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New fields for apprenticeship

**Insights for successful
expansion of
apprenticeships
to new sectors
and occupations**



Scaffolding: the case for apprenticeship

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9.1. Introduction

Scaffolding has been transformed in the post-war period to become a recognised occupation in many European countries, accompanied by often obligatory vocational education and training (VET). In Germany, for instance, rather than being simply an activity carried out in the process of building, scaffolding became a recognised occupation in 1991 and a full *Beruf* in 1998, with a three-year apprenticeship programme resulting in a formal qualification. However, certified training has been more common than apprenticeship, as in Denmark, where, given the dangerous nature of the work, in 1997 it was required that no one should erect or dismantle scaffolding over three metres high without specialist training.

In 2021, a two-year construction apprenticeship programme was introduced in Ireland, including on-the-job training with an approved employer and off-the-job training at the National Construction Training Campus (in the purpose-built scaffolding apprenticeship building) to become a fully qualified scaffolder. This apprenticeship exists alongside the formal training certification requirement for scaffolding, including occupational safety and health (OSH) training under the construction skills certification scheme (CSCS) for basic and advanced scaffolding. In contrast to Ireland, the case of the Netherlands provides a warning in that the scaffolding apprenticeship programme, which contained an on-the-job pathway and a classroom-based element including, for instance, Dutch, maths and citizenship, is no longer offered because of lack of enrolment. Instead, Safe Working at Height Foundation certification is preferred. This was established in 2016 to demonstrate professional competence; it is only for those over 18 years old and consists of courses to become an assistant scaffolder, a scaffolder, a chief scaffolder, a scaffolding foreperson, a scaffolding inspector and a supervisor of scaffolding in use.

The introduction of a new scaffolding apprenticeship in Ireland and the simultaneous demise of the Dutch scaffolding apprenticeship raise many questions pertinent to this publication, which this paper seeks to address. Are these changes attributable to the nature of the apprenticeship and the VET system in place, to labour market conditions, to the role of the social partners or to a combination of factors? We draw on an EU-funded project of the European Federation of Building and Woodworkers (EFBWW) conducted between 2023 and 2024: ‘Improving training, working conditions, and transformation in the European scaffolding sector’ (Scaffold). This project details the state of scaffolding and scaffolding VET in six European countries: Belgium, Denmark, Germany, Ireland, the Netherlands and Poland (EFBWW, 2024a, b; Durán-Palma et al., 2024). In this paper, we discuss the nature of scaffolding work, assess and compare attempts to ground scaffolding as an apprentice occupation in Denmark, Germany and Ireland, and put forward recommendations on common standards for scaffolding apprenticeship in Europe. The variation in the form that scaffolding apprenticeship takes, as illustrated in these three countries, provides valuable insights into the opportunities and challenges of introducing apprenticeships more widely across Europe into what, in the case of scaffolding, is becoming an ever more complex activity.

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9.1.1. What is scaffolding?

The activity of scaffolding is summarised in reference to the English standard apprenticeship for scaffolding:

Erecting, altering and dismantling scaffolding, to allow other trades to work safely at height from secure working platforms.

(Institute for Apprenticeships and Technical Education, 2023)

This is sufficient as a brief summary of what scaffolders do. It does not, however, do justice to scaffolding as an occupation. Indeed, when considered an integrated activity, the work of scaffolders is a species of project management involving planning, execution, problem-solving, finishing and evaluation. The EFBWW final report of 2024 goes into this in more detail, showing that the work of scaffolders is based on a cycle of activity (Durán-Palma et al., 2024). Not all scaffolding workers fully participate in all aspects but, within the hierarchy of qualified scaffolding work, the following broadly consecutive functions can be identified:

- (a) scoping work to be undertaken;
- (b) designing and planning work involved and commissioning the necessary equipment and workforce;
- (c) selecting, loading, transporting and unloading scaffolding parts;
- (d) erecting scaffolding structures;
- (e) inspecting, monitoring, maintaining and modifying structures;
- (f) dismantling structures;
- (g) removing and disposing of structures and waste;
- (h) evaluating work undertaken (optional);
- (i) concurrent with the above, and particularly in relation to (c) and (d), is an inspection, which is often carried out by a senior scaffolder with a specialist qualification.

These nine functions are often divided among different kinds of scaffolders with different levels of knowledge, know-how, authority and responsibility, reflecting their preparation for their respective roles. A prospective scaffolder, prepared to take on most of the activities described in the cycle, needs extensive and systematic preparation. The complexity and dangers of scaffolding work make considerable training-centre-based, work-based and classroom-based learning and consolidation essential. The dependence of scaffolders on equipment requires that they learn about measurement, tolerances, properties of materials, and soil and weather conditions, and about technological advances. In addition, there are social implications that impact on their work, in particular the wellbeing of scaffolding users and clients, and the wider public. Consequently, a degree of theoretical education, tightly integrated with workplace operations, is indispensable in developing scaffolders who can work competently and safely while at the same time attending to their welfare, that of their colleagues and clients, and the wider public.

Not surprisingly, there are different approaches both to scaffolding and to scaffolding VET across Europe, including integration into other construction occupations (Poland), training courses leading to certification for different hierarchical levels (the Netherlands), modular-based continuing vocational education and training (CVET) (Belgium), a modular-based apprenticeship combining initial vocational education and training (IVET) and CVET and leading to a scaffolding qualification (Denmark), apprenticeship (Ireland) and dual-system apprenticeship (Germany).

Although an occupational profile for construction scaffolding has been developed through the European Skills, Competences, Qualifications and Occupations (ESCO) classification, intended to promote European labour market mobility by providing a standard classificatory approach to skills, competences and occupations, there is no evidence that this has played any role in the development of VET standards for scaffolding (ESCO, 2025).

This article presents the features and lessons learned from the recent adoption in Ireland, comple-

mented by those of the more established programmes of Denmark and Germany, to offer examples to other countries considering expanding their apprenticeship provision to include scaffolding.

9.1.2. Apprenticeship

It is helpful to explain what we mean by ‘apprenticeship’ so that the reader is not led astray by the ambiguity of some definitions and the wide variation in attempts to define the term. We aim to make our account broad but also capable of demarcating a distinct range of VET practices.

Apprenticeship is an IVET type of programme focused on the workplace to the extent that apprentices are employees with a special type of employment contract that takes account of their status as both learners and workers. Apprenticeship is understood to require a significant degree of preparation outside the operational conditions of the workplace, including in the classroom and through workshop activities and simulation. To reflect the degree of knowledge, skill, autonomy and responsibility that a competent scaffolder needs to exercise, the programme has an education rating at European qualifications framework (EQF) level 3 or 4, equivalent to an upper secondary programme ⁽⁴⁷⁾. VET programmes, when completed and assessed successfully, result in a qualification that has labour market and educational value and can be used in an occupational labour market.

Apprentices do not need to be young people undertaking the transition between school and the labour market, although such young people constitute the bulk of apprentices in most countries. It is possible, and indeed quite common in some countries, for experienced construction workers or even adults from outside the sector to be able to undertake an apprenticeship programme in this sense. Apprenticeship is nevertheless distinguished from college-based routes in which workplace learning is undertaken as a student rather than an employee.

Our informal definition of apprenticeship corresponds closely to the 14 criteria for an apprenticeship of the European framework for quality and effective apprenticeships (EFQEA) (European Commission, 2017). However, as is also the case with the English standards-based apprenticeships, we do not specify that apprenticeships be set out in terms of learning outcomes (EFQEA learning and working conditions criterion 2) (Winch et al 2024). We also make it clear that apprenticeships should be at least at the upper secondary level (EQF level 3 or 4), thus excluding potential lower-level candidates under the EFQEA. In addition, we do not include some of the pay and working conditions criteria of the EFQEA, although these are desirable in any EU-recognised apprenticeship programme.

9.1.3. Methodology and approach

The Scaffold project sought to examine the state of the scaffolding sector across the six European countries in terms of four dimensions: employment and working conditions; VET and OSH training; technological developments and standardisation; and social dialogue structures. The project’s methodological approach consisted of:

- (a) producing national reports by social partner organisations in each participating country (EFBWW, 2024a);
- (b) evaluating national reports by project evaluators;
- (c) visiting scaffolding training centres and firms in Denmark, Germany and the United Kingdom;
- (d) conducting steering group meetings and workshops;
- (e) analysing and discussing findings among partners, evaluators, coordinators and other stakeholders in workshops dedicated to each of the four project dimensions;
- (f) producing a final report by project evaluators and coordinators (Durán-Palma et al., 2024);
- (g) proposing policy recommendations, in 11 languages, drawn up by social partner organisations (EFBWW, 2024b).

⁽⁴⁷⁾ The English scaffolder qualification is based at level 2 of the national qualifications framework and, in terms of duration, knowledge required and degree of responsibility exercised, could not be considered equivalent to EQF level 3 or 4. It is therefore not considered an apprenticeship in our sense.

Recommendations included consideration of Erasmus+ programmes for scaffolding apprentices (Box 12) and aspects related to apprenticeships.

Box 12. Scaffold project policy recommendations for Erasmus+ for apprentices

Bearing in mind that experiencing other work environments and acquiring previously unknown techniques upgrades one's level of skills and knowledge, we recommend that the EFBWW fosters and supports Erasmus+ action for apprentices. We recommend that the European Commission provides more tailor-made information and supports material in all EU languages for potential users of Erasmus+ for apprentices. Smaller firms in particular need easy access to programmes and support in the application procedures. Furthermore, it is recommended that the European Education and Culture Executive Agency provides detailed data on the use of programmes of Erasmus+ for apprentices on a yearly basis. Erasmus+ for apprentices must be better equipped financially and with corresponding staff at the agency.

Since Erasmus+ can only work if social partners, companies and training centres work closely together, we recommend that the European social partners promote the more frequent use of the Erasmus+ programmes and encourage increased mobility for apprenticeships and cross-border cooperation. This mobility and cooperation should also apply to the scaffolding sector.

We recommend that the EFBWW supports national social partners in Erasmus+. The social partners can participate, for instance, by creating information points for companies and apprentices, thereby supporting the dissemination of information material and guidance on the use of Erasmus+. It is recommended that the responsible national or regional authorities, in collaboration with the social partners, create platforms for training providers and companies engaged in the support of Erasmus+ actions. In addition, we recommend that companies engage in Erasmus+ programmes and offer international experiences to students and/or their employees and welcome students and/or employees from other countries in their premises, thereby improving workers' skills and the attractiveness of the industry.

Source: EFBWW, 2024b.

Participating stakeholders included the EFBWW and its national member associations, the scientific community, paritarian organisations in the scaffolding sector and a national employers' association, all of which were directly represented in the project, and the employers' associations – the European Construction Industry Federation (FIEC) and the Union of European Scaffolding Companies (Union Européen Gerüstbaubetriebe – UEG) – which actively supported the project as observers.

This approach offered numerous benefits, particularly in enhancing understanding of similarities and differences across national contexts, including visually, and encouraging critical reflection; it also presented some challenges, including conceptual equivalence, data availability through translation and interdisciplinary collaboration. Partly due to these challenges, the national reports underpinning the final report exhibit considerable variation. Some national teams relied exclusively on desk research, while others employed interviews and surveys to collect primary data. The national reports also vary in tone, with some more academic and others less so, some lengthy and others concise. This unevenness should be viewed not as a weakness but as reflecting the diversity of approaches and insights each team contributed.

9.2. Findings

There are considerable differences between the countries we investigated as to whether scaffolding VET is confined to IVET or to CVET or involves a mixture of both, and whether it takes the form of apprenticeships or just certification, involving particular modules or a complete course. Thus, of our six countries, Denmark, Germany and Ireland stand out in terms of having apprenticeship schemes for scaffolders, while Belgium and the Netherlands rely on certification; in Poland, scaffolding training is

incorporated in that of other construction occupations. Where Germany also stands out is in having the career structure associated with other construction *Berufe*, with the possibility of becoming a Meister after a three-year apprenticeship plus five years of work experience, involving a CVET course of eight months full time, plus passing an exam.

9.2.1. Ireland

Until 2021, the CSCS certification – involving basic (7-day) and advanced (10-day) off-the-job training and assessment programmes – was the main pathway to becoming a qualified scaffolder in Ireland. While the CSCS for basic scaffolders, or an equivalent training programme accredited by the Irish Further Education and Training Authority (SOLAS), remains the minimum acceptable standard of scaffolding training, the National Scaffolding Apprenticeship Consortium – led by the Construction Industry Federation and consisting of training providers, unions and employers – argues that such basic training:

... does not sufficiently equip people with (the) knowledge/awareness (necessary to operate in) a safety-critical trade (where) each individual working in the sector must be aware of their responsibility to themselves, those they are working with, the end user of the scaffold and also others who they may come into contact with while carrying out their role e.g. other trades, clients, members of the public.

(NSAC, 2020).

The consortium decided that a well-structured and comprehensive VET programme is required and, to this end, chose the apprenticeship pathway because it offers important benefits compared with alternatives, such as traineeship. While the latter offers the trainee a combination of workplace learning and formal training, the consortium agreed that the typical duration of traineeships (maximum 20 months, but usually not exceeding one year) is insufficient to allow trainees to gain the required competences and would not attract the same buy-in from the industry. More importantly, it was argued that, while the development of a traineeship is usually in response to a skills deficit, developing an apprenticeship presented an opportunity to place a comprehensive and consistent formal structure on an occupation that underpins the entire health and safety of the construction sector (NSAC, 2020). This structure would also afford the scaffolder, classified as a general operative despite the importance of the role, parity of status on-site with a skilled craftsperson, and ‘help the sector to regain confidence in their workforce and significantly reduce health and safety risks’ (NSAC, 2020).

In Ireland, the national apprenticeship system is governed by legislation, principally the 1967 Industrial Training Act, which sets out the overall structure and protections for and responsibilities of apprentices, employers and VET providers. Apprenticeship is defined as a structured VET programme formally combining and alternating learning in the workplace with learning in an education or training centre, leading to awards at EQF levels 2–5 (national framework of qualifications (NFQ) levels 3–6), with some higher apprenticeships at EQF level 6 (NFQ level 7 or 8). The state agency responsible for external quality assurance is Quality and Qualifications Ireland, which validates programmes, make awards and is responsible for the promotion, maintenance, development and review of the NFQ. The 2012 Qualifications and Quality Assurance Act also underpins apprenticeship, supporting national validation and quality assurance arrangements for programmes. The main VET providers are 16 education and training boards, while SOLAS is the government agency responsible for funding, planning and coordinating VET, including maintenance of registers of approved employers and of apprentices (Cedefop, 2021). The National Apprenticeship Council is responsible for overseeing and implementing the consortia-led construction apprenticeship programme, which includes scaffolding.

Although Ireland has adopted the ESCO pillar as reflecting labour market conditions, there is no evidence of an influence of the ESCO construction scaffolder occupational profile on the Irish scaffolder occupational profile (Mottweiler & Annen, 2025). This is hardly surprising as the ESCO descriptions are based on an aggregative model of assembling occupations by simply adding ‘skills’, failing to refer to the scaffolding cycle, the holistic and integrated nature of scaffolding work and the autonomy of the

scaffolder, and tending rather to adopt a ‘lowest common denominator’ approach, falling below national standards (Mottweiler, 2020).

The Irish scaffolding apprenticeship is a two-year structured programme of education and training that combines on-the-job employer-based training (80 %), with a SOLAS-approved employer, and off-the-job training delivered by Laois and Offaly Education and Training Board at the National Construction Training Campus (in the purpose-built scaffolding apprenticeship building) (20 %). The programme aims to provide the apprentice with the knowledge, skills and competence to perform safely and effectively as a scaffolder, in addition to providing a qualification that is academically robust and vocationally relevant. The apprentice is assigned a mentor by the employer for the on-the-job phases of the apprenticeship and an authorised officer from SOLAS, who monitors the apprentice during their apprenticeship. The off-the-job phases of the apprenticeship are delivered in eight modules over the two years: basic scaffolding principles; developing the scaffolder (personally and professionally); industry skills for scaffolders; scaffolding erection and dismantling; scaffolding compliance; management and control of scaffolding; complex structures; and capstone. On completion, participants become fully qualified scaffolders, with a Quality and Qualifications Ireland level 5 certificate in scaffolding.

The first apprentices graduated from this programme in late 2023. As of 2025, there have been 134 registrations, although some individuals withdrew their applications before beginning the off-the-job phase. Moreover, 45 apprentices have graduated, 34 are at various stages of completion and 11 are on a waiting list. Of the remaining 23, some have left the scaffolding industry and others have paused their programme with an option to return in the future. While Ireland currently operates a dual system for the training and assessment of scaffolders, it is envisaged that the scaffolding apprenticeship will replace the CSCS pathway in whole or in part at some stage. Delivering scaffolding training through a recognised level 5 apprenticeship model is an important step forward and means that there is an accredited qualification for those working in this area, thus helping with their career progression paths.

9.2.2. Germany

Germany has the most comprehensive apprenticeship system for scaffolding, stretching over three years and divided between the classroom, intercompany workshops and site-based practical work in the firm, involving:

- (a) 13 weeks each year or a total of 39 weeks in the classroom;
- (b) 10 weeks in the first and second years and 5 weeks in the third year in intercompany workshops, totalling 25 weeks or 20 % of the time;
- (c) 20 weeks per year in the firm, totalling 60 weeks.

Scaffolding apprenticeship is part of the dual system, divided between state and industry, and thus leads to a vocational qualification recognised throughout the entire national system of education and employment. Its status as a recognised vocational qualification is important for classification according to collective agreements and when applying for a job. The qualification is also necessary for admission to further education and training, for example for the *Meister* examination and courses preparing for this, and, under certain circumstances, higher education studies. In scaffolding, more than half of the apprentices are at least 18 years old at the start of their programme, with 1 in 6 over 24 years. In addition, most of the apprentices have a certificate from a lower secondary school and only a few are women.

As with the other construction *Berufe*, part of the practical training for scaffolding takes place in intercompany training centres, which play an important role as many small companies cannot cover the entire breadth of the occupation’s activities and do not always have the wide range of modern technical equipment needed. The training centres, of which there are three across Germany for scaffolding, are paid for by a training levy of 2.1 % of companies’ gross wage bill and are at the cutting edge of technical and vocational pedagogical development.

Detailed data on apprentice numbers over time are published regularly by the Federal Institute for

Vocational Education and Training (Bundesinstitut für Berufsbildung (BIBB)) and such data on the participation of companies of different sizes in apprenticeships are published by SOKA-Gerüstbau (the social fund for scaffolding). According to the SOKA-Gerüstbau data, there were 919 trainees in 2022, over all three training years, while BIBB data indicate that, of all trainees in 2021, 16 % were of non-German nationality, just under 14 % had not completed lower secondary school and 9 % had a higher education entrance qualification (Syben, 2023). Very small companies, with fewer than 10 employees, accounted for more than half of all companies participating in 2022 (56 %), although they offer fewer than 22 % of training places, while large firms, with 50 or more employees and comprising only 2 % of all firms, account for about 20 % of all training places. The number of apprentices who successfully complete the programme is, however, considerably lower than the number of those who start it, with completers fluctuating between 150 and 200 per year up to 2021, while around two thirds of the apprentices passed their exams.

A general problem with apprenticeships for scaffolding is the premature termination of contracts, affecting up to half of all contracts over the last five years and representing a vocational pedagogical challenge. This reflects a general problem for VET in a sector where most companies are small, even micro, and thus do not necessarily have the capacity, mentoring ability or portfolio of future contracts to commit to taking on apprentices for up to three years.

Apprenticeship content covers the entire range of work required in the scaffolding construction cycle, including preparatory surveying work, setting up a construction site and assessing load-bearing foundations; establishing the load-bearing capacity, the materials to be used and the various common work processes and work techniques; and the handling and maintenance of tools, equipment, machines and technical facilities required for this. The following specific topics are addressed:

- (a) maintenance, storage and transport of scaffolding components;
- (b) anchoring of scaffolding;
- (c) construction of length- and area-oriented working and protective scaffolds;
- (d) construction of shoring with substructure including the basic formwork;
- (e) knowledge and use of working platforms and lifts;
- (f) construction of suspended scaffolding;
- (g) construction of weather-protection halls and enclosures;
- (h) construction of scaffolding for special requirements.

Furthermore, quality assurance measures and reporting are part of the programme, as are OSH measures and environmental protection, all of which must be realised when executing the practical examination task at the end of the third year. Knowledge acquisition has been facilitated by standardising the scaffolding of all manufacturers so that workers do not have to deal with the peculiarities of different scaffolding systems.

9.2.3. Denmark

IVET and CVET merge in Denmark's two-year industry apprenticeship programme – dating back to 2009 and obligatory for all scaffolders after three months or less of employment – on an alternating basis. Apprenticeships take place off-site in classrooms or workshops and on-site, on a full salary (with a state subsidy available), with different modules totalling 25 weeks or 120 days, and in accordance with the collective agreement. Apprentices gain a truck-driving licence and crane and forklift certificates, while additional training is available for offshore work. The programme provides insight into the working environment and consists of several OSH training programmes, which must be completed before workers are allowed to perform work that can pose a significant accident risk or health hazard. Once the apprentice has completed all courses, a final examination is held, which results in qualification as a scaffolder. These requirements for the educational elements also apply to workers coming from outside Denmark, who must meet them to have their competences in scaffolding assembly recognised to work in the sector.

A survey conducted in 2019 to identify scaffolding workers in the sector showed that around 51 % of participants had completed the entire two-year scaffolder training programme, while around 27 %, including apprentices, had undertaken individual scaffolding modules. The programme covers system scaffolding, pipe and coupling scaffolding, setting up special scaffolding, enclosure and total enclosure scaffolding, and coordinated scaffolding assembly. Furthermore, it is mandatory to obtain the necessary licences to drive forklifts, to work with cranes and to comply with the safety requirements for working on roads. In addition to scaffolding knowledge, general skills such as customer service, cooperation and understanding drawings are acquired.

The 2023 collective agreement has a provision for training and upskilling if work is stopped, for instance due to bad weather. It also creates an incentive to include apprentices in the pricing of on-the-job training, consisting of trained scaffolders receiving a so-called mentor supplement for taking on apprentices. This is intended to motivate more scaffolders to take on apprentices, retain apprentices in training and obtain more trained scaffolders; it is also intended to strengthen the sector in the long term. The parties in the scaffolding sector work together to ensure retention but the average scaffolder stays for only 11 years. Those who stay tend to have completed the programme, but many leave the industry; there is a high turnover rate. The programme is continuously being modernised to adapt to developments, including new materials, technological developments, health and safety requirements, etc.

9.3. Conclusions

Broadly speaking, the research revealed that training resulting only in certification goes together with a degree of fragmentation of the work process and multiple levels of hierarchy within the overall occupation, while at the same time reflecting the amount and quality of VET required to undertake different aspects of scaffolding work. In contrast, extensive and comprehensive VET leading to a scaffolding qualification, as found in the apprenticeship-based programmes in Germany and Ireland, implies a relatively autonomous workforce, able to undertake most of the activities involved in the scaffolding cycle. ESCO does not provide a good model for the development of apprenticeships along these lines, although it could arguably accommodate the EFQEA criteria.

The apprenticeship systems for scaffolding developed in the three countries – Denmark, Germany and Ireland – differ in terms of when they were established and their comprehensiveness. The German system has been in place for the longest period, while the Irish system has only very recently been introduced. The German apprenticeship is also the most wide-ranging, lasting three years and with the possibility of progressing to *Meister* level. However, the fact that the number of apprentices completing the programme is considerably lower than the number who start it, that one third do not then pass the final examination and that up to half of all apprenticeship contracts are prematurely terminated points to considerable problems with maintaining high-quality apprenticeships. Such problems are evident too from the demise of the scaffolding apprenticeship in the Netherlands.

A key problem with apprenticeship is that it requires a stable labour market to provide the infrastructure for the work-based element, and the construction labour market across Europe is often unstable, beset by casual employment and self-employment, long subcontracting chains and a lack of regulation, including of posted and migrant workers. Small firms and microfirms constitute the vast majority of scaffolding firms, many without the capacity or portfolio of future work to consider employing apprentices, while the large firms subcontract much of their work and the medium-sized firms – widely recognised as the key to maintaining a successful apprenticeship system for construction in Germany – are dwindling in number. It is therefore no coincidence in the Dutch case that apprenticeship has been abandoned given that 55 % of the 1 250 scaffolding employees are self-employed, with migrant scaffolders dominating temporary jobs.

If scaffolding VET and direct employment are not mandatory for working in the scaffolding sector,

or are obligatory only in terms of certification following a minimum level of training, the danger is of a two-tier labour market, with one tier fully qualified through apprenticeships for all aspects of scaffolding work and the other just meeting the minimum requirements for safe working, as is possible in the Irish case. This danger is also evident in the German case, where, in contrast to Denmark and Ireland, there is no obligation to be certified. In this respect, the Danish system, mandatory for all, including the migrant workforce, and providing VET for all aspects of scaffolding work, including a truck driving licence and crane and forklift certificates, serves as a model. Here, however, the construction labour market is more stable, given high levels of unionisation (94 %) and regulation through the collective agreement.

In other respects, the German scaffolding apprenticeship stands out for its comprehensiveness, covering the knowledge (e.g. physics), know-how or skills, and competences (e.g. communication) involved in the scaffolding cycle, including the selection, erection, repair, maintenance, modification, dismantling and transport of the physical components of scaffolding, involving measuring, testing, fastening, hoisting, unloading, etc. Above all, due to the complexity of this cycle and the necessity of teamwork, the apprenticeship is concerned with developing project management abilities. This means that apprentices learn to plan, design and work out the scaffolding structure and the materials and workforce needed to create it. They also learn to control and coordinate work so that activities take place in sequence, materials and workers are in place at the appropriate times, and information, questions and orders are delivered and understood in a timely and accurate manner. Finally, they learn to cooperate and to solve the many problems that can arise, including those concerning health and safety, changes in client specifications, and the vagaries of weather and ground conditions.

Although shorter, the new Irish scaffolding apprenticeship also promises to develop all these abilities. Most importantly, the Irish example highlights the role that apprenticeship can play in terms of the status of scaffolders, in according public recognition as a skilled occupation and in offering permeability for further career progression, whether to higher education or to supervisory and management positions. As outlined in Box 12, undertaking an apprenticeship also facilitates involvement in Erasmus+ programmes that provide experience of scaffolding across Europe.

All these considerations demonstrate the need for high-quality apprenticeships for scaffolding – including both practical and theoretical components – and the importance of the scaffolder to ensuring the safety of the entire building process, even though, on completion, their work is no longer visible. The above considerations are applicable to all EU Member States, as are the policy recommendations drawn up by the Scaffold project partners for discussion by the construction social partners through social dialogue, as summarised in Box 13.

Box 13. Scaffold project-relevant policy recommendations

VET

Based on mandatory VET structures for scaffolders at the national level, it is recommended that requirements regarding the minimum duration of VET be developed and introduced at the national level, both occupationally and in terms of the working environment. Practical and theoretical education and training should be an integral part of scaffolding education. The qualification should be as broad as possible, dealing with all aspects of scaffolding and the various forms of scaffolds.

OSH training

OSH training for scaffolders, supervisors and scaffold users must be mandatory. Mandatory VET for scaffolders should be considered mandatory on-the-job training, with associated off-the-job training in schools, colleges and/or training centres, and regular further training. How it is designed depends on the national framework provided by the VET system and OSH regulations. It is desirable and possible to develop European OSH recommendations/guidance for scaffolders and scaffolding users on OSH training in the EU Member States, to include theoretical and practical elements, while improving and strengthening the working environment and safety.

Collective agreements and forms of employment

There is a need to ensure proper and secure terms of employment for scaffolders. It is recommended that employment terms for scaffolders be eliminated in forms other than permanent employment contracts. This can be accompanied by incentives for companies providing permanent employment and high-level training opportunities. Employment, training and certification, and qualification, requirements must be in place for all those involved in the scaffolding work process, including national requirements for the performance of the work before it is carried out.

Cross-border work and services

It is necessary for Member States to introduce guidelines, establish a process and set up an authority for the assessment, recognition and confirmation of certificates and qualification levels of scaffolders from countries other than the host country. Recognition and confirmation of certificates and qualification levels, and documentation of their authenticity, must be in place before the scaffolding work begins.

Companies providing cross-border services in the sector often do not act in accordance with OSH provisions; nor are the workers properly trained regarding host country OSH regulations. It is recommended that a certification process for sending countries is established, to prove that scaffolders can follow the health and safety provisions in the host country and are properly employed and trained accordingly.

It is necessary to ensure that information about the relevant Member State's regulations, including requirements for the performance of the work, and training certificate and qualification requirements, is provided in such a way and language as to be understandable for all workers.

It is necessary for the individual Member States to develop further training structures aimed at scaffolding workers from countries other than the host country so that the host country's requirements for certificates and qualifications can be met. Unions should support political initiatives to create a voluntary system of mutual recognition of certificates issued by Member States.

Source: EFBWW, 2024b.

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