos and a final learner report. This makes it possible to assess digital and green competences through real workplace activities rather than only through theoretical knowledge.

9.6 Building information modelling as a bridge between the Two Transitions

BIM should be one of the main tools connecting the green and digital dimensions of mobility, and its use should not be limited to architects, engineers or specialist designers. Apprentices working in carpentry, electrical installation, plumbing, masonry, renewable energy or site management can also use BIM according to their occupational level. During a placement, learners may navigate a model, read dimensions and technical information, compare planned elements with work completed on site, identify basic clashes, or attach photographs and notes to specific building elements.

More advanced learners may contribute to quantity calculations, construction scheduling, digital surveying, energy-performance analysis or the updating of as-built models. Learners should also become familiar with common data environments, file naming, version control, information sharing and basic data-security principles. Whenever possible, host companies should introduce open and interoperable formats such as IFC, so that learners understand digital collaboration beyond a single software platform.

9.7 Sustainable construction in practical workplace tasks

Sustainable construction should be integrated into practical tasks. Relevant activities may include energy-efficient renovation, the installation of insulation and high-performance windows, airtightness measures, photovoltaic systems, heat pumps, timber construction, prefabricated components and the use of recycled or low-impact materials. Learners may also participate in selective demolition, waste separation, material recovery and the documentation of resource use.

Host companies should explain not only how a task is completed, but also why a particular material or method is selected. Learners should understand how construction decisions influence energy consumption, emissions, waste generation, maintenance and the overall life cycle of a building.

9.8 Thematic mobility pathways

Three thematic mobility pathways are proposed. The first, **BIM for Sustainable Renovation**, would combine model reading, digital surveying, renovation-site documentation and energy-efficiency measures. The second, **Smart and Renewable Building Systems**, would focus on photovoltaic installations, heat pumps, sensors, building automation and basic Internet of Things applications. The third, **Circular and Industrialised Construction**, would cover timber or prefabricated systems, selective demolition, waste tracking, material reuse and off-site construction methods. Each pathway should also include occupational safety, environmental responsibility, digital collaboration, data protection and communication in an international workplace.

9.9 Curriculum ıntegration, recognition and staff development

Curriculum integration should follow a modular approach. A common introductory module could cover climate objectives, energy performance, circular construction, BIM fundamentals and digital site communication. These topics could then be adapted to different construction occupations through practical modules. A final project could require learners to plan, complete or document a small renovation or construction task using both sustainability criteria and digital tools.

Mobility outcomes should be assessed through clear rubrics based on workplace performance. Results may be recognised through Europass Mobility, digital badges or micro-credentials where possible. The modules developed through mobility should also be suitable for integration into regional VET programmes, apprenticeship training and continuing professional development courses.

Teacher and company-tutor training is equally important. Staff mobility, job shadowing and joint training activities can help trainers update their knowledge of BIM, sustainable materials, renewable energy systems and digital construction technologies. Host-company mentors should receive simple guidance on learning outcomes and assessment, while sending teachers should remain in regular contact with learners and supervisors during the placement.

After returning, participants should present a case study, demonstrate a digital tool or a sustainable technique and contribute learning materials to their institution. These activities can also involve local SMEs, other learners and trainers. In this way, mobility results are transferred beyond the individual participant and contribute to the wider modernisation of construction education.

Quality assurance should measure competence development as well as participant satisfaction. Indicators may include BIM-supported tasks completed, sustainable construction techniques practised, digital outputs produced, teachers trained and curriculum units updated. Through this approach, apprenticeship mobility becomes a practical tool for supporting the green and digital transformation of the construction sector.

9.10 Good Practices from Türkiye

Stakeholder consultation in Türkiye identified two relevant examples of how energy-efficiency competences can be integrated into vocational education. The YENİ NESİL Project, implemented in 2017–2018 under the EU IPA Programme through cooperation between Özyeğin University's Centre for Energy, Environment and Economy, EYODER and ENVER,

combined energy audits in vocational schools with teacher guidance materials and an energy-efficiency training module for students. The initiative demonstrated how real school buildings can be used as practical learning environments while bringing together universities, civil society organisations, public institutions and local authorities.

The NEXT-GEN Project, implemented in 2019–2020 with support from the Islamic Development Bank's Transformers Fund, extended a similar approach to vocational and technical schools across ten provinces in south-eastern Türkiye. Its activities included energy audits in pilot schools, in-service teacher training, educational modules on energy efficiency and renewable energy, and an artificial intelligence-supported learning platform through which materials were made available to students, teachers and the wider public.

These practices provide a transferable model for MOBUILDING. Mobility pathways could combine workplace placements with building-energy assessments, practical energy-efficiency assignments, teacher training and digital learning resources. They also illustrate how green-skills training can be scaled from individual pilot institutions to wider regional and national VET networks.

10. Implementation Roadmap

10.1 Phased implementation approach

The MOBUILDING Action Plan adopts a phased and iterative implementation approach that connects the strategic priorities and recommended actions identified in the previous chapters with the subsequent activities of the project. The roadmap spans the MOBUILDING implementation period from March 2025 to February 2028 and extends towards post-project sustainability, moving from the establishment of enabling conditions to practical testing, refinement, consolidation and wider uptake.

MOBUILDING provides an initial environment in which several of the Action Plan's priorities can be supported and tested through the European Platform, capacity-building activities, stakeholder cooperation and pilot mobility. Wider implementation of the recommendations will, however, depend on the involvement of the relevant VET providers, employers, intermediary organisations, social partners and public authorities according to their respective competences and national or regional contexts.

10.2 Phase 1. Foundation and Framework (March 2025 – August 2026)

- Consolidate the evidence and priorities emerging from D2.1 and D2.2.
- Establish the MOBUILDING European Platform as a common infrastructure for networking, capacity building and mobility management.
- Activate the Building Apprenticeship Mobility Network to strengthen cooperation between VET providers, employers and other mobility actors.
- Develop practical guidance and capacity-building resources supporting the effective management of apprenticeship mobility.
- Engage VET providers, smes, social partners and relevant public authorities in preparing the conditions for pilot implementation.

During the first phase, project partners will focus on establishing the operational and institutional foundations required for implementation. This includes completing research activities, validating the Action Plan, launching the MOBUILDING European Platform and developing construction-specific mobility toolkits covering health and safety guidance, insurance information, legal procedures, risk assessment templates and example work tasks for different construction professions. TÜRKONFED will organise capacity-building workshops and awareness-raising activities targeting SMEs, VET providers and sectoral organisations in order to improve understanding of apprenticeship mobility procedures and strengthen employer participation.

Required resources for this phase include digital infrastructure, expert facilitators, dissemination materials, administrative coordination staff and financial support for stakeholder engagement activities. Success indicators will include the number of participating SMEs, completed training workshops, active platform users and successfully delivered project outputs.

10.3 Phase 2. Piloting and Learning (September 2026 – August 2027)

- İmplement and monitor pilot apprenticeship mobility activities across the MOBUILDING partnership.

- Use and test the relevant Platform functions, Training Programme resources and support mechanisms in real mobility contexts.
- Collect structured feedback from apprentices, VET providers, host companies and other participating actors.
- Assess the effectiveness of approaches related to preparation, inclusion, SME engagement, workplace learning, recognition and green/digital skills.
- İdentify lessons, transferable practices and areas requiring adaptation.
- Feed the resulting evidence into the project's policy recommendations and Policy Toolbox.

The second phase focuses on pilot implementation and the practical testing of apprenticeship mobility placements across partner countries. During this period apprentices, SMEs and VET providers will participate in cross-border mobility activities using the support structures and guidance materials developed during the first stage. Sector-specific mobility toolkits and intermediary support mechanisms will help reduce administrative complexity and operational risks for employers. Project partners will continuously monitor implementation progress through predefined key performance indicators related to placement completion rates, apprentice satisfaction, employer feedback and stakeholder participation levels.

Pilot activities will also support organisational learning and the refinement of mobility procedures. Continuous evaluation meetings and stakeholder feedback collection will allow the consortium to improve coordination mechanisms and identify practical solutions to implementation challenges.

Risk management will remain a central element throughout implementation. Potential challenges include administrative delays, language barriers, accommodation difficulties, financial pressures on SMEs and occupational safety concerns on construction sites. Mitigation measures will include simplified administrative procedures, intermediary support systems, clear communication channels, flexible implementation planning and continuous mentoring for participating stakeholders.

10.4 Phase 3. Scaling and Sustainability (September 2027 – February 2028 and beyond)

- Consolidate lessons and evidence generated through the pilot mobility activities.
- Refine action plan recommendations on the basis of implementation experience.
- Disseminate validated practices and practical resources through the mobuıldıng platform and stakeholder networks.
- Strengthen cooperation with european, national, regional and sectoral stakeholders able to support wider uptake.
- İntegrate relevant lessons into the policy toolbox and final project recommendations.
- Promote the continued use of the platform, network, training programme and other relevant project results beyond the funded period.

The final phase focuses on scaling successful pilot approaches and ensuring long-term sustainability beyond the project duration. Successful practices and tested mobility models will be integrated into long-term cooperation structures between SMEs, VET institutions, chambers of commerce and sectoral organisations. The MOBUILDING European Platform will continue to serve as a coordination and networking mechanism supporting future apprenticeship mobility activities.

TÜRKONFED and project partners will also continue dissemination and policy advocacy activities at national and European levels. Recommendations developed through the

MOBUILDING Policy Toolbox will support discussions with policymakers, employer organisations and vocational education stakeholders regarding supportive financial incentives and regulatory frameworks for apprenticeship mobility. Long-term sustainability will be strengthened through stakeholder ownership, repeat SME participation, institutional cooperation and engagement with European-level actors. Success will ultimately be measured through continued platform use, increased employer engagement, expanded mobility partnerships and the long-term integration of apprenticeship mobility into vocational education and training systems.

Phase	Indicative timeframe	Main focus	Key actors	Expected result
1. Foundation & Framework	March 2025 – August 2026	Evidence, infrastructure, capacity and stakeholder mobilisation	MOBUILDING partners; VET providers; SMEs; social partners	Enabling conditions and support structures established
2. Piloting and Learning	September 2026 – August 2027	Practical testing, feedback and improvement	Apprentices; VET providers; host companies; MOBUILDING partners	Evidence on feasibility and effectiveness generated; approaches refined
3. Scaling and Sustainability	September 2027 – February 2028 and beyond	Knowledge transfer, policy uptake and continuity	MOBUILDING partners; stakeholder networks; relevant public and sectoral actors	Effective approaches consolidated and conditions for wider uptake established

The table sets out the main focus, indicative timeframe, principal actors and expected results of each phase. It is intended as an orientation for implementation rather than as a commitment on behalf of individual organisations: the precise timing, distribution of responsibilities and outputs of each action will depend on the competences, resources and national context of the actors involved. Progress across these phases will be assessed through the monitoring framework presented in Chapter 11, which links implementation priorities with appropriate indicators and sources of evidence.

11. Monitoring Framework and KPIs

11.1 Purpose and principles

A robust monitoring and evaluation framework is essential to ensuring that the MOBUILDING Action Plan delivers measurable, attributable impact. The framework is designed around three core principles: transparency, meaning that all indicators, data sources and responsibilities are clearly defined; proportionality, meaning that the monitoring burden remains proportionate to the resources available; and learning, meaning that monitoring results feed back into programme adaptation and improvement.

The monitoring system operates on a continuous collect–review–adapt cycle, coordinated by the partners responsible for their respective countries with methodological support from INQS. Data collection combines quantitative and qualitative methods matched to the indicators set out below.

11.2 Key Performance Indicators

The following indicators are proposed to monitor key dimensions of Action Plan implementation and the experience generated through MOBUILDING activities. They complement, but should not be interpreted as replacing or extending, the contractual indicators established in the MOBUILDING Grant Agreement. Where appropriate, baselines and targets will be refined on the basis of pilot implementation and available data.

KPI Category	Indicator	Target	Prepared by
Mobility participation (SO2, SO3)	Number of apprentices participating in cross-border mobility through MOBUILDING pilot activities	Progressive increase over the pilot period, in line with the mobility volumes foreseen in the Grant Agreement	TÜRKONFED / all partners
Employability outcomes (SO5)	Share of participants in employment, further training or continued apprenticeship six months after the end of the placement, compared with their situation recorded at selection	Indicative target of a 25% relative improvement on the pre-mobility baseline, measured six months after completion	INQS / all partners
SME engagement (SO3)	Number of SMEs actively participating in mobility schemes as hosts or senders	Minimum 50 SMEs across partner countries	TÜRKONFED / INFODEF
VET provider capacity (SO2)	Number of VET providers with dedicated internationalisation capacity	All consortium VET providers	INQS / all partners
Platform usage (SO2, SO6)	Number of registered users on the MOBUILDING European Platform	70 registered users	INQS
Policy uptake (SO1)	Number of national or regional policy recommendations adopted or under consideration	Minimum 3 policy changes across partner countries	INFODEF / ECTE
Inclusion (SO4)	Share of mobility participants from disadvantaged backgrounds and share of female participants	Year-on-year increase against the baseline recorded in the first mobility cycle, complemented by the inclusion	CARDET

KPI Category	Indicator	Target	Prepared by
		indicators set out in Section 8.8	
Green and digital skills (SO5)	Share of mobility placements including explicit green or digital learning outcomes in the learning agreement	Minimum 60% of pilot placements	ENAIP
Governance (SO6)	Existence of an operational regional coordination mechanism for apprenticeship mobility, whether a newly established consortium or an existing body performing this function	At least one operational mechanism identified or established per partner country	EDUCACYL / GOI

Each indicator is operationalised through a KPI tracking system that defines the indicator itself, its baseline, target, data source, collection method, measurement frequency and responsible partner. This prevents the ambiguity that commonly undermines multi-country monitoring, ensures that indicative targets are confirmed, quantified or adjusted at the baseline evaluation, and provides continuity in the event of changes in partner personnel. The approach is comparable to the monitoring checks conducted in the project to date, whereby all elements relating to the key KPI components are clearly defined, updates are gathered on a regular basis, and results are analysed and summarised so that findings and recommendations are made explicit.

Two indicators require additional methodological specification. For the employability indicator, the baseline is the situation of each participant at the moment of selection, as recorded in the participant file; the denominator is the number of participants who completed a mobility placement and responded to the follow-up survey; and the reference moment is six months after the end of the placement. Employment recorded immediately after mobility and at three months is collected separately for descriptive purposes and is not used for this indicator, since the three measurements are not comparable. For the governance indicator, what is measured is the existence of an operational regional coordination mechanism for apprenticeship mobility, irrespective of its legal form. A regional authority, chamber, employer federation or VET consortium already performing this coordination function is counted; the creation of a new body is not required and would not in itself be sufficient.

11.3 Data Collection

Quantitative data will be gathered through standardised activity records maintained by each partner, covering mobility placements initiated and completed, SMEs engaged, VET providers engaged and registered users of the MOBUILDING European Platform. These records may be completed by individual stakeholders or gathered by partners through direct communication and cross-tabulation of sources, including the Platform itself. Quantitative data collection will also include structured surveys of apprentices, SMEs and VET providers administered before and after mobility placements, capturing satisfaction, skills development and employment outcomes.

Qualitative data will be gathered through semi-structured interviews and focus groups with key stakeholder groups, including apprentices, host employers and VET staff, conducted following pilot placements. The results will inform partner reflection reports relevant to specific monitoring milestones, and will also be used to document MOBUILDING case studies and good practices in mobility, which in turn support project promotion and dissemination.

For both qualitative and quantitative data, all partners will use common templates and tools to ensure consistency and comparability across the nine partner organisations and their countries. These will be supported by usage instructions prepared by INQS for partners, and by clear guidelines for any stakeholder engaging with the data-collection tools.

11.4 Reporting rhythm

Reporting follows a three-tier rhythm aligned with the Implementation Roadmap set out in Chapter 10. At operational level, partners submit monitoring data twice yearly using the common templates, with submissions timed to precede transnational partner meetings so that findings can be discussed in person; this frequency may be adjusted in the light of partner circumstances and mobility timelines. At strategic level, INQS consolidates all partner data into a periodic monitoring report for the Action Plan, assessing progress, flagging deviations and proposing corrective actions. These reports are reviewed by the Management Committee and shared with the Strategic Guidance Committee for an external perspective.

At milestone level, three formal evaluation points — baseline at the adoption of the Action Plan in 2026, mid-term following the pilot phase in 2027, and final in 2028 — provide structured moments for deeper assessment, integrating survey results, qualitative findings and external quality assessment recommendations. Partners may also adopt a traffic-light system to identify key or urgent issues, comparable to the risk index developed by INQS and INFODEF for the MOBUILDING project.

11.5 Alignment with European Quality Assurance

The proposed monitoring system draws on Ireland's statutory approach to VET quality assurance, developed under Quality and Qualifications Ireland, which is applied across the entire further education and training sector, including the national apprenticeship system. The framework is also aligned with the EQAVET quality cycle of planning, implementation, evaluation and review, on which the Irish VET quality assurance system is itself based. This ensures that MOBUILDING's monitoring is compatible with the European quality assurance architecture and credible to policymakers and funding bodies across partner countries.

Taken together, these processes provide a proportionate, practical and implementable system: rigorous enough to demonstrate impact, light enough to be sustained by partners alongside delivery, and designed to feed learning back into the continuous improvement of the Action Plan itself. A question that will be revisited during the piloting phase is the appropriate scope of the system in the longer term, that is, whether monitoring should remain an instrument for the MOBUILDING partnership or evolve into a more general framework of suggested indicators and data-gathering processes for apprenticeship mobility stakeholders at national level.

12. Governance and Sustainability

12.1 Long-Term Governance Architecture

The sustainability of the MOBUILDING Action Plan beyond the project duration depends on durable coordination and cooperation mechanisms capable of maintaining stakeholder engagement, responding to evolving policy contexts and supporting the continued use and development of the MOBUILDING European Platform and mobility network. Wherever possible, these functions should be embedded within or connected to existing VET, employer and regional cooperation structures rather than requiring the creation of new standalone bodies.

12.2 Key sustainability principles

- **Institutional anchoring:** embedding mobility coordination functions within existing institutional structures such as VET consortia, employer federations and regional authorities, rather than creating standalone entities that risk collapse when project funding ends.
- **Financial diversification:** developing diverse funding streams, including Erasmus+, national VET funding, employer contributions and regional structural funds, in order to reduce dependence on any single source.
- **Knowledge management:** systematically documenting and disseminating good practices, lessons learned and case studies to ensure that institutional knowledge is retained and transferable.
- **European networking:** embedding the MOBUILDING network within broader European initiatives, including the European Alliance for Apprenticeships, the Construction Blueprint and Europass, in order to leverage external resources and expertise.
- **Policy legacy:** using the Policy Toolbox (D4.2) to advocate structural legislative changes that create a self-sustaining regulatory environment for apprenticeship mobility, independent of project funding.

12.3 The role of North Macedonia and Türkiye

North Macedonia and Türkiye are third countries associated to Erasmus+ and can participate in most programme opportunities. Nevertheless, as highlighted through the MOBUILDING analysis, practical challenges affecting apprenticeship mobility may remain, including differences between national apprenticeship systems, institutional and administrative capacity, recognition procedures, language preparation and SME participation. Long-term sustainability should therefore combine European-level cooperation with strong national and sectoral coordination mechanisms adapted to the specific context of each country.

The cooperation established through MOBUILDING, particularly through the Building Apprenticeship Mobility Network and the European Platform, provides a basis for maintaining links between VET providers, employers and other mobility stakeholders beyond the funded project period. Sustainability will depend on the extent to which these cooperation mechanisms remain useful to stakeholders and become connected to existing national, sectoral and European networks.

12.4 A Two-Level Governance Model

After the project, the MOBUILDING network should operate through a two-level governance model. At European level, a MOBUILDING Steering Group should bring together VET

providers, employer organisations, construction companies and mobility experts. Its responsibilities would include maintaining the European Platform, reviewing mobility standards, coordinating future funding applications and updating the Action Plan in response to policy and labour market developments. Leadership could rotate among partners every two years to ensure shared ownership.

At the national level, coordination groups should be established in North Macedonia and Türkiye. These groups should include VET schools and centres, chambers and employer federations, construction-sector representatives, public authorities and organisations supporting international mobility. EMKICE KIC can connect education providers with companies, promote mobility among employers and support dialogue on recognition, mentoring and quality assurance. In Türkiye, TÜRKONFED and regional business networks can help mobilise SMEs and connect mobility activities with regional development priorities.

The model should remain light and practical. Instead of creating a new legal entity, MOBUILDING functions should be embedded within existing organisations. Each national group should appoint a mobility contact point responsible for sharing opportunities, identifying host companies, supporting applications and collecting placement data. Regular online meetings and one annual European review meeting would be sufficient to monitor progress and agree on priorities.

12.5 A Three-Year post-project plan

Post-project sustainability should be guided by a three-year plan. During the first year, partners should maintain the Platform, update the host-company database and prepare at least one follow-up Erasmus+ application. In the second year, the network should expand to additional VET providers and companies and test mobility pathways linked to BIM, sustainable construction and digital site skills. By the third year, selected mobility modules and quality standards should be integrated into the regular internationalisation strategies of participating institutions.

12.6 Financial sustainability

Financial sustainability requires diversified resources. Erasmus+ should remain a central funding source, including mobility projects, accreditation and cooperation partnerships. Partners should also explore national VET budgets, Instrument for Pre-accession Assistance opportunities, regional development funds, municipal support and company contributions. North Macedonia may connect MOBUILDING activities with reforms and investments supported through the EU Growth Plan for the Western Balkans, while Türkiye can use relevant pre-accession and national vocational-training instruments. Employer support may also be provided in kind through mentors, equipment, workplace access, accommodation or staff time.

12.7 SME involvement and knowledge management

The active involvement of construction SMEs is essential. Many smaller companies are interested in mobility but lack the capacity to manage applications and reporting. National coordination groups should therefore provide shared services, including standard agreements, mentoring guides, safety checklists and simple assessment tools. Mobility consortia can allow several SMEs to participate through one coordinating VET or employer organisation, reducing the administrative burden.

Knowledge management will be supported through the MOBUILDING European Platform, which should retain mobility guidelines, company profiles, learning agreements, policy recommendations, case studies and training materials. Partners should review the content annually and assign responsibility for technical maintenance. Learners, trainers and

companies should also contribute short case studies so that the Platform remains active and practice-oriented.

12.8 Regional Integration

Regional integration should connect North Macedonia and Türkiye with neighbouring countries and wider European networks. North Macedonia can strengthen links with Western Balkan mobility and skills initiatives, including cooperation supported by the Regional Cooperation Council. Türkiye can contribute through its extensive VET and business networks and its links with European and neighbouring labour markets. Joint Balkan and South-East European mobility routes could focus on energy-efficient renovation, BIM, timber construction and renewable-energy installation.

12.9 Measuring Sustainability

Sustainability should be measured through practical indicators: placements continuing after the project, active host companies, new institutions joining the network, follow-up applications submitted, mobility modules integrated into curricula, and learners whose competences are formally recognised. Through institutional anchoring, shared governance, diversified funding and regional cooperation, MOBUILDING can develop from a time-limited project into a durable apprenticeship mobility ecosystem.

13. Conclusions

The MOBUILDING Action Plan to Foster Apprenticeship Mobility in the Building Sector in Europe provides a comprehensive and evidence-based strategic framework for strengthening cross-border apprenticeship mobility in the construction sector. Building on the findings of Deliverable 2.1 and the experiences of the seven partner countries, the Action Plan moves beyond the identification of barriers and proposes a coordinated set of measures addressed to VET providers, employers, intermediary organisations, social partners, public authorities and other relevant mobility actors.

The European construction sector cannot effectively respond to labour shortages, demographic change and the green and digital transitions without investing in a workforce that is adaptable, internationally experienced and equipped with future-oriented competences. Cross-border apprenticeship mobility can contribute directly to this objective by exposing learners to different working methods, technologies, safety cultures and organisational environments. It can also support the transfer of innovation between countries, VET institutions and local construction companies.

However, the evidence collected through MOBUILDING confirms that mobility cannot be expanded through funding opportunities alone. Legal uncertainty, fragmented recognition procedures, administrative burdens, inadequate financial support, language and safety concerns, limited institutional capacity and employer reluctance continue to restrict participation. These challenges are especially significant for SMEs, which form the backbone of the construction sector but often lack the staff time, financial resources and administrative expertise required to host or send apprentices. The evidence underpinning these conclusions is largely qualitative, drawn from interviews, focus groups and institutional analysis in seven countries, and the figures reported in this document should therefore be read as indicative of the situations described by stakeholders rather than as representative sectoral statistics.

The Action Plan responds to these interconnected challenges through six complementary priorities. It promotes a more supportive regulatory and policy environment, strengthens the organisational capacity of mobility actors, encourages SME participation, advances inclusive and learner-centred mobility, integrates green and digital competences into work-based learning, and establishes the foundations of a sustainable mobility ecosystem. Together, these priorities recognise that successful apprenticeship mobility requires coordinated action at local, regional, national and European levels.

A central message of the Action Plan is that there can be no single standardised model applicable to every country. National apprenticeship systems, employment regulations, recognition mechanisms and institutional capacities vary considerably. MOBUILDING therefore combines shared European principles with flexible national and regional implementation. Common quality standards, learning agreements, recognition tools and monitoring approaches should be applied while allowing partners to adapt mobility formats to their legal, economic and educational contexts.

A further distinction runs through the document. Some of the measures proposed can be taken forward directly by VET providers, employers, intermediary organisations and the MOBUILDING partnership, while others, particularly those concerning legal status, funding mechanisms and recognition rules, are recommendations addressed to competent national and regional authorities. Similarly, the actions supported and tested within the MOBUILDING project period should not be confused with the wider implementation of the Action Plan, which depends on actors beyond the consortium and on timeframes extending beyond the project. Making this distinction explicit is intended to keep the Plan both ambitious and realistic about what each actor can commit to.

Governance and social dialogue will be essential to this process. Sustainable mobility ecosystems must connect VET providers, construction companies, employer federations,

trade unions, public authorities and apprentices themselves. Existing or newly developed multi-stakeholder coordination mechanisms, including regional mobility consortia where appropriate, can reduce institutional fragmentation, distribute responsibilities and provide practical support to organisations with limited capacity.

The participation of SMEs should remain a specific priority. Simplified procedures, practical sector-specific resources, intermediary support, appropriate financial and non-financial support mechanisms, and recognition of mobility-engaged employers can reduce the real and perceived barriers to participation. Employer engagement should be based on a clear value proposition, demonstrating how mobility contributes to skills development, innovation, recruitment, international cooperation and the modernisation of the construction sector.

At the same time, expansion must not take place at the expense of inclusion or quality. Mobility opportunities should be accessible regardless of gender, socioeconomic background, disability, nationality or geographical location. Adequate financial support, appropriate language and intercultural preparation, mentoring and other support arrangements adapted to learners' needs should therefore form part of a quality mobility approach. Learning outcomes must also be clearly defined, assessed and formally recognised so that mobility becomes a meaningful part of the apprenticeship pathway rather than an extracurricular experience.

The green and digital transition provides both an urgent reason and a practical focus for expanding mobility. Structured placements can give apprentices direct experience with BIM, digital site-management tools, energy-efficient renovation, sustainable materials, renewable-energy systems and circular construction practices. Where relevant to the occupational profile and mobility objectives, integrating green and/or digital competences into learning agreements, workplace tasks and assessment processes can strengthen the contribution of mobility to the future skills needs of the sector.

Implementation will follow a phased process moving from foundation and framework development to piloting, learning and refinement, and finally to consolidation, transfer and sustainability. Monitoring will support this process by assessing participation, SME engagement, inclusion, competence development, institutional capacity and the quality of mobility experiences, while allowing lessons from implementation to inform continuous improvement. Each indicator is linked to at least one strategic objective and is accompanied by an identified source of evidence, a responsible actor and, where relevant, a baseline and reference period, so that progress can be verified rather than asserted. Where the Action Plan refers to coordination mechanisms, what matters is that the function is performed, whether through a newly created structure or through an existing body already active in the region.

This Action Plan also provides the strategic compass for the consortium's remaining outputs: the MOBUILDING European Platform, the Training Programme, the Building Apprenticeship Mobility Network and the Policy Toolbox. Together, these outputs form an integrated ecosystem of practical resources, capacity-building measures, partnerships and advocacy instruments.

The long-term success of MOBUILDING will ultimately depend on whether its approaches become embedded within existing institutions and continue beyond the project period. Through shared governance, diversified funding, curriculum integration, active employer involvement and continued European cooperation, MOBUILDING can develop from a time-limited initiative into a durable mobility ecosystem.

The ambition is clear: to move apprenticeship mobility from the periphery of VET systems to their very heart, ensuring that apprentices across the European construction sector can access high-quality, inclusive, safe and formally recognised international learning experiences that prepare them for the challenges and opportunities of the twenty-first century.

References

European and International Frameworks and Studies

- Cedefop. (2021). *Cross-border long-term apprentice mobility: making it work — suggestions for national policy-makers.* Publications Office of the European Union.
- Cedefop. (2021). *Enablers and disablers of cross-border long-term apprentice mobility: evidence from country- and project-level investigations.*
- Cedefop. (2020). *Financing apprenticeships in the EU.* Publications Office of the European Union.
- Cedefop. *Vocational education and training in Cyprus: short description.* Publications Office of the European Union.
- Council of the European Union. (2022). *Council Recommendation on a European strategy for universities and on building bridges for effective European higher education cooperation ("Europe on the Move").*
- European Alliance for Apprenticeships. (2024). *EAfA webinar: integrating mobility in apprenticeships — from theory to practice.*
- European Commission. (2023). *Erasmus+ Programme Guide.*
- European Commission. (2026). *Erasmus+ Programme Guide.*
- European Commission. *Implementation guidelines: Erasmus+ and European Solidarity Corps Inclusion and Diversity Strategy.*
- European Commission. (2024). *Education and Training Monitor 2024.*
- Council of the European Union (2024). *Council Recommendation of 13 May 2024 'Europe on the Move' – learning mobility opportunities for everyone (2024/C 3364).* Official Journal of the European Union.
- European Commission (2026). *Commission Staff Working Document accompanying the Report on the implementation of the Council Recommendation of 24 November 2020 on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience*, SWD(2026) 181 final.
- European Commission — Eurostat. (2022). *Key figures on European business: construction.*
- European Labour Authority. (2024). *EURES report on labour shortages and surpluses 2023.*
- European Parliament. (2016). *Resolution on the application of the UN Convention on the Rights of Persons with Disabilities (2015/2258(INI)).*
- OECD. (2023). *Building future-ready vocational education and training systems.*
- UNESCO. (2015). *Unleashing the potential: transforming technical and vocational education and training.*

National and Academic Literature by Country

Spain

- Ministry of Education. (2020). *Vocational Training Modernisation Plan.*
- SEPIE. (2014–2020). *Erasmus+ mobility for vocational training students in Spain.*
- Organic Law 3/2022 of 31 March on the organisation and integration of vocational training.

Türkiye

- *Atiyas, İ., et al. (2023). SME outlook report: Türkiye 2022. TÜRKONFED.*
- *İŞKUR (Turkish Employment Agency). İstanbul Provincial Labour Market Research Reports (İşgücü Piyasası Araştırması, conducted annually since 2007).* Available at: https://www.iskur.gov.tr/kurumsal/raporlar/isgucu-piyasasi-raporlari/isgucu-piyasasi-arastirmasi-raporlari/2024/il-raporlari/
- *Ministry of National Education (2018). Outlook of Vocational and Technical Education in Turkey. Hosted on ETF Open Space.* Available at: https://openspace.etf.europa.eu/system/files/2020-02/__Outlook%20of%20VET_MONE_2018.pdf
- *Ministry of National Education. Mesleğim Hayatım (My Profession, My Life) vocational guidance platform*. https://meslegimhayatim.meb.gov.tr/
- *Ministry of National Education (2019). İstanbul'da Mesleki ve Teknik Eğitimin Geleceği için İşbirliği. 25 January 2019.* https://www.meb.gov.tr/istanbulda-mesleki-ve-teknik-egitimin-gelecegi-icin-isbirligi/haber/17918/tr
- *"İTO ve MEB iş birliğiyle meslek liselerinde yeni dönem: Hedef 100 okul," Haber7 Ekonomi, 19 December 2025.* https://ekonomi.haber7.com/ekonomi/haber/3589418-ito-ve-meb-is-birligiyle-meslek-liselerinde-yeni-donem-hedef-100-okul
- *İstanbul Provincial Directorate of National Education (2026). İstanbul'da Mesleki Eğitim Çalıştayı Yapıldı. June 2026.* https://istanbul.meb.gov.tr/www/istanbul039da-mesleki-egitim-calistayi-yapildi/icerik/6336
- *Provincial Administration Law No. 5442.* Available at: https://www.mevzuat.gov.tr/MevzuatMetin/1.3.5442.pdf
- *Vocational Education Law No. 3308.* Available at: https://www.mevzuat.gov.tr/MevzuatMetin/1.5.3308.pdf
- *Vocational Qualifications Authority (MYK) (2016). Turkish referencing report.* https://www.myk.gov.tr/en/page/88
- *Vocational Qualifications Authority (MYK). Construction Sector Committee: National Occupational Standards and National Qualifications.* https://myk.gov.tr/tr/page/108

Italy

- Cedefop ReferNet. *International mobility in apprenticeships: focus on long-term mobility — Italy.*
- Legislative Decree No. 81 of 15 June 2015, Article 43.

Cyprus

- Human Resource Development Authority. (2021). *Annual report 2021.*
- Ministry of Education, Sport and Youth. (2020). *Annual report 2020.*

Ireland

- Department of Further and Higher Education, Research, Innovation and Science. (2021). *Action plan for apprenticeship 2021 to 2025.*
- Industrial Training Act 1967.
- Quality and Qualifications Ireland. *Statutory quality assurance guidelines for further education and training providers.*
- SOLAS. (2024). *Apprenticeship client services system.*

Greece

- BUILD UP Skills. (2013). *Greece national roadmap.*
- EOPPEP (National Organisation for the Certification of Qualifications). ReferNet publications.

North Macedonia

- Cedefop. *North Macedonia: national qualifications framework country report.*
- European Training Foundation. (2023). *North Macedonia: Torino Process system monitoring report.*
- European Training Foundation. *Skills demand and supply in North Macedonia.*
- Ministry of Education and Science of North Macedonia. *Education Strategy 2026–2032.*