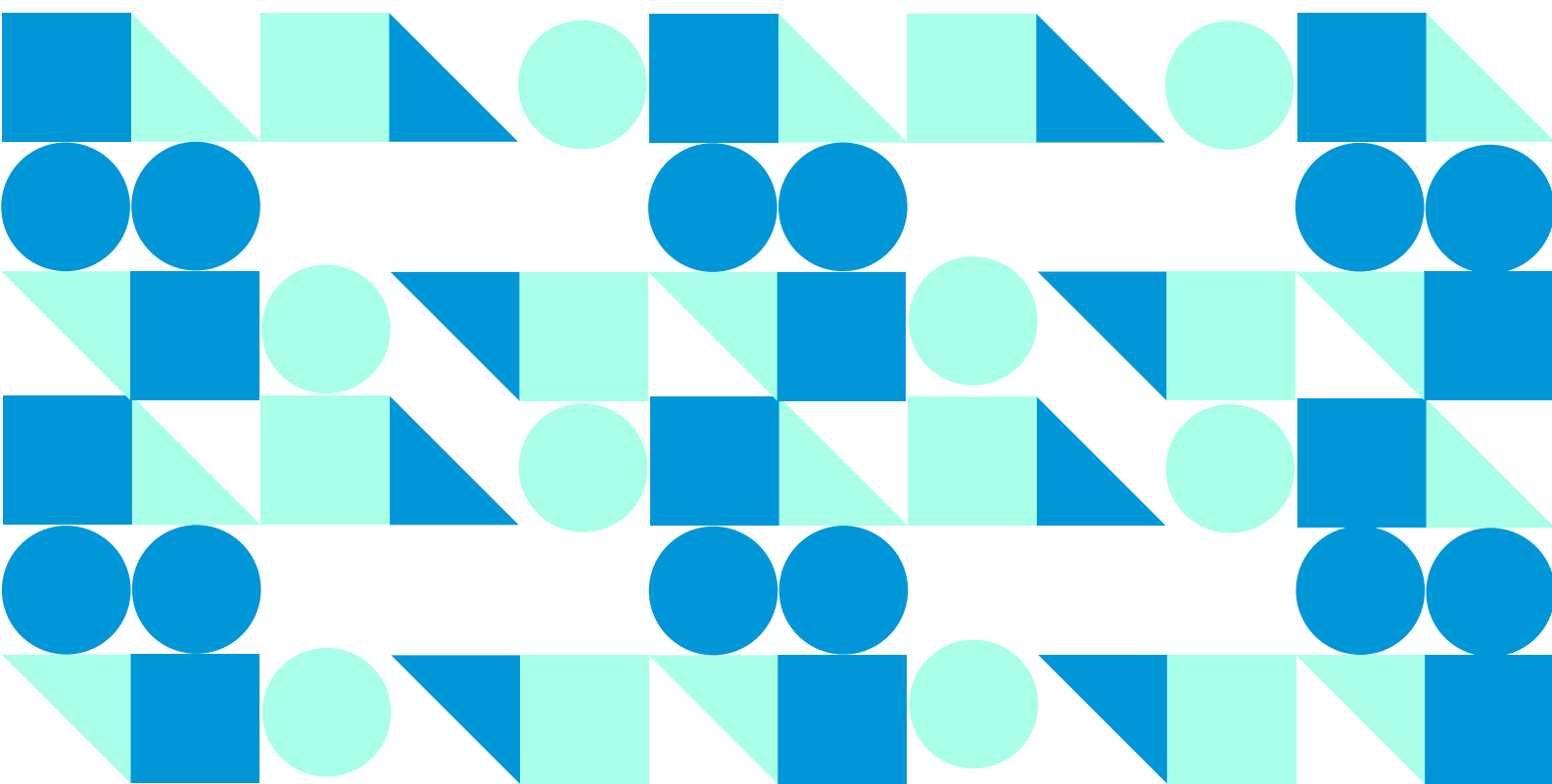




Research paper

Beyond subsidising training costs

Policies to increase training provision
in micro, small and medium-sized
enterprises





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 This decision was repealed in 2019 by Regulation (EU) 2019/128 establishing Cedefop as a Union Agency with a renewed mandate.

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Foreword

Skills and lifelong learning are the key to ensuring successful digital and green transitions, strengthening competitiveness and resilience to external shocks. They also and guarantee social fairness. Skills empower individuals to participate fully in the labour market and in society. They are essential for achieving long-term and sustainable growth, productivity and the competitiveness of businesses.

Companies play a vital role in investing in skills as they sponsor the vast majority of CVET. However, the evidence suggests that micro, small and medium-sized enterprises (MSMEs), provide, on average, less job-related non-formal training to their employees than their larger counterparts. Since MSMEs are the backbone of EU economic and employment growth, the lower training provision in MSMEs requires attention from policymakers.

This report contributes to a better understanding of the policies which can effectively support MSME to increase their training provision. On the one hand, it is necessary to help MSMEs to identify and meet their given training needs as shaped by their current way of doing business and organising work. On the other hand, MSMEs should be encouraged to expand their skills-in-use – notably by promoting innovation – at their workplaces. The increased skills-in-use will likely lead to higher and more effective training in the long run. Further, MSME may be incentivised to cooperate with public institutions in educational outreach activities targeting MSME employees (or other groups entering the company for educational purposes) so increasing MSME training provision.

Addressing the MSME training gap requires a holistic approach and seeking synergies and complementarities between different policy domains, including lifelong learning and skills, business development and innovation, and employment policies. There is a need for an integrated or coordinated set of instruments and mechanisms – financial and structural – that will effectively help MSMEs to move from a situation where training is limited, to an approach where the potential of training as a source of company success is fully explored.

We hope that by demonstrating how important it is to apply a holistic view on policies supporting training in MSMEs, and by providing examples of policies applied throughout the EU, this publication will serve as inspiration for policy-makers, social partners and other relevant stakeholders on how to assist MSMEs in developing 'training culture'.

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Executive summary

Rationale and objectives of the study

Micro-, small- and medium-sized enterprises (MSMEs) ⁽¹⁾ provide less employer-sponsored training to their employees than large organisations. A higher proportion of MSMEs (as compared to large enterprises) provides no training at all and MSMEs include fewer employees in training, spend less on training and provide fewer training hours per capita than larger organisations. Given that the MSMEs represent more than a half of the EU economy, identifying effective levers for increasing training provision in MSMEs and narrowing the 'MSME training gap' is a priority for EU policy-making.

The aim of the study is to contribute to better understanding of those policies which can effectively induce change in MSME behaviour and work towards a new approach for reviewing these policies. First, the study investigates the causes of the MSME training gap. Second, it develops a novel taxonomy of policy strategies and instruments supporting MSMEs in increasing their training provision, which allows framing the exploration of the relevant policies. Third, the study analyses a broad range of policy instruments implemented across the EU-27 and the UK aiming at mitigating the MSME training gap, with roots in different fields of policy-making including lifelong learning and skills, business development and innovation, and active labour market and employment. Fourth, the study provides insights into the effectiveness of the policy strategies and instruments supporting MSME increase in training provision. Particular attention is paid to how different policy instruments interact or are combined, as their effectiveness likely depends on their complementarity. The report proposes the novel concept of 'support arrangement' which refers to all forms of support available to MSMEs located in a given sector or region; it empirically explores the support arrangements in selected skill ecosystems and skill formation systems. Fifth, the study provides suggestions for policy-making and further research.

The study builds on the following strands of empirical work.

- (a) Collection data for Cedefop's database on Financing adult learning (with 1 February 2020 as the cut-off date). Key insights into financing instruments/cost-sharing schemes to support training provision in enterprises, and in particular MSMEs (training funds, tax incentives for enterprises, grants for enterprises and payback clauses) are presented in this report.
- (b) Collecting examples of a broad range of structural instruments (i.e. going beyond targeted financial support) providing support for training in

⁽¹⁾ MSMEs are understood as firms with up to 249 employees, in line with EU documents.

- enterprises, particularly MSMEs. Around 190 [case vignettes](#) were produced which are an integral part of this study.
- (c) Conducting 15 [case studies](#) to provide further insights into the effectiveness of policy instruments in supporting training provision by MSMEs. These are an integral part of this study.

MSME training gap and its causes

MSMEs face several barriers preventing them from providing (higher levels) of training. These may include low cost-effectiveness ⁽²⁾, liquidity constraints, high risks ⁽³⁾, lack of know-how or managerial capacities, or lack of time to implement training. MSME personnel may have low interest in CVET, lack awareness of CVET benefits and of existing training opportunities. Training tailored to MSME needs may not be on offer in the market. Also, weak cooperation among MSMEs and between large companies, MSMEs and training providers, as well as insufficiently developed collective agreements on training-related issues, may hamper MSME training provision. These barriers prevent MSMEs from meeting their given demand for training that corresponds to their current way of doing business and organising work, hence their current level of skill use.

The MSME training gap can also be explained by the seemingly limited – on average – skills in use in MSME workplaces. While acknowledging that some smaller organisations can even be technological leaders, in aggregate, MSMEs use a smaller range of technologies, are less likely to cater to international markets, and apply less complex organisational processes. They are likely to utilise, on average, a smaller range and quantity of skills, which results in limited opportunities to make good use of CVET. MSME skills in use could be expanded through innovation and organisational learning but they are likely to face the potential barriers to innovation. These are similar to the barriers to training (mentioned above) and may include lack of funding or managerial capacity to implement innovation, or lack of know-how. MSME personnel may not be aware of the importance of (specific types of) innovation and may lack proper skills and attitudes to pursue it (weak ‘absorptive capacity’). Weak cooperation between MSMEs, large companies and R&D organisations may also hinder innovation.

⁽²⁾ The costs may be too high in relation to the expected training outcomes/returns on investment. This may be due to low economies of scale.

⁽³⁾ MSMEs face higher risks of losing out on their training investment. This includes the situations where skills acquired by employees remain underused or trained employees leave the company due to labour market competition (talent poaching).

Policies to increase MSME training provision

Cedefop has identified three main policy strategies for improving training provision in MSMEs.

Policy instruments can provide targeted support, helping MSMEs to identify and meet their training needs as shaped by their current business activities, work organisation and skill use. Instruments of targeted support are used to overcome/reduce specific barriers to the training (see above). They are offered within a broad range of policy fields including lifelong learning and skill, active labour market and employment, and – to a lesser extent – business development and innovation.

Alternatively, instruments can offer mediated support for training that seek to unleash innovation in MSMEs – expand their business activities or change their work organisation – and therefore increase skill use at their workplaces. In this perspective, policies aimed at achieving goals other than training, such as technological upgrading and entering new markets, may support training as a means to achieve these goals in a mediated way. With increased range and/or quantities of skill use at the workplaces (as a result of innovation), the options for making good use of training are expected to expand in the long run. Instruments providing mediated support are mainly grounded within the policy fields of business development, innovation, and regional development. So far, the lifelong learning policy field has not paid due attention to them.

Instruments can also seek to win over MSMEs to cooperate in educational outreach. This reflects the fact that MSME employees are not only less likely to receive training provided (i.e. organised or paid) by their employer but also demonstrate a lower propensity to engage independently in CVET activities, even if supply-side funded learning opportunities at low or no cost are available. Through the cooperation of public entities (providing funding for CVET) with MSMEs to reach out to their employees, both the individual employees and the MSMEs can make substantial gains. These instruments have roots in the lifelong learning policy field and within active labour market and employment policies.

Cedefop has also classified policy instruments considering different ways of supporting MSMEs, i.e. different levers used to induce change.

Financing instruments are a group of vital importance. They may provide public (co)funding (e.g. tax incentives or grants from general taxation) or induce forms of cost-sharing among employers (training funds, i.e. levy-grant schemes) or between employers and employees (payback clauses). Offering financial contributions frequently serves as a level for all three strategies: targeted support, mediated support and cooperation in educational outreach.

Beyond financial contributions to the training costs (or to the costs of other organisational activities (e.g. innovation) aiming at indirectly increasing the provision of CVET), various other types of instruments aiming at overcoming

specific barriers hampering MSME training provision can be subsumed under the heading structural instruments. They include:

- (a) offering organisational counselling/consultancy services to MSMEs;
- (b) expanding the range of CVET provision (offered by public and non-public providers) tailored to the needs of MSMEs;
- (c) promoting knowledge creation – e.g. ‘pilot projects’ delivering novel solutions for MSMEs – and supporting transfer of outcomes among MSMEs;
- (d) supporting awareness-raising activities to promote the benefits of continuing learning (or of other organisational activities (e.g. innovation) aiming at indirectly increasing the provision of CVET);
- (e) supporting networking among MSMEs and MSME cooperation with other relevant actors (large enterprises, training providers, R&D institutes);
- (f) supporting interest aggregation between employers/MSMEs and facilitating collective bargaining on training in relevant issues (or on other organisational activities (e.g. innovation) aiming at indirectly increasing the provision of training).
- (g) The review of existing policies clearly indicated that a particular policy intervention can combine different strategies (targeted, mediated, cooperation in educational outreach) and a policy package can provide both financial and one or more forms of structural instruments. The taxonomy is therefore used mainly to analyse the ways policies combine instruments, identifying each intervention’s ‘signature’, instead of placing policies into distinct silos.

Targeted support: financing instruments

Providing financial contributions to enterprises’ training expenses, is a long-established form of targeted support to overcome the cost barrier. Practically all financing instruments targeting enterprises covered in the study are accessible for MSMEs; about 40% of instruments give them preferential treatment. Where financing instruments must comply with de minimis regulation ⁽⁴⁾ (more than 70% of all instruments analysed), MSME are typically less affected by the set threshold for support set at EUR 200 000 within 3 years for any public subsidy. However, as concluded from the scarce relevant data, MSMEs are often underrepresented among the beneficiaries of financial support schemes.

In several Member States (such as Belgium (Flanders), Denmark, Greece, Spain, France, Italy, Ireland, Cyprus and the Netherlands) and the UK, training funds have a systemic role in supporting training, particularly employer-sponsored CVT; in other Member States they only have a complementary/specialised role, being established only in some sectors (e.g. Germany, Luxembourg, Austria) or on voluntary basis (Slovenia). Training funds are heterogenous and typically complex

⁽⁴⁾ Aid granted to a single undertaking over a given period that does not exceed a certain fixed amount and is not subject to the notification procedure. Commission Regulation (EU) No 1407/2013.

structures which use the levies collected from enterprises to provide financial support to training enterprises and supply-side funding of CVET ⁽⁵⁾. They put in place various structural instruments and services (e.g. consulting/counselling services for employers, support for interest aggregation, research on skills needs, development of novel/tailored forms of training), often adapted to sectoral/regional needs, and provide incentives targeting individuals (employees, the unemployed).

Grants – or vouchers – supporting training in companies/MSMEs are established in nearly all EU Member States and the UK ⁽⁶⁾. They play an important role in promoting employer-provided training in Europe. In many countries, grants for companies support direct costs (typically covering a proportion of the costs) and wage costs. EU funds play an important role in co-financing grants for companies ⁽⁷⁾.

Only a few Member States (e.g. Bulgaria, France, Croatia, Romania, Slovenia and Finland) have tax incentives for training activities of companies, going beyond the ubiquitous treatment of training costs as operational costs. However, they typically have specific objectives (e.g. allowing tax deductions for scholarships) and do not have systemic importance.

Payback clauses can be used for mitigating the risks and costs of talent poaching. Regulations on payback clauses vary extensively across Europe in terms of limits set; for example, the maximum application period ranges from 2 to 5 years. More than a half of the EU countries have defined general legal limits for the application. The study collected little evidence regarding the frequency of the use of payback clauses in enterprises and MSMEs.

Targeted support: structural instruments

The study sorted the observed instruments (going beyond financial support) according to their application of key mechanisms. However, many instruments apply more than one mechanism.

- (a) Consulting/organisational counselling services are widely used to mitigate MSMEs barrier of lack of know-how and (management) lack of capacity/time to take proper care of CVET. Organisational counselling/consultancy may concern any step of the 'training cycle' (identification of needs, planning/ designing training activities, selecting appropriate providers/delivering training, assessment/evaluation of learning outcomes, transfer of learning (Becker, 2005)). Counselling offers can also promote the use of other instruments, including co-funding;

⁽⁵⁾ Financial support is provided to dedicated training organisations (public training providers, institutions run by employer organisations or/and trade unions).

⁽⁶⁾ No grant schemes were reported for Greece (though grants are provided through the national training fund) and Sweden.

⁽⁷⁾ Around 40% of the grants reported were EU co-funded.

Counselling for SMEs, *Impulsberatung*, provided by PES in Austria represents such example.

- (b) To address a shortage of suitable training offers in the market, development of new forms of (typically supply-side funded) training opportunities more tailored to MSMEs may be supported through public funding. Training providers and enterprises/MSMEs are often joint creators of the new forms of training. Beyond support for non-formal courses, the new offers include the workplace training often preferred by MSMEs and their employees. The novel work-based training actions in France (*Action de formation en situation de travail – AFEST*) are a good example of this group of instruments.
- (c) Another way to overcome a shortage of solutions addressing the needs of MSMEs is promoting collaborative pilot projects, aiming at creating new knowledge, expertise, and skills as relevant for the MSMEs and the transfer and diffusion of the outcomes of these projects among them. Beyond providing the funding for the projects, public intervention can aim at creating a supportive infrastructure for these activities (e.g. by the implementation of dedicated R&D centres in collaboration with local HE and VET providers). The 'SME idea' (*MKB Idee*) in the Netherlands is an example of a framework promoting experimentation with new forms of training projects in the MSME sector.
- (d) Some instruments aim at increasing awareness of the importance/benefits of CVET among MSME management and employees. This includes providing (public) awards to enterprises/MSMEs for their excellence/good practices in the field of HRD and training, and developing the web platforms bringing together all relevant information and tools on HRD and training-related matters relevant for (MSMEs) business owners and managers. Such web platforms may allow access to public funding or consultancy/organisational counselling services; they have developed into key components for promoting training in MSMEs in Poland ('Entity financing system') and Bulgaria ('My competence' project).
- (e) A further approach to supporting MSMEs concerns promoting company networks that could include MSMEs and also large organisations. Coordinating/pooling the training demands of participating enterprises and by mutual learning within the networks can help MSMEs overcome some 'liabilities of smallness', such as a lack of economies of scale when commissioning tailored training services. MSME networks can strengthen their buying power, and therefore market position, *vis-à-vis* the training providers, which are more likely to provide the tailored services where the training projects are substantial compared to the demand of a single MSME. An alternative approach for overcoming the 'liabilities of smallness' is illustrated by the Joint purchase training (*Yhteishankintakoulutus*)

initiative in Finland, where the local PES cooperate with group of enterprises/MSMEs to design and buy training tailored to their needs.

- (f) Instruments can help MSMEs aggregate their interests: identify common needs related to CVET (going beyond individual organisation needs) and agree on promising approaches. Collective bargaining at national/sectoral/regional level regarding training related issues (e.g. mutual rights and obligations, such as paid training leave and the ways training is rewarded) might be incentivised. Many instruments indirectly support interest aggregation and social dialogue (e.g. with business interest organisations responsible for implementing instruments, with business and labour interests represented in the governance). However, instruments explicitly supporting related matters seem to be more exceptional. An example is the UK Union Learning Representatives framework and its underpinning Union Learning Fund.

Mediated support: financing and structural instruments

For mediated support, the study looked at the cases where policy packages supporting innovation in MSMEs included embedded support for training. The selected instruments can be summarised as follows.

- (a) Providing co-funding for innovation (including related CVET) in MSMEs is used in isolation or in combination with other structural instruments. The study paid particular attention to examples of financial support for innovation which also explicitly offer financial contributions to any training related costs incurred as part of innovation activity. The Lithuanian *Eksperimentas* initiative, for example, provides financial support (partly EU-funded) to encourage R&D projects in companies while giving preferential treatment to small organisations (higher proportion of eligible costs can be reimbursed). The funding may be spent on R&D related training costs.
- (b) Providing organisational counselling/consultancy services (to overcome gaps in know-how or a lack of managerial resources to implement innovation activities) is one of the most often observed approaches within mediated support, either as the stand-alone instrument or as part of broader packages of instruments. The Swedish Robot boost programme (*Robotlyftet*), for example, offers funding to SMEs for counselling/consulting services related to automation projects/processes and relevant training activities. Mutual learning activities and workshops are offered free of charge.
- (c) Another form of support for innovation in MSMEs is to ensure adequate CVET provision to develop skills required for the specific innovation activity and/or for strengthening the 'absorptive capacity' of MSME in general. This form of support may only focus on MSME managers and key forces or also serve larger parts of the MSME workforce. The technology workshops

provided in the Basque Regions (*Barnetegi Teknologiko*) may serve as an example.

- (d) MSMEs may receive support through public funding of the pilot projects aimed at developing novel ways to achieve innovation in MSMEs. The outcomes of these pilot projects can be diffused among a broad range of MSMEs. The Danish project Digital catalyst is an example.
- (e) Exchange/demonstration programmes can strengthen MSME manager and employee awareness of the benefits of innovation. The Hungarian model factory programme (*Ipar 4.0 Mintagyár Programme*) aims to help MSMEs start digitalising and offers visits to model factories, business consultation, workshops, training programmes, ‘the night of modern factories’ special event, and an entrepreneur portal.
- (f) Another form of structural support to innovation is promoting cooperation and networking among MSMEs and other relevant organisations. The Business mentoring programme in Poland (*Mentoring biznesowy w Województwie Opolskim*) is an example where networking plays a marked role. It seeks to popularise the idea of business mentoring and to transfer the knowledge and successful experiences of Opole entrepreneurs to the young managers of SMEs with high growth potential.
- (g) Improving coordination and interest aggregation among enterprises/MSMEs (particularly belonging to the same economic sector) can be a key lever in effectively supporting innovation. Organised business may be invited to participate or even lead the governance of frameworks aimed at supporting innovation. The Digital competences for SME employees framework in Romania demonstrates such an approach, where employer organisations, business associations, chambers of commerce and industry are invited to participate in ESF-funded calls/projects. Strengthening the cooperation between organised business and organised labour can also facilitate innovation activities, with agreed safeguards for employees whose employment opportunities are negatively affected by the innovation (e.g. retraining programmes) and agreed distributions of the economic returns of innovation activities implemented (e.g. by wage determination reflecting progress made in labour productivity).

Cooperation in educational outreach

Approaches inviting MSMEs to partake in educational outreach fall into three broad categories:

- (a) Gaining MSME support in motivating employees to participate in external CVET opportunities; these are typically supply-funded, i.e. provided free of charge or at low fees. MSME owners/managers can agree with their employees to make use of CVET opportunities that would also meet MSME/organisational needs. In a further step, outreach frameworks aim to

win the support of MSMEs in encouraging their staff to take advantage of available external training offers, even if the learning outcomes are not of immediate use for the organisation/MSME.

- (b) Encouraging MSMEs to offer workplace learning (work placements, traineeships, internships, apprenticeships, including for adults). Promoting workplace learning (*Töökohapõhise õppe*), from the Innove Foundation in Estonia, is an example of such an approach. Many schemes within the active labour market policy offer support to employers where they provide places to individuals who potentially could be employed. Alongside wage subsidies, schemes often foresee contributions to training costs for the newly hired. In Belgium (Flanders), external coaches are provided to support job integration, on-the-job training of newly hired employees.
- (c) Incentivising MSMEs to organise on-site CVET activities (delivered by third parties) exclusively for their employees, even if the training provided is understood mainly as within the interest of the individuals targeted. Integrated training at work action (*Formation intégrée au travail*), in the construction sector in France, demonstrates such approach.

Policy effectiveness in increasing MSME training provision

Little evidence is available about the effectiveness of public policy instruments in changing the training behaviour of companies, including MSMEs. This applies to different financing instruments and, even more, to structural instruments. However, as has been demonstrated for individual participation in CVET (Rubenson and Desjardins, 2009), cross-country differences in the availability and interplay of sets of policy instruments may explain some observed differences in the training behaviour of organisations, including MSMEs.

Concept of 'support arrangement' in skill ecosystem and skill formation system

This study proposes the concept of 'support arrangement' which refers to the set of policies aiming at supporting CVET in enterprises, especially MSMEs, as accessible for a particular enterprise belonging to an economic sector and located in a particular geographic area. The relevant forms of support include financing and structural instruments supporting CVET in enterprises, following a targeted or a mediated strategy. Also considered are instruments seeking enterprise support for educational outreach and the instruments supporting CVET where enterprises (particularly MSMEs) are only indirect beneficiaries: these include supply-side funded provision of CVET opportunities and demand-side co-funding schemes targeting individual (MSME) employees. Support arrangements may include

instruments offered at national level (as part of a skill formation system) and instruments specific to a particular economic sector and/or a particular region (as an element of a skill ecosystem).

'Support arrangements' have various characteristics: 'density', i.e. the number of support instruments and their distribution across types of policies and policy levels (national, sectoral regional); 'complementarity', i.e. the coexistence of various support instruments which together addresses all barriers to training, including innovation/ organisational learning, in MSMEs; 'targeted elaboration'. i.e. the degree of adaptation of the support arrangements to the needs of a skill ecosystem (national-level support instruments adopted to the particular needs of a sector or region; existence of instruments developed in a particular sector or region). Support arrangements are expected to provide a more effective boost for MSME training activities when their 'density' is high (not low or medium), their 'complementarity' is strong (not weak or moderate) and their 'targeted elaboration' is advanced (not rudimentary or fairly developed).

Examples of support arrangements in skill ecosystem and skill formations systems

Three examples of support arrangements are presented in more detail in this report. As demonstrated for the skill ecosystem and its relevant support arrangement of the machine-tool sector in the Basque region, a regional skill formation system can provide much more support (for MSME training) than the national skill formation system. As shown for one disadvantaged region in Poland, support arrangements (for MSME training) can be developed considerably despite unfavourable overall conditions. Ireland illustrates how national training fund resources (based on a company levy) can be used for different purposes/activities, including support for MSME training.

Based on the (non-comprehensive) evidence collected within the project, and especially the 15 [case studies](#), support arrangements at skill formation system level have been rated as high across all three categories (density, complementarity, targeted elaboration) in Denmark, Ireland, France and Malta, with the arrangement for Finland rated as almost as good as the former. At skill ecosystem level, the examples for the Basque machinery sector and for the construction sector in Hessen have been rated high across all three categories. Examples of support arrangements with a strong rating in one or two dimensions, and weaker ratings for the remaining dimensions, include the examples of Italy (skill formation system level) and Austria and Poland (skill eco-system level). Examples of support arrangements with mainly weak ratings include Bulgaria, Lithuania Hungary and the UK (all observed at skill formation system level). The support arrangement in place within the Romanian skill formation system is considered the weakest and received the lowest ratings. Details are available in the corresponding [case studies](#).

Lessons learned include that support arrangements depend on the complementarity of instruments, but the availability of at least some larger, substantially funded policy instruments remains crucial. It seems desirable that one organisation (or a smaller number of organisations) assumes a coordinating role within the support arrangement, especially at a skill ecosystem (i.e. sectoral or regional) level. Working towards better coordinating/integrating policies rooted in the adult learning and/or employment policy field with those rooted in the business development field is expected to be particularly promising. Representatives of business and labour are often well-positioned and should be encouraged to contribute to further integration of the policies making up the support arrangement.

Policy suggestions

Helping MSMEs to improve their training provision requires a well-coordinated or, better, an integrated set of policies and instruments, offering targeted and mediated support, as well as inviting MSMEs to cooperate in educational outreach. This calls for broad stakeholder cooperation – including policy-makers and social partners – and holistic policy approaches linking different policy domains: lifelong learning, employment, business development and innovation. Much can be gained from better coordination/integration of the support services relevant for MSMEs provided by the organisations established in various policy fields: those aiming at ‘developing organisations’ on the one hand and those oriented more towards supporting individuals/MSMEs employees. There is a particular need to combine financing and structural instruments to tackle different root causes of MSME low training provision.

Suggestions regarding ‘targeted support’ include to:

- (a) strengthen and systematise the instruments providing targeted financial support. Pay particular attention to the ways in which the instruments currently understood as ‘financing instruments’ combine financial and structural support (e.g. training funds);
- (b) offer (further) instruments going beyond financial support, referred to as ‘structural support’;
- (c) aim at comprehensive mix of instruments within the overall support arrangements which, in combination, address all barriers to training in MSMEs;
- (d) make good use of existing intermediary organisations providing services to MSMEs for implementing new instruments;
- (e) pay particular attention to the instruments aiming at ensuring that CVET provision is tailored to the needs of MSMEs and their employees;
- (f) develop approaches for supporting workplace-based forms of CVET.

Suggestions regarding ‘mediated support’ include to:

- (a) mainstream policies increasing the use of skills (notably, supporting innovation and organisational development) as a fundamental component of strategies to foster training in enterprises/MSMEs;
- (b) strengthen frameworks supporting the creation of learning-conducive workplaces. Reinforce the interaction between policies working towards an increase in 'decent jobs' and policies aiming at the improvement of skill use, (informal) workplace learning and CVET;
- (c) offer more policy packages combining support for innovation and training.

Suggestions regarding the strategy of 'cooperating in educational outreach' include to:

- (a) promote and fund educational outreach projects targeting MSMEs;
- (b) provide incentives for CVET providers to include MSMEs in educational outreach projects.

Further research

This study broke new ground by bringing together different approaches to mitigate the 'MSME training gap'. Nevertheless, the proposed conceptual and analytical framework is open for further refinement, e.g. integration of other barriers to training and innovation areas of organisational development, as well as interventions designed specifically to meet the related challenges. Beyond such refinement of the framework, further research needs include:

- (a) developing and applying more fine-grained, systematic mapping of instruments within a single support arrangement;
- (b) systematically collecting data on how MSMEs effectively use combinations of instruments;
- (c) designing an evaluation strategy for measuring the effectiveness of support arrangements in improving MSME training performance;
- (d) developing a realistic benchmark approach to MSME training performance;
- (e) further exploring the varied role of different industrial relation systems for training in MSMEs.

CHAPTER 1.

Introduction to the study

1.1. Context and rationale

Safeguarding access to lifelong learning opportunities for everyone has been a top priority of European Union policy-making for the past two decades, with support for lifelong learning restated in the [European Pillar of Social Rights](#) and the [2020 European Skill Agenda](#) (European Commission, 2020). The EU set the target that by 2030, 60% of the adult population should participate in adult learning each year ([Porto Social Summit](#), implementation of the European Pillar of Social Rights).

In a similar vein, promoting the expansion of European companies' investments in skills, and continuing vocational education and training (CVET) in particular, forms the backbone of the European Union's economic policy, underpinned by an employment policy giving priority to upskilling the European workforce. It is acknowledged that 'skills and lifelong learning are crucial for long-term and sustainable growth, productivity and innovation and therefore a key factor for the competitiveness of businesses of all sizes, in particular small and medium-sized enterprises (SMEs).' (2020 [European Skill Agenda](#)). The [European Year of Skills](#) aimed at 'promoting increased, more effective and inclusive investment at all levels, inter alia, by public and private employers, in particular by SMEs, into all forms of reskilling and upskilling, education and training'.

It is undisputed that employers play a vital role in making lifelong learning a reality. They sponsor a vast majority of CVET: nine in 10 participants in job-related education and training received support from their employers, who either contributed to the costs of participation or have devoted employed working time to the training activity itself (Cedefop, 2015). Therefore, employers turn into key partners in any coherent strategy to safeguard individual access to lifelong learning. However, they are targeted by policy-making not only for their role as providers of learning opportunities to their employees but equally as beneficiaries. The economic performance of an enterprise relies heavily on the development and use of a broad set of skills, with CVET as a key source of skills acquisition. Policies targeting enterprises and aiming at increasing their training provision seek also to improve their economic performance and long-term survival.

It is still argued – among scholars and policy-makers – whether employers invest sufficiently in CVET (CIPD, 2019; Sloof et al., 2007). The large differences between individual enterprises' training investments, within and across economic sectors or countries support the view that many enterprises might not be fully tapping into what CVET can offer them.

It is evident, however, that MSMEs provide considerably less employer-sponsored training than their larger counterparts (Section 2.1). Given the MSMEs'

role as a motor of employment and economic growth, accounting for 99.8% of all non-financial enterprises in the EU-27 (NFBS), 53% of the total value-added produced, and 65% of employment (2022), their lower training provision must attract the attention of policy-makers. It poses a twofold challenge. First, due to their lower training provision, MSMEs are likely to suffer from a competitive disadvantage compared to larger enterprises and are hampered in their overall growth and performance. Second, MSME employees are disadvantaged in access to lifelong learning due to the organisational behaviour of their employers. The challenge might also be exacerbated as occupations associated with lower skill intensity are overrepresented among MSMEs ⁽⁸⁾, so they face a greater challenge accessing high-skilled workers (OECD, 2021). Identifying effective levers for increasing and better targeting training provision for MSMEs is a priority for EU policy-making, as reflected, for example, in the 2020 [European Skill Agenda](#) or [SME strategy for sustainable and digital Europe](#).

1.2. Objectives, scope and structure

The overarching objective of this study is to contribute to better understanding of the policies which can effectively induce change in MSME behaviour and narrow the MSME training gap, and to work towards a new approach for reviewing these policies. The study:

- (a) looks into the causes of the MSME training gap. In doing so, it takes companies' skill utilisation as a starting point to explain the differences in their training provision. It also points to various barriers to training that may be more prevalent in MSMEs than in large enterprises and that need to be addressed by adequate policies (Chapter 2, Sections 2.1 and 2.2);
- (b) develops a novel taxonomy of policy strategies and instruments targeting MSMEs/enterprises intending to increase their training provision (Chapter 2, Sections 2.3 and 2.4), which allows framing of the exploration of the policies concerned. While various relevant policies and instruments had been developed across the EU-27, there has been a lack of both a holistic conceptual framework and comprehensive mapping. The study helps to mitigate this gap;
- (c) analyses a broad range of relevant policy instruments implemented across the EU-27 and the UK, while mapping them against the developed taxonomy. The study looks at instruments having roots in different fields of policy-making including lifelong learning and skills, business development and innovation, and active labour market and employment (Chapters 3, 4 and 5 in this report and supporting document [Case vignettes](#));

⁽⁸⁾ Own calculations based on Eurostat data, Structure of Earnings Survey, 2018.

- (d) provides insights into the effectiveness of the policy strategies and instruments supporting MSMEs to increase their training provision. To this end, the study pays particular attention to how different policy instruments interact or are combined, as the effectiveness of those often depends on their complementarity. The report proposes the novel concept of ‘support arrangement’ which refers to all forms of support available to MSMEs located in the given sector or region. This includes policy strategies and instruments covered in the developed taxonomy, as well as those not targeting enterprises directly (Chapter 2, Section 2.4.2). The study empirically explores the support arrangements in selected skill ecosystems and skill formation systems (see Chapter 6 and supporting document [Case studies](#));
- (e) provides policy suggestions and proposes how to take forward the work of this study (Chapter 7).

1.3. Methodology

The report builds on two strands of empirical work. The first concerns updating the [Cedefop Database on financing adult learning](#), with 1 February 2020 as the cut-off date for the new data collection. Information on the most significant examples of eight types of financing instruments/cost-sharing arrangements supporting CVET/adult learning⁽⁹⁾ (training funds, tax incentives for companies and individuals, grants for companies and individuals, loans, training leave and payback clauses) was collected (via desk research and expert interviews) for the EU-27 and the UK⁽¹⁰⁾. For instruments used with variations across many regions or sectors in one country, only selected examples were included in the database. In this report, the key insights on financing instruments/cost-sharing arrangements targeting enterprises, specifically MSMEs, are presented in Chapter 3, Section 3.1).

The second strand of empirical field work aimed at establishing a collection of a broad range of policy approaches, supporting training in MSMEs, implemented across the EU-27 and the UK, going beyond the targeted financial support for

⁽⁹⁾ In the 2020 database edition, demand-side funding instruments providing 100% coverage of the incurred costs are also included, except for support provided exclusively for the unemployed (these instruments were excluded from the scope of the 2015 edition of the database). Altogether, over 270 financing instruments/cost-sharing arrangements are covered in the 2020 edition of the database (including around 240 single instruments, some 10 groups of instruments and around 25 examples representing groups of instruments).

⁽¹⁰⁾ The information was collected in two phases of the field work between April and June 2020, and October to December 2020. In-depth quality assurance took place between February and May 2021. Further revisions were implemented before publishing the updated database on-line in November 2022.

training. This meant covering so far uncharted territory as information on the variety of further ('non-financial') incentives had not been systematically collected before within a cross-country comparative framework.

Depending on the size of the country, between four (for small country) and 15 (for large country) examples of policy instruments going beyond financial support for training were collected (via desk research and expert interviews), analysed and summarised in a 'case vignette' ⁽¹¹⁾. All 'case vignettes' (approximately 190) included in the final analysis are provided in supporting document [Case vignettes](#). These include around 30 vignettes on policy approaches which are considered as borderline cases (for example, covering only a narrowly defined group, e.g. targeting self-employed engineers or professionals in adult education, or promoting CVET in MSMEs only as a minor activity among many others).

Based on the results of these two strands of empirical work, a taxonomy was developed of policy strategies and instruments targeting MSMEs/enterprises intending to increase their training provision. The framework distinguishes the three main strategies: targeted support, mediated support and cooperation in educational outreach. Two main types of policy instruments/levers identified are financing and structural instruments (Chapter 2, Section 2.3).

The study proposes the concept of 'support arrangements' to explore how different policy instruments interact or are combined (Chapter 2, Section 2.4); 15 [case studies](#) were developed to analyse support arrangements in selected skill ecosystems and skill formation systems. For the [case studies](#), additional desk research and additional expert interviews were conducted.

1.4. [Limitations](#)

The current study has been deliberately explorative in nature and has attempted to explore and to systematise policies supporting MSME training activities which are going beyond the provision of targeted financial support. Emphasis has been placed on establishing examples of instruments across all EU Member States and the UK, meaning that only a selection of instruments per country were considered. While the chosen approach was deemed appropriate for achieving an account of the various types of policies and instruments in place and for working towards a framework for systemising this variety, it has clear limitations, summarised below.

- (a) Some policy approaches might have remained uncharted based on the developed taxonomy. The main intention has been to demonstrate the need for going beyond accounts of instruments of targeted financial support. It is

⁽¹¹⁾ Short descriptions of the instruments going beyond financial support for training were collected in the field phase 1 (May – July 2020), and then reviewed and selected for further elaboration in field phase 2 (August – November 2020).

expected that future research will identify further policies supporting MSME training activities, though it should be possible to integrate the latter in the taxonomy developed and presented in this report.

- (b) Achieving comprehensive accounts of all forms of support available for MSMEs in one country or one skill ecosystem has not been an intention of this study. For providing full accounts, it would be necessary to focus on selected countries and/or skill ecosystems and develop a methodology for systematic mapping of all current policies (beyond training policies), before discerning the potential impact of mapped policies on MSME training activities. By this approach, most likely further policies not covered so far can be detected.
- (c) The study did not include qualitative or quantitative survey(s) among MSMEs, harvesting information about the sources of support accessible and used by the enterprises. Information on the potential joint use of policies was not collected in a systematic way, although anecdotal evidence was available in several interviews with experts responsible for one or more policy instruments.

CHAPTER 2.

Conceptual and analytical framework

2.1. MSME training gap

Evidence indicates that MSMEs provide, on average, less job-related non-formal training to their employees than their larger counterparts; this may be referred to as the 'MSME training gap'. All key data sources of the European system of statistics on lifelong learning – the [European labour force survey \(LFS\)](#), the [Adult education survey \(AES\)](#) and the [Continuing vocational training survey \(CVTS\)](#) – show lower training provision among smaller organisations.

The training gap is evident irrespective of the indicator used to measure training in companies. A comparison of four indicators from CVTS ⁽¹²⁾ (incidence, participation, intensity, total monetary expenditure ⁽¹³⁾) clearly shows that at an aggregate level, fewer SMEs provide any training, they include fewer employees in training, spend less on training and provide fewer training hours per capita than their larger counterparts. For example, in 2015 in EU28, large enterprises devoted on average 7.4 hours to CVT courses per 1 000 hours worked, compared to 5.7 hours in medium-sized enterprises and 4.4 hours in small enterprises (for more indicators on the SME training gap, see Cedefop, 2019).

While CVTS data also shows that the gap has been shrinking over time ⁽¹⁴⁾, it still poses major challenges and attracts policy-maker attention. Given the paramount significance of employer-sponsored, job-related training ⁽¹⁵⁾, any reduction in the MSME training gap would boost overall participation rates in

⁽¹²⁾ CVTS provides the data for enterprises with 10 and more employees. Micro-enterprises (less than 10 employees) are not considered, thus the use of SMEs instead of MSMEs

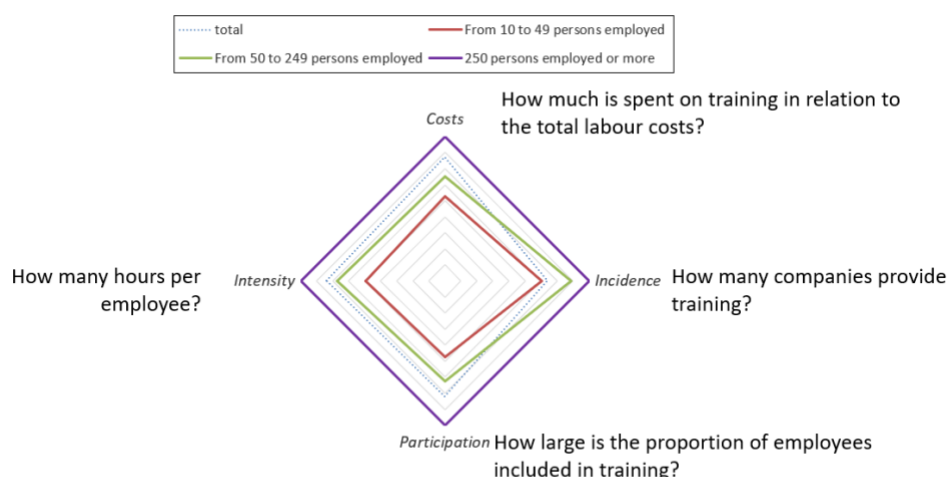
⁽¹³⁾ Incidence: training enterprises providing any type of CVT in all enterprises (%), Participation: employees in all enterprises participating in CVT courses (%); Intensity: total number of hours of CVT courses in the total number of hours worked by all employees in all enterprises (per 1 000 hours worked); Total monetary expenditure (TME): total costs of CVT courses (direct costs plus contributions minus receipts) in total labour costs of all enterprises (%) (Cedefop, 2010).

⁽¹⁴⁾ Between 2010-15, the training gap between large and small enterprises narrowed in relation to all four indicators, both in terms of absolute and relative performance gaps (Cedefop, 2019). The preliminary analysis of the latest CVTS 2020 data set does not confirm an overall pattern of reduced differences between small and large organisations with regard to training; there are some countries where the data suggest that the training gap has further narrowed and some where the training gap seems to have greatly increased. However, the data are affected to an unknown extent by the impact of the first COVID year and manifold lockdowns during 2020. An in-depth analysis of the CVTS 2020 data is currently not available.

⁽¹⁵⁾ Job-related non-formal training makes up the lion's share of all education and training activities (formal and non-formal adult learning) measured.

lifelong learning. This would achieve two goals: raise productivity, and thereby the competitiveness of the MSMEs sector; and contribute to social equality in access to education and training, as the sector employs a larger proportion of groups of adults (such as low-qualified ⁽¹⁶⁾) who face below-average access rates to lifelong learning. Consequently, there has been a need for better understanding of the reasons for the MSME training gap and finding policy levers to narrow it.

Figure 1. **MSME training gap: CVTS indicators by size**



Source: Based on Eurostat (Version 2022-10-18) TRNG_CVT_01S; TRNG_CVT_12S; TRNG_CVT_16S, TRNG_CVT_23S

Source: Cedefop, based on CVTS 2015 data.

2.2. Reasons for the MSME training gap

2.2.1. Barriers to training

In the literature, a broad range of barriers to training in enterprises are discussed, and are more prevalent in MSMEs than in large enterprises (Cardon and Stevens, 2004; Cardon and Valentin, 2017) (Table 1 for summary). These barriers are considered to contribute to the observed differences in the aggregated indicators on training provision between MSMEs and large organisations ⁽¹⁷⁾.

⁽¹⁶⁾ As explained above, occupations associated with lower skill intensity are overrepresented among MSMEs (own calculation based on Eurostat data, European Earning Survey, 2018).

⁽¹⁷⁾ However, in surveys such as the CVTS, representatives of small, medium and large organisations provide practically the same answers with regard to the perceived reasons for not providing training.

Table 1. **Barriers to training in enterprises, especially MSMEs**

Barrier	Short description	Effects on MSMEs
Costs/ROI/Liquidity constraints	Costs are too high regarding the expected outcomes (return on investment, ROI), the perceived risks (e.g. that acquired skills find no use) or the available liquidity/stock of capital. Training includes high costs of hiring additional staff to step in during training spells (as the given workforce is too small to cover for colleagues away for training).	MSMEs have limited options to profit from economies of scale and therefore face higher unit costs for training; risks are less well distributed or more pronounced than in large organisations; liquidity constraints are more pronounced
Risk of losing training investment due to poaching	Danger of losing employees after training ('poaching')	MSME are at a disadvantage in the competition for skilled labour (due to average lower level of pay, restricted career options, etc.) and so face higher risk of losing employees after training
Lack of know-how/experience, (managerial) capacity/time to implement training (in efficient and effective way). Low awareness of the potential benefits of training.	A lack of knowledge about the potential use/benefits of training and how to implement training properly reduces the motivation for training investment and increases the proportion of failing training projects ⁽¹⁸⁾ . Lack of capacity for organising training.	MSMEs have less dedicated personnel responsible for training; management capacities are more likely to be overstretched; MSME owners/managers are often captured by other pressing tasks than training, considered more vital to enterprise survival. MSMEs accumulate less (positive) experience with regards to training which results in higher efforts required for implementing new training activities/long-term training plans. The overall low experience with training makes it also less likely that MSMEs develop an 'expansive training culture' ⁽¹⁹⁾

⁽¹⁸⁾ SME owner or manager lack of knowledge and positive experiences may lead to their unfavourable perception of what training can deliver, which is sometimes mentioned as a barrier in its own right. (Cardon and Valentin, 2017).

⁽¹⁹⁾ By developing an 'expansive training culture' MSMEs could profit (more) from exploiting all advantages CVET can deliver for the organisations. Instead, they are more likely to stay with a 'reactive training culture', providing training only to the extent that it is practically non-avoidable (e.g. for meeting legal health and safety regulations) (Hefler, 2013; Hefler and Markowitsch, 2008).

Barrier	Short description	Effects on MSMEs
Lack of appropriate training provision in the market. Shortage of viable models of implementing training. Weak/underdeveloped cooperation among companies and training/CVET providers	Lack of suitable training provision on local training markets (content, timing, unit prices).	MSMEs are less in the position to provide internal training than large enterprises. Internal training with external facilitators is no option as too few employees are in need. of one type of training. MSMEs depend more on external training provision.
Low motivation of employees to participate in training due to poor/insecure rewards	Lack of formalised reward systems for improved performance/participation in training. More restricted options to make use of new skills within day-to-day work	MSMEs are less likely to have formal reward systems for participating in CVET in place
Lack of interest aggregation. Detrimental outcomes to training from industrial relations/collective bargaining.	A lack of (sectoral) interest aggregation hampers identifying common training needs, going beyond single organisation needs (therefore, reduces opportunities for developing tailored training) Industrial relations may lead to unclear or unfavourable collective arrangements (on sectoral level) for distributing costs and benefits of training;	MSMEs depend more on collective resources provided by dedicated business interest associations MSMEs are more affected by detrimental industrial relations/a lack of conducive collective agreements on training ⁽²⁰⁾

Source: Cedefop.

It is difficult to isolate the impact of a specific training barrier on the observed enterprise training provision and the evidence available is limited. Yet, it is reasonable to assume that barriers work in combination and reinforce each other; the removal of one relevant barrier may not be sufficient to increase MSME level of training activity, as the limitations of one or more further barrier(s) may persist.

The existence (combination) of these barriers helps explain the difficulties of MSMEs in responding to their given training demand, as shaped by their current way of doing business and organising work, i.e. at the current level of skill utilisation. However, the weaker training provision of MSMEs can also be explained by their presumably lower levels of skill utilisation in the workplaces that MSMEs offer, as discussed in the following Section 2.2.2.

2.2.2. Skills utilisation

Several authors have proposed that training provision in a company can be understood best as depending on key features of the workplace, particularly the

⁽²⁰⁾ This argument refers to countries with no or only a few binding sectoral agreements, with MSMEs less likely to achieve a collective agreement at company level to fill the gap.

quantities of skills used (Fournier, 2016; Holm and Lorenz, 2015; Holm, 2010; Valeyre, 2009).

Workplaces with a broader range of tasks, and/or with more demanding ones, require more skills. Jobholders bring these skills with them yet typically acquire many of them while performing their job over time, turning day-to-day work and informal learning into an indispensable source of skill acquisition. Informal skill formation, however, can be complemented by CVET provided by the company to support acquisition of skills required for the job. Evidence shows that a higher level of task complexity and job design are associated with higher potential for informal learning at the workplace and higher levels of employer-sponsored training (Fournier, 2016).

The complexity of tasks performed within an organisation's workplaces depends on the type of products produced and services provided, which is reflected in steep differences in skill use across economic sectors and mirrored by differences in the use of CVET. However, the applied form of work organisation also plays a decisive role. The work can be organised either in a way that complex tasks are concentrated in a smaller number of workplaces, leaving skill demands limited for most workplaces, or complex tasks can be assigned across the vast majority of workplaces, thereby increasing strongly the skill utilisation of an organisation as a whole. The ways work is organised (Parker et al., 2017), can therefore be taken as the key starting point for understanding how much training might be useful or required.

There are reasons to believe that MSMEs, on average, are engaged in a smaller range of tasks than larger organisations, resulting in a lower level of skill utilisation. While accepting that some smaller organisations can even be technological leaders, at aggregate level, MSMEs are less likely to adopt advanced technologies, develop new, more complex products and services, enter international markets or rearrange their internal processes in ways which contribute to increased levels of productivity or employee well-being (thus to increased skills utilisation) (Ashton et al., 2008).

Considering how CVET responds to the given skill needs of an organisation, the potential for using training is lower in MSMEs than their larger counterparts, as MSMEs use a smaller range of skills. This difference in skill utilisation explains the differences observed in training activity between MSMEs and large enterprises: even if MSMEs faced no barriers to training (discussed in Section 2.2.1), they would still train less because they have less potential for using CVET to support skill acquisition in the workplace.

To increase skill utilisation and the consequent potential for using training successfully, MSMEs need support to expand their range of business activities and the tasks to be mastered. Adding more and/or more complex tasks drives skill utilisation and given tasks can be distributed more equally across categories of employees, increasing the skill utilisation in formerly 'de-skilled' workplaces. Such

changes are covered by the term innovation, including changes in markets, products, technologies, processes, and forms of organisation. By supporting innovation, skill utilisation can be expanded, which can invite more use of CVET.

The immediate training implications of innovation activities are less often studied in a systematic way, although it is widely accepted that some innovation activities may require considerable amounts of training for a substantial fraction of the staff. For a company, any innovation might come with a 'price tag' for related training activities, as planning for a specific organisational innovation makes visible skills needs and gaps. Training will be considered as one option among others to close this gap and meet skills needs.

MSMEs may face the barriers to implementing innovation. Although the literature on barriers to innovation in MSMEs is less well developed compared to training, similar barriers are typically reported including (Hadjimanolis, 2003; Madrid-Guijarro, 2009; Mirow, 2007; Sandberg and Aarikka-Stenroos, 2014):

- (a) lack of funding or access to finance;
- (b) lack of know-how regarding identifying, selecting and implementing innovation activities;
- (c) lack of skills, competences and attitudes of employees required for implementing the innovation ('weak absorptive capacity');
- (d) shortage of successful models and know-how regarding the implementation of particular types of innovation (e.g. the adoption of one technology) in MSMEs;
- (e) lack of/low awareness among MSME owners/managers of the importance of specific types of innovation;
- (f) weak cooperation regarding innovation among MSMEs and between MSMEs, public higher education and research institutions or R&D service providers;
- (g) low level of interest aggregation within the MSME business arena, the interest of MSME therefore having little impact on public R&D support policies.

By helping to overcome these barriers to innovation and eliciting organisational learning, a key mechanism for increasing learning opportunities of MSME workforces is established, including – mediated by the expansion of skill use – their access to training.

2.2.3. Preference for less formal approaches to skill development

MSMEs also provide less training for reasons other than a higher exposure to 'training barriers' and the likely average lower level of skills utilisation compared to large organisations. To explain lower MSME training provision, it is vital to acknowledge the key role of informal learning for skill formation.

Compared to large organisations, MSMEs are more likely to choose informal approaches to support skills acquisition than participation in 'training courses'.

Most micro and small enterprises do not have a dedicated HRM or training unit; even among smaller medium-sized organisations, many do not have any specialist responsible for HRM or training (training decisions are made either by the general management or by line managers for their team members). MSMEs also reserve a training budget less often and they can do without many tools of formal training management, such as training plans. HRD and training activities may be planned, but they are neither stated in formal plans nor reported in any systematic way (Bishop, Daniel, 2012; Cedefop 2019).

The MSME preference for informal approaches to skill formation also reflects their limited options to profit from any 'economies of scale' to outweigh the costs of formal approaches. MSMEs also have fewer opportunities to provide internal training courses, given that only a small number of employees may need a particular type of training.

Case study research across the globe has demonstrated that informal learning is taken seriously in MSMEs; owner-managers are aware of the vital importance of workplace learning and apply their ingenuity to developing staff skills on a day-to-day basis (Eurofound and Cedefop, 2021). Even when not outlined in any training plans, in many MSMEs there are fine-grained 'pedagogies of the workplace' (Billett, 2002), allowing new workers to acquire the skills of the trade in a long-term learning pathway. Substantial proportions of employees in MSMEs see it as an important part of their occupational roles to instruct their colleagues informally and engage in more formal activities (such as giving short presentations) to develop skills (Cedefop, 2015c). However, they would not perceive themselves as 'trainers', nor is their activity likely to be counted as 'training' ⁽²¹⁾.

While informal workplace learning forms the backbone of skill formation in MSMEs, it is well established that the need, and the opportunities, for informal learning in the workplace are directly linked to the propensity of employer-sponsored job-related training (Fournier, Lambert and Marion-Vernoux, 2016; Gallie, 2013; Skule, 2004; Skule and Reichborn, 2002; Valeyre, 2009). For example, using the data of the European social survey, it can be stated that adults with jobs, which require constant learning of new things, participate five times as much in employer-sponsored training as adults with jobs which do not require constant learning (ENLIVEN Project Consortium, 2020). Only where MSMEs design adequate environments conducive to learning, or provide larger numbers of jobs requiring constant learning and allowing using high quantities of skills, may they also provide more employer-sponsored training.

⁽²¹⁾ Currently, there is a lack of sources for differentiating between small firms, which may not provide much training, yet still support the skill acquisition of their employees by designing adequate environments conducive to learning (Fuller and Unwin, 2004), and firms which fail both to support learning in the workplace and to provide training. For the latter, more comprehensive strategies are needed to improve the situation as simply 'adding training' does not work.

Attracting the attention of MSMEs management to CVET requires acknowledging the role and impact of informal learning first, with CVET understood as operating in a supportive, complementary role. Any CVET offered needs to be characterised by the way it responds to the skills in use in the relevant workplaces and how it can go beyond what readily used forms of informal workplace learning can deliver.

2.3. Policies to increase MSME training provision

Based on the discussion in the previous sections, the following key policy strategies to mitigate the MSME training gap can be identified: ‘targeted support’ for training, ‘mediated support’ for training, and ‘cooperating in outreach activities’.

2.3.1. Targeted support for training

Targeted support refers to policies that address an organisation’s current demand for training, corresponding to its current way of doing business and the related skills needed in its workplaces. Policy instruments are specifically promoted as support for training, so the approach builds on sufficiently high interest among MSME management in the subject matter. The idea is to use the full potential for training as present in an organisation by contributing to the improvement of all stages of the ‘training circle’ (skill/training needs identification, planning, selection of training providers and forms of training, implementation of training, evaluation and transfer of learning outcomes) and mitigating related barriers. Policy instruments of the ‘targeted support’ are offered within a broad range of policy fields including lifelong learning and skills, active labour market and employment, and – to a lesser extent – business development and innovation.

Table 2 lists key policy instruments for providing ‘targeted support’ for training, (addressing the key barriers to training). These include (co-)funding along with other various instruments that go beyond providing financial support and which can be addressed under the heading ‘structural instruments’.

Table 2. **Key policy instruments for providing ‘targeted support’ for training and related key barriers addressed**

Type	Key policy instruments	Key barriers addressed
Financing instruments (3.1)	Provide (co-)funding of the costs of training (including personal absence cost)	Lack of funding, risk aversion
Structural instruments (3.2)	Offer organisational counselling/ consultancy services at any step required to implement training in enterprises (‘training circle’) (3.2.1)	Lack of know-how and (managerial) capacity/time in the organisation

Type	Key policy instruments	Key barriers addressed
Structural instruments (3.2)	Expand the range of targeted, suitable CVET offers, meeting the demand of MSMEs (3.2.2)	Lack of appropriate training offer in the market (tailored to MSME needs)
	Provide support for knowledge creation ('pilots') within MSMEs and the transfer of outcomes across MSMEs (3.2.3)	Shortage of viable models how to address organisational problems via CVET
	Support frameworks for awareness raising about the importance of CVET and the motivation of managers/owners of MSMEs and their employees to participate in CVET activities (3.2.4)	Lack of /low level of awareness of CVET benefits/opportunities; low levels of motivation
	Support the networking and the cooperation of MSMEs in the provision of CVET and related activities (3.2.5)	Weak cooperation among companies and/or between companies and CVET providers
	Improve interest aggregation among employers (e.g. MSMEs in a sector or region) and facilitate collective bargaining on training relevant issues (3.2.6)	Lack of /low level of interest aggregation

Source: Cedefop.

2.3.2. Mediated support for training

Policies can apply a mediated approach to support training, by aiming at increasing the 'skills in use' within organisations, instilling – in a broad sense – specific types of innovation. Policies seek MSMEs' management attention for specific topics other than training, like technological upgrading, development of (particular) international markets and so forth. Training comes in to achieve the selected organisational goal and therefore in a mediated way only. However, through expanding the range of skills used within the organisation, the options for making good use of training are expanded in the long run, thereby holding the promise that the mediated policy intervention will increase the organisations' training provision in a sustainable way. Policy instruments of mediated support are mainly grounded within the policy fields of business development, innovation and regional development. So far, lifelong learning policy has not paid enough attention to them.

Policy instruments of mediated support (aiming at strengthening innovation in MSME and therefore, also expanding the opportunities to use training by MSMEs) can be organised along the similar lines as policies providing 'targeted support' for training (as barriers to training and innovation are considered similar, Section 2.2.2).

Table 3. **Key policy instruments within the 'mediated support' for training and related key barriers addressed**

	Key policy instruments	Key barriers addressed
Financing instruments (4.1)	Provide (co-)funding of the costs of innovation	Lack of funding
Structural instruments (4.2)	Offer organisational counselling/ consultancy services at any step required to implement innovation (4.2.1)	Lack of know-how
	Support innovation-related CVET activities which strengthen the skills required for implementing specific innovation or for expanding the 'absorptive capacity' in general (4.2.2)	Lack of skills, 'absorptive capacity'
	Provide support for knowledge creation ('pilots') within MSMEs and the transfer of outcomes across MSMEs (4.2.3)	Shortage of viable models
	Support frameworks for awareness raising about the importance of innovation among MSME owners/managers (4.2.4)	Lack of/low level of awareness
	Support networking and cooperation among MSMEs in the implementation of innovation (4.2.5)	Weak cooperation among companies, between companies, R&D and other relevant organisations
	Improve interest aggregation among employers (e.g. MSMEs in a sector or region) and facilitate collective bargaining on innovation (4.2.6)	Lack of/ low level of interest aggregation

Source: Cedefop.

2.3.3. Cooperating in educational outreach activities

Policies within this category aim at winning over MSME management support for (educational) outreach activities targeting employees and/or taking place at work premises. This reflects the fact that MSME employees are not only less frequently invited to participate in employer-provided training, but they also participate less frequently in individually arranged CVET activities, even when supply-side funded opportunities (at low or no cost) are available. Moreover, the MSME workforce has more hard-to-reach groups with a lower propensity to enter CVET compared to large organisations.

In contrast to targeted support and mediated support approaches, an organisations' potential to use training, or any barriers to training, are not the starting point: the goal of involving hard-to-reach groups into extended training activities forms the core of the strategy. Enterprises are sought to be won over to supporting educational provision for groups of their employees – irrespective of an

immediate organisational interest in their participation – as well as for groups of adults entering the organisations just for educational purposes. CVET provision is thus tailored mainly to individual learner needs, although it may be advantageous for the organisations as well.

Enterprises are expected to participate in, and profit from, their participation in the educational outreach activities for various reasons:

- (a) organisations may support an outreach framework for normative reasons, demonstrating their social responsibility and gaining in visibility and social recognition in their local environments;
- (b) organisations participate in the positive effects of the CVET provided to their own employees, speaking of expanded skills and higher level of motivation, even when the education provided might not be ultimately required for their job (courses in the local language for workers who hardly use the local language in their current type of work);
- (c) organisations might profit from positive spill-over effects, with the outreach project expanding the resource base for CVET selected in line with a company's needs or specific interests. Positive experiences with the training projects implemented as part of the outreach framework may strengthen an organisation's positive attitudes towards training and support the development of an expansive training culture (Hefler and Markowitsch, 2008);
- (d) organisations might receive compensation for at least a share of their efforts, for example, when wage costs for internal personnel engaged in the training activities are subsidised.

Outreach frameworks involving enterprises differ in how support from the organisation is sought. Schemes typically only reach out to and seek enterprises' support for employees belonging to vulnerable groups (e.g. low-qualified or low-skilled employees, former long-term unemployed, refugees). In some cases, working for micro or small enterprises is seen as a potential source of vulnerability, meaning that all employees of an organisation are targeted.

Schemes can be summarised under three main headings:

- (a) promoting the participation of MSME employees in external CVET opportunities offered to individuals: with the help of the instrument, the enterprise should be motivated to promote the participation of its own employees in external CVET opportunities (these are not restricted to the members of own workforce);
- (b) providing work experience/on-site training spells to non-employees: the organisation is encouraged to support the education of adults by providing opportunity for workplace learning and/or the acquisition of work experience, as part of work placements, internships, traineeships. Workplace learning might allow for the implementation of CVET programmes closer to formal programmes like apprenticeships. Besides

- regular apprenticeship schemes accessible to adults, where possible, other specific forms of apprenticeship for adults might be supported. The organisation might consider employing the learner at a later stage;
- (c) providing training (on-site or external) to the employees of one organisation: the enterprises allow a third party (an education provider, a trade union), to organise CVET within the corporate facilities. Alternatively, it supports extramural provision.

The policy instruments of ‘cooperation in outreach’ are rooted in business, lifelong learning and active labour market and employment policies.

2.3.4. Summary

Figure 2 below brings together the identified key policy strategies (targeted support/mediated support/cooperating in educational outreach) and instruments (financial/structural) aiming at supporting MSMEs to increase their training provision. The developed taxonomy helps to frame further discussion and (empirical) exploration of the relevant policies.

While the taxonomy has been developed with the aim of getting a better grip on the variety of approaches for supporting training in MSMEs, many policies combine several different instruments. Therefore, the policies do not necessarily fall neatly within one or another category, yet represent a specific blend marked by a unique profile.

Even more important, MSMEs working in one economic sector and/or geographic region might have access to and potentially make use of various support instruments offered within their relevant environments (including the instruments going beyond the ones covered in the developed taxonomy). Instruments might be effective only via their complementarity with other instruments also in place. To capture this reality, the next section introduces the concept of ‘support arrangement’ as a part of skill ecosystem or skill formation system and proposes the criteria for studying the effectiveness of such an arrangement.

Figure 2. Taxonomy of policy instruments to increase MSME training provision

	Financial support	Structural support					
Targeted support for training	Provide (co-)funding	Offer consultancy/organisational counselling	Expand tailored training provision	Support knowledge creation (pilots)	Raise awareness	Support cooperation/networks	Improve interest aggregation
Barriers	Cost & risk aversion	Lack of know-how & managerial capacity	Lack of appropriate training offer	Shortage of viable models to emulate	Lack of awareness	Weak cooperation	Lack of interest aggregation
Mediated support for training	Provide (co-)funding	Offer consultancy/organisational counselling	Support innovation-related CVET	Support knowledge creation (pilots)	Raise awareness	Support cooperation/networks	Improve interest aggregation
Cooperating in educational outreach	<ul style="list-style-type: none"> ▪ Promoting the participation of MSME employees in external CVET opportunities offered to individuals ▪ Providing work experience/on-site training spells to non-employees ▪ Providing training (on-site or external) to the employees of one organisation 						

Source: Cedefop.

2.4. How to study the effectiveness of policies to increase MSME training provision: the concept of 'support arrangement'

2.4.1. Towards a holistic approach in supporting MSME training

The different policy strategies presented above are ways of increasing MSME training provision. Effective policy instruments instil meaningful change in one or more dimensions. Adopting an instrument should cause (within some margin of uncertainty) an intended change in the desirable outcomes dimension (as measured by indicators chosen). Further, unintended negative side effects should not call into question the desirability of the approach. Effective policies (and the accompanying instruments) help improve training provision, whether in the short or in the long term. Policies thereby – following the taxonomy presented in 2.3 – pursue either a targeted approach, a mediated approach or an approach based on cooperating in educational outreach activities.

Stakeholders need evidence when deciding on introducing or keeping instruments that make a difference and on phasing out ineffective policies. However, significant challenges hinder direct evaluation of instruments to improve MSME engagement in training. This section presents these challenges and suggests a fresh starting point and a way forward.

Few studies evaluate the effectiveness of public schemes in changing the training behaviour of companies, including MSMEs. This is true for various forms of financial support/incentives (Müller and Behringer, 2012) and even more for structural support/incentives of all kind. Counterfactual results for financial incentive impact on company training performance are mixed, with some studies suggesting their effectiveness (Brunello, 2012; Görg and Strobl, 2006), while others report less encouraging results. (Görlitz, 2010). Despite of the diffusion of instruments providing support for training, many investigations provide only descriptive statistics with no counterfactual for the assessment of the policy impact (Brunello and Wruuck, 2020, p. 26) ⁽²²⁾.

Measuring policy-induced change in organisational behaviour is more demanding than observing policies' impact on individual behaviour (Dvouletý, 2021). To start, it is methodologically more demanding to design counterfactuals, for example, by using a matching approach for developing a control group of non-treated companies, or by finding any instrumental variable allowing for a counterfactual design (Leuven and Oosterbeek, 2004). Further, to

⁽²²⁾ Studies identified as part of the current project are reported in the Annex (Table 10. Evaluation studies (public) on structural instruments identified during the project9, 10). Counterfactual evaluations are practically absent.

establish a causal relationship between the policy and the outcome, it is even more difficult to control for the myriads of other factors which have an impact on organisational behaviour. A whole 'policy package' affects organisational behaviour and it is difficult to assess how a specific policy has contributed to the mix and whether the policy would be equally (un-)successful when applied as part of a different mix (OECD, 2007). Finally, it is difficult to establish whether a policy is the root cause of an observed 'additionality' (e.g. more training, more R&D), because policies serve as mere steps in organisational development that may remain insignificant until a final 'breakthrough' changes the organisational behaviour in the desired direction. As stated in an often-quoted paper on the impact of public support for R&D: '[...] repeated treatment appears to be the only trigger for substantial changes to the way in which a company carries out its R&D&I related activities. In other words, different forms of multiple policy interventions are necessary to produce scope additionalities in the form of more cooperation or a greater willingness to engage in risky basic research. [...] When one acknowledges that the success of policy intervention does not solely depend on individual funding schemes, it becomes clear that future work should focus more on the evaluation of programme portfolios and their interactions'. (Falk, 2007, p. 676)

The interplay or embeddedness of any observed policy in wider 'support arrangements' or wider societal structures also poses other challenges to the most common evaluation strategies. The conventional counterfactual argument builds on the idea that only the treated entities – and not the untreated – benefit from an evaluated policy. However, where single policies have large spill-over effects or contribute to wider arrangements that favour all entities under study, then comparison with the control group may underestimate the overall contribution of policies to the observed outcomes.

Cross-country comparisons provide an invaluable corrective. It is already well established that the wider policy arrangements supporting lifelong learning play a key role in explaining cross-country differences in the individual participation of adults in further education (Rubenson and Desjardins, 2009). However, similar arguments have rarely been used for explaining the observed differences in the training behaviour of organisations (Markowitsch, 2013), although they do disentangle the large 'country effects' (Brunello, 2007).

Despite the well documented and stark cross-country differences in employer-provided training across Europe, research on observed country patterns of employer-provided job-related adult learning using data on companies is rare (Brunello, 2007; Markowitsch and Hefler, 2008). The available evidence shows, however, that overall training of organisations of all sizes differs considerably within

and across EU countries. The countries also differ greatly regarding size of the MSME training gap ⁽²³⁾.

According to (Hefler and Markowitsch, 2008; Markowitsch et al., 2013), the cross-country differences in the level of company training provision can be explained by the following three ‘layers’:

- (a) compositional effects (across territories and time) due to differences in the structure of the economy, such as sectoral composition, distribution of employment across differently sized companies, and the mix of economically strong and weak organisations;
- (b) differences/changes in the organisational behaviour (across territories and time) resulting from changing preferences for type of work organisation or for particular forms of prior (occupational) training. Firms develop specific approaches to (cultures of) training; firms that develop an ‘expansive training culture’ have, on average, more training;
- (c) differences in the general institutional environment (the political economy) including specific policies to support CVET and/or firm-provided training result from the whole set of factors explaining the diversity of capitalism. Single factors drive demand for firm-provided training in a direct or mediated way (Busemeyer and Trampusch, 2012b; Hall and Soskice, 2001; Roosmaa and Saar, 2017; Saar and Räis, 2016; Saar, 2013).

Based on the above discussion, the study proposes the novel concept of ‘support arrangement’ with the aim of contributing to studying the effectiveness of policies supporting companies’ – and particularly MSMEs’ – training provision. The term support arrangement refers to all forms of support for training made available to MSMEs through dedicated policies in a country (going beyond the policies targeting enterprises/MSMEs directly). Support arrangement may be a key component of ‘skill formation system’ (national level) or skill ecosystem (regional or sectoral level). The skill ecosystem approach reflects the possibility that different economic sectors and regions can have stark differences in how they develop and use skills.

Section 2.4.2 presents the concept of support arrangements as part of skill formation or skill ecosystem in more detail.

2.4.2. MSME training support arrangements in skill formation systems and skill ecosystems

The novel term support arrangement refers to the set of policies aiming at supporting CVET in enterprises, especially MSMEs, as accessible for a particular enterprise belonging to an economic sector or cluster and located in a particular geographic area. By displaying all relevant instruments of support, the interplay of

⁽²³⁾ Cedefop. (2019). Continuing vocational training in EU enterprises: – developments and challenges

various policies is made visible, as seen from the standpoint of a single enterprise, allowing study of the level of complementarity of instruments.

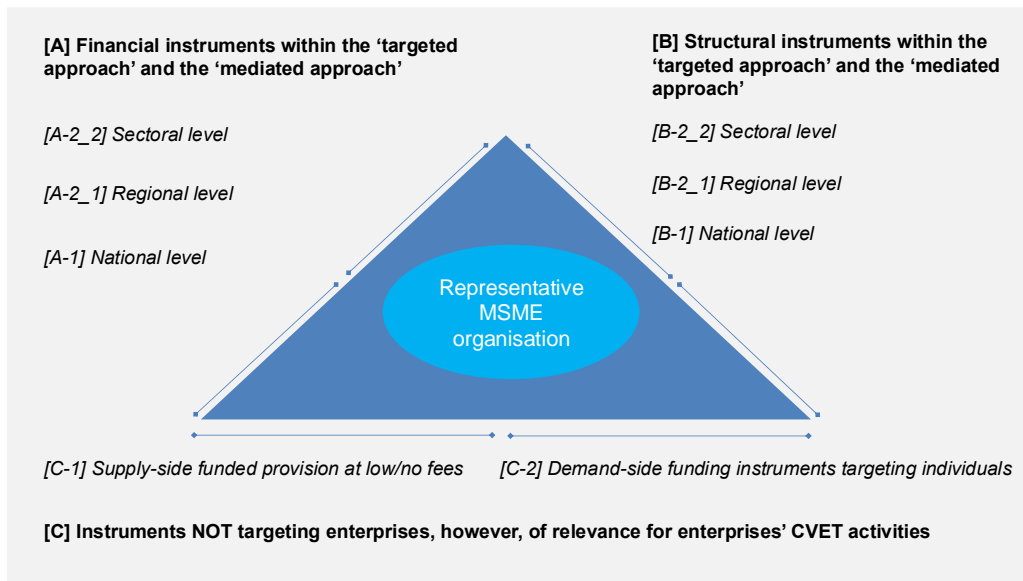
Support arrangements include instruments offered at national level, meaning that – in principle – they should be accessible for enterprises irrespective of their local or economic sector. They can also include groups of instruments established at a regional or sectoral level, where particular types of support are available in the majority of regions or for the majority of sectors, so this level is of systemic importance. However, support arrangements may comprise instruments specific to a particular economic sector (or cluster) and/or a particular region (in the sense of a political sub-unit entitled to implement relevant policies). The support arrangement' thereby expresses the set of policies which one enterprise located in one sector and region might be entitled to profit from.

In line with the previous discussions, the forms of support relevant for training in enterprises/MSMEs include (see also Figure 3 for graphic representation):

- (a) instruments providing financial support for CVET, following either a targeted or a mediated approach. (Left side [Label: A] of the triangle. Two segments (where applicable) are represented: [A-1] instruments established at national level and therefore accessible irrespective of sector and region; and [A-2] instruments available only at a [A-2-1] regional or at a [A-2-2] sectoral level);
- (b) instruments offering structural support for CVET in enterprises, again either by applying a targeted or a mediated strategy; (Right side [Label: B] of the triangle. Two segments (where applicable) are represented, following the same logic as above);
- (c) instruments not targeting enterprises directly, with the supply-side funded CVET arrangements and demand-side instruments supporting individual employees as the two groups of instruments selected. (The bottom line [Label C] of the triangle. It represents only the instruments available at national level or – in the case of analysing the support available in a skill ecosystem – the support available in a particular economic region or sector).

Figure 3. **Graphic representation of the ‘support arrangement’ as a part of the skill ecosystem or skill formation system**

Source: Cedefop.



Support arrangements are analysed either as elements of national ‘skill formation systems’ or as elements of ‘skill ecosystems’. The skill ecosystem concept has been introduced for studying ‘local orders’ of skill formation, which can differ considerably from the features which are characteristic for the overall skill formation system of a country.

The project examined support arrangements but could not study in detail other elements of the skill ecosystems or skill formation systems such as the landscape of CVET providers or the patterns of work organisation and the consequent role of standardised qualifications.

Policy instruments displayed by the support arrangement (Figure 3) are rooted in different fields of policy-making (such as education/lifelong learning, employment, business development, industrial relations) and so have specific goals going beyond the support for CVET in enterprises. Any representation of support arrangements would remain incomplete when including only one out of different types of policy instruments.

Support arrangements are studied according to three key dimensions: density, complementarity and targeted elaboration:

- (a) density refers to the number of support instruments and their distribution across types of policies and policy levels (national, sectoral regional). Some support arrangements have many instruments, on both a general and a specific (sectoral, regional) level, that provide financial and structural support for individuals or organisations. In contrast, other arrangements have only a few instruments, not well distributed across the type of support contributing to the overall arrangement.

- (b) complementarity captures the coexistence – or its absence – of instruments providing financial support and those providing structural support (both following targeted and/or mediated approach). Complementarity covers mainly the coexistence of support mechanisms which together address all barriers to training, including barriers to innovation. As a further issue, complementarity captures the coexistence of instruments targeting MSME organisations and further measures relevant for the enterprises (supply-side funded CVET, demand-side schemes supporting employees).
- (c) targeted elaboration refers to the degree of adapting the support arrangements to the needs of a skill ecosystem. As a part of the overall skill formation system, targeted elaboration can take place by adapting national-level support instruments to the particular needs of a skill ecosystem (such as a sector). In addition, instruments specific to a particular skill ecosystem may be developed.

Support arrangements are expected to provide a more effective boost for MSME training activities when their density is high (not low or medium), their complementarity is strong (not weak or moderate) and their targeted elaboration is advanced (not rudimentary or fairly developed). Given the explorative nature of this study, the three dimensions are proposed as an initial heuristic tool, because the lack of data hinders any detailed analysis.

Nevertheless, using these three dimensions allows comparison of different support arrangements and reveals significant differences between them. Chapter 6 illustrates the use of the developed concept of support arrangement and presents the main findings of the case studies in Spain, Poland, and Ireland ⁽²⁴⁾. It also provides short summaries of the findings on support arrangements across all 15 case studies conducted within this project.

⁽²⁴⁾ Supporting document ‘[Case studies](#)’ presents the full version of the 15 case studies.

CHAPTER 3.

Targeted support for training in MSMEs

This chapter presents examples of policy instruments providing targeted support (Section 2.3.1), aiming at mitigating one barrier or a bundle of barriers to training in enterprises (MSMEs in particular). The key examples of financing and structural (those going beyond financial support) instruments implemented across the EU-27 and the UK are described. Many policy instruments are often combined to bring effective change, meaning that the analytical distinction between financing and structural instruments is often blurred.

3.1. Financing instruments

About one in three representatives of enterprises, irrespective of size, identified cost of training as a barrier to providing any (or more) training in 2015. Only time constraints were more often reported as an impediment for training (Cedefop, 2019). As time constraints could be mitigated by putting in more financial resources (e.g. allowing the take-on of supplementary workers or paying overtime), contributions to the costs of training should address the most important impediments for expanding training activities in enterprises.

By reducing the costs for training, enterprise/MSME exposure to risk of losing the returns on training investments is also reduced. There are cost-sharing instruments (payback clauses, Section 3.4) which can further reduce this risk. Financing instruments/incentives also have the potential to attract enterprise/MSME management attention to training-related matters. Overall, the instruments discussed in this section are well established and had received the attention of policy-making for a long time.

Practically all EU Member States have financing instruments/cost-sharing arrangements aiming at providing an incentive for enterprises/ MSMEs to train. These include grants and tax incentives (public (co)funding), training funds (cost-sharing between employers), and payback clauses (cost-sharing between employer and employee).

Detailed information on these instruments is provided in [Cedefop's database on financing adult learning](#), which has been updated (cut-off date 1st of February 2020) in parallel to developing this study. The following sections provide a concise summary of the nature and scope of financing instruments/cost-sharing arrangements targeting enterprises across the EU-27 and the UK. Attention is paid to the following aspects:

- (a) if, apart from granting financial contributions to the costs of training, financial instruments provide also other (structural) forms of support (the analytical

distinction between financial and structural forms of support is often blurred in practice);

- (b) if financial instruments specifically target MSMEs, give them preferential treatment or are designed for all enterprises (and therefore are accessible also to MSMEs);
- (c) if [de-minimis regulation](#) is applied (one enterprise must not receive State aid under relevant titles of more than EUR 200 000 within a period of 3 years). Schemes working under de minimis regulation are partly shielded from overly strong use by large enterprises. For them, the threshold works as an effective constraint, considering that large enterprises might have access to a broader range of subsidies all provided under the regulation (e.g. subsidies for innovation). Schemes functioning under such regulation are already attuned mainly to the MSME sector, as smaller firms are less likely to cross the threshold for acceptable State aid.

3.1.1. Training funds

[Training funds](#) are institutions which collect money – via the so-called training levy – from all enterprises that are under their jurisdiction and use the collected contributions specifically for training purposes ⁽²⁵⁾.

Training funds often have a long history and are important, yet, highly heterogeneous institutions. The differences concern governance models, the level of operation, the number of funds established per country, the way the money is collected and distributed, and the type of training activities and target groups supported.

In general, training funds are set up at:

- (a) national level, often with tripartite governance and the levy defined by law;
- (b) sectoral level, with bipartite governance and the levy defined for each sector, based on collective agreements.

Beyond these two basic types, other solutions can be found among EU countries. For example, the so-called interprofessional funds for CVT in Italy are linked to a particular sub-field of the economy, a particular profession (e.g. managers/executives) or size of the company (e.g. SMEs).

While national training funds emerge from public policy, sectoral training funds are commonly established at social partner initiative. However, the distinction is

⁽²⁵⁾ It should be noted that in some countries there are organisations named 'Training funds', which, however, are funded based on general taxes or social security contributions (including unemployment insurance) and a discretionary decision on the size of the budget to be allocated to these organisations. While these organisations often provide types of activity and support like those provided by the funds based on training-specific levies, they are not considered as training funds according to the approach adopted by Cedefop. However, the support schemes provided by these organisations, e.g. grants, are included in the scope of Cedefop's Database on financing adult learning (e.g. as grants for companies or grants for individuals).

not always straightforward. For example, interprofessional funds in Italy are managed by social partners but they need to be authorised by the State and the level of the levy is set nationally.

In several EU countries, such as Belgium (Flanders), Denmark, Ireland, Greece, Spain, France, Italy, Cyprus and the Netherlands, training funds play a significant role in adult learning and employer-sponsored training. They provide the backbone of the CVET funding system. In the UK, the recent (2017) type of training fund is also making contributions significant at a system level.

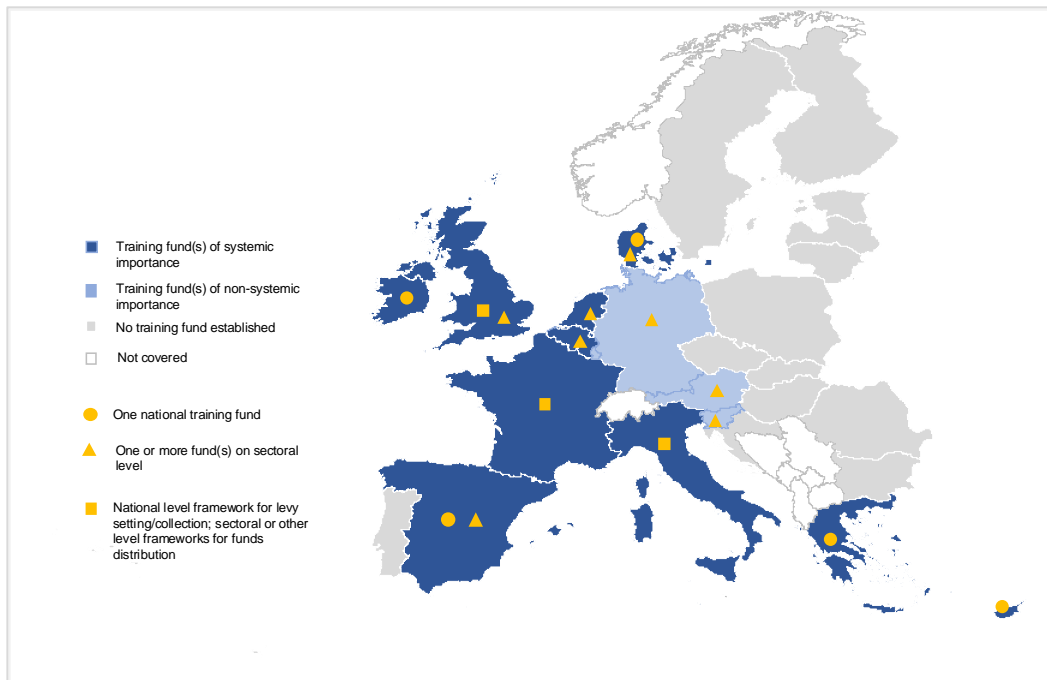
The above country group includes those which opted for creating a single national training fund or those with multiple training funds, usually covering most economic sectors (e.g. the Netherlands). In some countries (e.g. in Denmark, the UK), national training funds are complemented by others, smaller in scope, which support specific sectors, target groups or activities related to skill and competence development.

In other countries, training funds are established only for some selected sectors (e.g. Germany, Luxembourg, Austria) or only on a voluntary basis (Slovenia) and therefore have no systemic role in adult learning and employer-sponsored training (and in funding of CVET). In the remaining EU countries, training funds are not a feature of the skill formation or adult learning systems at all.

In some countries a training levy may be collected, though it is mainly used to fund IVET ⁽²⁶⁾. These institutional frameworks are not discussed in this report.

⁽²⁶⁾ For example, in Hungary enterprises were required to pay the 'vocational training contribution' set at 1.5% of company payroll. The contribution could be paid in several ways: by providing apprenticeship training to apprentices in upper-secondary VET and certain higher education programmes; by providing or financially supporting employee training (up to 16.5% of the training levy), under certain conditions; by paying into the National Employment Fund training sub-fund. [Since 1 January 2022, the vocational training contribution has been abolished.](#)

Figure 4. Training funds across the EU-27 and the UK



Source: Cedefop.

When focusing on training funds of systemic importance, enterprises provide between 0.24% (Greece) and 1% (France) of their payroll to the fund ⁽²⁷⁾: in Denmark, a contribution of about EUR 375 per employee is due. Micro-enterprises (1-10 employees) pay a lower levy in France. In the UK, smaller enterprises with a payroll of less than GBP 3 million are exempted from the levy. Only in Spain are employees required to contribute to the training fund as well. Resources collected by the training fund are complemented by public sources in Denmark, Spain or France. For an overview, see Table 4.

⁽²⁷⁾ For some of the sectoral training funds in the NL, the contribution can be even higher, see the following footnote.

Table 4. Training funds with a systemic role: overview of collection mechanisms

ID	Country	Name of the instrument in local language	Name of the instrument, English translation	Level of obligation to pay a levy	Collection from employer/employee	Additional State funds	ESF co-funding	Level of levy
34	CY	Αρχή Ανάπτυξης Ανθρώπινου Δυναμικού Κύπρου – Προγράμματα Κατάρτισης στην Κύπρο & στο Εξωτερικό	Human Resource Development Authority of Cyprus (HRDA) – Training Programmes in Cyprus and Abroad	Compulsory (by law)	Employer	No	Yes*	0.50%
60	DK	Arbejdsgivernes Uddannelsesbidrag (AUB)	Employers' Reimbursement System	Compulsory (by law)	Employer	No	No	approx. EUR 375 per employee.
73	EL	Λογαριασμός για την Απασχόληση και την Επαγγελματική Κατάρτιση (ΛΑΕΚ)	Account for employment and vocational training (LAEK)	Compulsory (by law)	Employer	No	No	0.24%
75	ES	Fundación Estatal para la Formación en el Empleo (Fundae)	State Foundation for Training in Employment (Fundae)	Compulsory (by law)	Employer and employee	Yes	Yes	0.70%
86	FR	Contribution à la formation professionnelle continue**	Training Fund based on Contribution to the continuing vocational training	Compulsory (by law)	Employer	Yes	No	0.55%- 1%

ID	Country	Name of the instrument in local language	Name of the instrument, English translation	Level of obligation to pay a levy	Collection from employer/employee	Additional State funds	ESF co-funding	Level of levy
272	NL	Onderwijs en Ontwikkeling	Sector training funds (social partner agreements without a common legal obligation within the NL corporatist system)	Voluntary agreement on sectoral and/or company level	Variated	Yes	In some	Variated ⁽²⁸⁾
109	IE	National Training Fund	National Training Fund	Compulsory (by law)	Employer	No	Yes	1%
273	IT	Fondi interprofessionali	Interprofessional funds	Compulsory (by law)	Employer	No	No	0.30%
323	UK	[Based on the 'Apprenticeship levy'] – High End Skills Investment Fund	High End Skills Investment Fund + Film Skills Investment Fund	Compulsory (by law)	Employer	No	No	0.50%

* ESF contribution was very low in 2020, but had been more relevant in previous years, the highest in 2014 (about 30%).

** From 2020 onwards, the contribution to CVT #86 and the apprenticeship tax #87 are collected together through the same framework

Source: Cedefop database on financing adult learning.

⁽²⁸⁾ Latest data available from a comparative study (Meijden, A. van der & Meer, M. van der (2013). Sectorfondsen voor opleiding en ontwikkeling: van pepernoten naar spekkoeke. 4de meting van de Monitor O&O fondsen. 's-Hertogenbosch: Expertisecentrum Beroepsopleiding: On average 0.43% of the wages (in 2009), with a range from close to 0 to 2.7% in 2005. Since the finalisation of the database, a follow up study has become available: Vijfde O&O-Monitor (ecbo.nl)

The training funds with systemic relevance provide support for CVET by one or a combination of approaches.

- (a) Offering co-funding for enterprise CVET costs. Companies might recapture a part or even the total amount of their contributions. While some grants cannot exceed a firm's contributions, in other cases grants are provided independently of contributions.
- (b) Providing co-funding for project-based training activities, with calls specifying the targeted activities and the criteria for funding, with enterprises required to build consortia when asking for funding. Italy's Interprofessional funds provide rich examples of calls for providing support and promoting development (see the examples of Interprofessional funds for the crafts (#386) or for MSMEs (#387); the latter is also discussed in detail in the Italian in-depth case study.
- (c) Organising supply-side funded training provision in line with the needs of enterprises or their employees, typically by taking into consideration sectoral needs. Key examples for such an approach include the training funds in Denmark, Ireland, Spain or France. Training opportunities established might be accessible for both enterprises and individuals.
- (d) Providing various structural support services/ training-related activities, such as counselling/consultancy services to organisations on CVET-related activities, R&D, skill intelligence, the creation of new forms of CVET targeted to enterprise (MSME) needs, support for interest aggregation among the employers (of one economic sector) or quality assurance.

Across the various approaches taken, MSME may benefit from preferential treatment: they may receive a higher co-funding rate (as in the case of France or Spain); or they enjoy preferential treatment in selection procedures (e.g. when a training network must contain a minimum number of MSMEs, as in some calls for the fund for MSMEs in Italy (#387)). Some funds provide specific additional schemes targeting only MSMEs, e.g. the scheme offered in France (Skills development scheme for companies less than 50 employees) or that offered in Greece (Vocational training and education programme implemented by employers' representative bodies for employees in small enterprises). However, where data are available, training funds typically face the issue that MSMEs are strongly underrepresented among their beneficiaries (see for example the Italian case study, and data presented in (OECD, 2019a).

Grants provided by training funds differ greatly in their co-funding rates, their ceilings and whether eligible costs include wage costs during participation in training. Some funds offer generous solutions covering up to 100% of participation (e.g. in Spain), including wage costs.

As well as the enterprises, individual (former) employees of enterprises covered by a training fund are frequently among the potential beneficiaries of financial grants or further forms of support (as lifelong guidance or validation of

prior learning). Examples include training funds in Denmark, Spain, France, Cyprus, the Netherlands, or the UK.

Training funds are highly diverse institutions, with organisational subunits (e.g. the OPCOs in France, see Box 1) doing things differently, or formally independent funds (as in Italy) pursuing very different policies (OECD, 2019a). Training funds are not a mere funding arrangement: they often develop into multifaceted organisations with a staff of dedicated experts, playing a key role in the governance and quality provision of CVET (training funds may run significant training facilities of their own).

Box 1. Nationally collected resources for sectoral and regional skill ecosystems: the French training fund after its 2018 reform

Since 1971, employers in France have contributed to the costs of CVT for their employees by paying a national training levy (#86). Since 2018, enterprises pay 1% of gross wages (0.55% for small enterprises; 1.3% for temporary employment agencies) resulting in the (on aggregate) highest net contribution of employers to collective funding arrangements across the EU-27 (PPP 332 in 2015) ⁽²⁹⁾. A large-scale reform (2018) introduced some important changes while maintaining key features of the overall system of funding and provision.

Understanding the French training fund requires acknowledging the key role of the eleven sectoral training organisations (Opérateur de compétences – OPCO ⁽³⁰⁾), which provide the support for enterprises and individual employees in their economic sectors.

Training is offered based on supply-side funding arrangements between OPCOs and a network of training providers, overseen by the OPCOs. The OPCO Board of Directors is composed of an equal number of representatives of employers and employees and considers the diversity of the professional branches that are members, thereby contributing to the alignment of supply and demand within the sector.

The eleven OPCOs are the key organisations which safeguard CVET provision as relevant for the various sub-sectors falling under their responsibility. They can provide various forms of structural support, such as counselling on implementing the training plans in enterprises. Another recent example relates to a novel approach to develop tailored workplace-based training actions (*Action de formation en situation de travail – AFEST*), which had been mainstreamed from 2018 onwards (detailed discussion of this example in Box 3).

The OCPOs receive their funding from a central organisation (*France Compétences*), which bundles resources from the employer levy, from national (tax-based) programmes, and from resources devoted to regional policies. The training levy, mediated by the OCPOs as the key organisers of provision, contributes to a mainly supply-side funded system (with only moderate fees), accessible both for the employers (sending employees) and individual employees. The OCPO can combine

⁽²⁹⁾ CVTS5 – trng_cvt_17s

⁽³⁰⁾ *Les opérateurs de compétences (OPCO) – Ministère du Travail, du Plein emploi et de l'Insertion (travail-emploi.gouv.fr)*

supply-side funded provision with demand-side financial instruments and structural support instruments to increase the level of training activity in MSMEs.

Employers and employees can also draw on support measures provided by the OCPOs through related provision by the PES, based on regional funding, with the OCPOs in a coordinating role regarding securing provision at the sectoral level.

Employers can choose suitable training offers and send their employees, thereby implementing their mandatory training plans and fulfilling their training obligations *vis-à-vis* their employees. Employers have their training costs refunded, including a contribution to wage costs during participation.

Employees can draw on rights stated in their individual learning accounts (ILA) #259 and access training. They can also draw on their options for paid short-time leave (#262 #261 #260) while participating in a selected activity based on their ILA. For upskilling or retraining, they can draw on the CPF for occupational transition #299, which is funded from regional sources and overseen also by the regional branches of the public employment services, which also support CVET for the unemployed.

Source: Cedefop.

3.1.2. Grants (or vouchers)

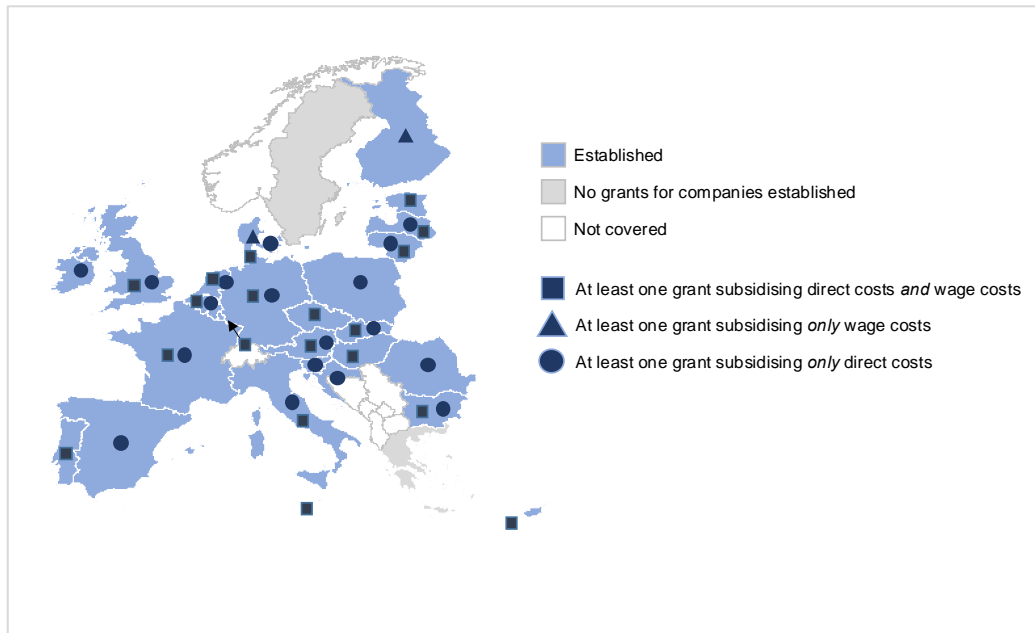
Grants (or vouchers) refer to a subsidy provided based on public sources (such as general taxation, contributions to the social security system, including unemployment insurance) to support the company's investment in education and training. Similar policy instruments drawing on funds established by a training levy (training funds) were discussed in the previous section.

Across the EU-27 and the UK, in all countries but Sweden, grants supporting enterprises in one way or other have been reported. In Greece, enterprises can receive grants only from the training fund. Grants may be function at national, regional or sectoral level.

Grants may contribute only to the so-called direct costs of training, with course fees or fees of hired trainers as the key component (for the typology of costs see Cedefop, 2015). Alternatively, they can provide contributions to both the direct costs as well as the wage costs of participants during training spells. In some cases, where CVET is provided mainly within supply-side funding regimes, grants may provide support to the wage costs of participants in training only. Many countries offer more than one type of grant. Figure 5 provides an overview of the implementation of grants for companies and the costs eligible for refunding across the EU-27 and the UK.

Grants can be complemented by measures of structural support, such as when the provision of funding is combined with support for setting up a network of enterprises and for organising tailored training as in Austrian Impulse qualification network (#226). The Irish Skills for work scheme (#113) also funds the required organisational counselling/consulting services for setting courses for the enterprises.

Figure 5. Grants for companies across the EU-27 and the UK



Source: Cedefop.

The level of support provided by grants varies widely, with most grants and vouchers providing between 50% and 90% of the eligible costs, in most cases with ceilings for the maximum funding applicable (see overview [here](#)). Almost a half of the reported schemes offer preferential treatment to MSMEs, typically providing higher rates of co-funding (e.g. the SME portfolio in Belgium #22). Some grants provide higher co-funding rates to companies having specific groups of employees (e.g. in Hungary training subsidies #103 cover up to 100% of training costs for employees aged 45; in Portugal the co-funding share is increased for disabled or disadvantaged workers #287, #288). Several grants are available only for MSMEs (e.g. in Belgium/Wallonia, the Cheques-formation #15, in Germany/ Northrhine-Westfalia, the education cheque #56, and in Croatia, the Lifelong learning for crafts grant #316). As the de minimis regulation needs to be applied in most cases (about 80% of the grants reported), grants are largely oriented to the MSME sector.

The budgets applied to grants supporting enterprises differ greatly, ranging from major schemes mobilising hundreds of millions of Euros to small schemes restricted to a funding volume of several hundred thousand Euros within 1 year. Alongside national sources, European Union funding plays a considerable role, with over 40% of the grants reported using EU funds. To conclude, grants (and voucher) schemes targeting enterprises, and MSMEs in particular, play an important role in promoting employer-provided training in Europe. A further [overview of the main features of grants for companies](#) is available online.

3.1.3. Tax incentives

Tax incentives are the concessions in tax codes that mean a conscious loss of government budgetary revenue. They are usually intended by public authorities to encourage particular types of behaviour (in relation to education and training, in this case) and/or to favour specific groups (certain companies, e.g. MSMEs, in this case). Typically, tax incentives reduce either the tax base (tax allowance) or the tax due (tax credit).

Tax incentives for training should not be confused with the tax treatment of education and training costs as operational costs. In case of the latter, the training costs of the personnel of a company is seen as a component of the costs of employment and so reduces profits as does other types of costs such as wages. A tax incentive leads to an economic benefit exceeding the impact of treating training costs as operational costs.

Tax incentives can be used to provide substantial incentives for training or provide an effective source for co-funding of enterprise training costs. For example, instead of providing a grant equal to 20% of the training costs, enterprises might be granted a tax incentive (e.g. a tax credit) reducing the tax due by the corresponding amount. However, no EU Member State currently has a substantial tax incentive – equal to comparable grant schemes – for companies. Some countries have tax incentives supporting training in enterprises, including Bulgaria, France, Croatia, Romania, Slovenia and Finland. However, these are of limited significance.

Tax incentives across countries differ in their intention and form of implementation.

- (a) Support for training costs of the (self-employed) company owners, not covered by the regulations for dependent employees: A significant scheme of this type is established in France (France #88).
- (b) Support for companies employing pupils and students. As a mean of fighting youth unemployment and to increase the number of young employees with working/practical experience, some countries introduced tax incentives for companies enabling the deduction of scholarships provided to pupils in secondary education (Romania #187) and higher education students (Bulgaria #27), or of the costs for apprentices (Slovenia #194).
- (c) Support for setting-up and implementation of a training plan. An incentive was established in Finland to avoid structural unemployment by maintaining staff skills and competences relevant and aligned with the requirements of their tasks. The employer may deduct costs arising from training based on a specific training plan (Finland #219).

The details of tax incentives vary considerably (see further [overview of the main features of tax incentives for companies](#)), but their impact on enterprises' overall training provision – beyond specific subfields of activity – is limited. This

should be seen in the context of previously existing tax incentives for enterprises (e.g. in Netherlands or Austria) being discontinued due to poor evaluation findings (e.g. Leuven and Oosterbeek, 2004)

Tax incentives for companies currently play a minor role and should not be confused with the tax treatment of training costs as operational costs equal to any others incurred and therefore reducing the taxable profits of an organisation. Nevertheless, tax regulations on training costs as operational costs may cause difficulties for MSMEs, as they might have fewer opportunities to transfer the training costs from one year to another, to ensure that the costs incurred reduce taxes paid. Related issues, however, are complex and depend on national tax codes and their legal construction; these are often specific for different types of organisation. They are not generally well reflected in the available research literature (e.g. Cedefop, 2009; OECD, 2017).

3.1.4. Payback clauses

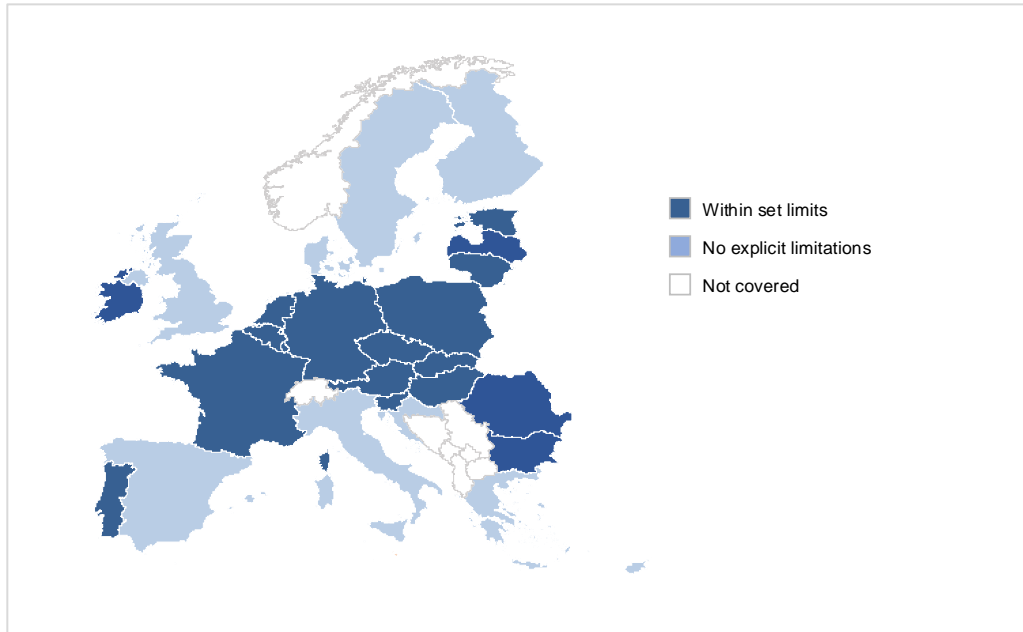
Employers face the risk that they invest in the training of employees who then choose to leave the organisation prior to the organisation recouping its training costs through improved performance. MSMEs are expected to be more exposed to this threat of 'poaching', given that larger organisations can usually offer higher levels of pay and can afford to invest in their own training without much of a poaching threat (Backes-Gellner and Mure, 2005).

When there are no rules limiting this option, employers can make their training offer conditional on setting up an agreement with the employee, where the latter agrees to stay with the company for a defined period or otherwise pay back – partly or in full – the costs of training. Arrangements of this kind are termed [Payback clauses](#).

Insofar as employers and employees are free to agree on their mutual contractual obligations, the payback clause is available everywhere. However, general or specific laws regulating the employment relationship may set limits for the valid content of the payback clause, so that employers cannot abuse their power to dictate rules deemed as violating the legitimate interest of employees. Also, the decisions of dedicated courts (including labour courts) may draw a line between acceptable and the invalid content of payback clauses, either specifying the content of a specific regulation or defining the rule of operation even where no explicit regulation is in place.

The option to agree on payback clauses should increase employer investment in training as their risk of losing their investment becomes limited. Employees are expected to profit from employers' increased readiness to pay for general training, with learning outcomes that may be of value on the external labour market.

Figure 6. **Payback clauses across the EU-27 and the UK**



Source: Cedefop.

In 17 EU Member States there are specific laws or regulations limiting the possible content of a payback clause (Figure 6). Regulations typically concern the form and timing of the agreement (e.g. in writing and prior to the training), the eligible costs (e.g. only fees of training providers, not for firm-specific training or for the wage costs during participation), the maximum costs covered, the maximum duration of the agreement, the reasons for which an enterprise can reclaim the costs of training (e.g. termination at will, dismissal due to misbehaviour) or changes in the amount due (e.g. reduced for each year of employment after the training).

Currently, little is known about the frequency of use of payback clauses across the EU Member States, a shortage having remained unchanged over the last decade (Cedefop, 2012). In a non-representative survey among MSMEs, practically no MSME reported the use of payback clauses in Denmark, France and Italy. Some use is reported for Germany (about 7%) and Slovakia (about 12%) and considerably frequent use for the Netherlands (more than a quarter) (European Commission et al., 2020b). Although there is currently a lack of data, the general importance of the payback clause as a way of reducing MSME barriers to training should not be overestimated.

3.2. Structural instruments

This section presents key examples for structural instruments (beyond financial support) providing targeted support to MSMEs. Financing instruments/cost-sharing schemes have been already discussed in Section 3.1 and are not explored here.

However, many structural instruments include some financial incentives for training as policy instruments are often combined.

3.2.1. Offering organisational counselling/consultancy services at any step required to implement training in enterprises

The provision of organisational counselling/consultancy services on HRM and training is a promising and widely used option to overcome MSME barriers of lack of know-how and (managerial) capacity/time to implement the consecutive steps of the 'training cycle': identification of needs, planning/ designing of training activities, selecting appropriate providers, delivering training, assessment/ evaluation of learning outcomes, transfer of learning (Becker, 2005).

Counselling is meant as both a tool to transfer know-how to MSMEs personnel and as a way to deliver services expanding the capacity of internal management. In the first case, the knowledge of managers is expanded within a counselling process or various forms of training. In the latter, services are offered relieving the management of various sub tasks of the 'training cycle' or facilitating their implementation.

To be effective, counselling needs to be tailored to the targeted organisations and capable of providing solutions to the varied challenges present in the organisations, requiring a knowledge base specific to MSMEs. Where counselling is not offered directly but the public intervention funds the buying of services, the effectiveness of the intervention depends on the availability of the sought-after expertise in the market.

Organisational counselling/consulting services related to the implementation of the training cycle can address simultaneously several barriers to training in MSMEs. They mainly overcome gaps in know-how/capacity related to training and strengthen the awareness of, and the motivation for, training. But they also reduce the costs of training by taking over some of the related managerial tasks, and facilitating access to existing schemes that the MSMEs would not have tapped into otherwise; the latter is often a key selling point. They might also help to overcome a lack of tailored provision as they can provide MSMEs with a better overview of the training opportunities available in the market; they may even initiate tailored provision by aggregating demand from various MSMEs.

Making use of counselling can also be a driver for training in MSMEs, particularly by strengthening positive beliefs about training and by supporting the development of an 'expansive training culture' (Section 2.2.1). Some counselling approaches put emphasis on particular aspects of human resource management and development, for example strategies for avoiding redundancies during short-term slumps in labour demand; these support organisational cultures rooted in long-term employment relationships, which in turn provide the rationale for investing more in training. Some counselling schemes have a narrow agenda and are mainly designed as means for promoting or overseeing the use of co-funding

opportunities (see, for example, case vignettes DE_06 ⁽³¹⁾; HU_05; SI_01; UK_04).

Box 2 provides an example of counselling in Austria, supporting implementation of different stages of the training circle in enterprises. It demonstrates how the counselling offer is used to facilitate access to a wider range of support instruments, including co-funding for training available to the MSMEs (see for example financing instruments #5, #11, #226).

Box 2. AT_01 – Counselling for SMEs – *Impulsberatung*

The Austrian PES provides, free-of-charge, up to 11 days of counselling on a broad range of HRM- and HRD-related issues, including training. Although enterprises of all sizes are eligible, the de-minimis regulation limits adoption by large enterprises. Micro (1-9 employees) and small enterprises (10-49 employees) mainly use the instrument. Between 2015 and 2019, more than 4 000 enterprises have been reached, with about 1 100 enterprises completing all stages of the proposed counselling process. The instrument builds on experiences gained with closely related approaches in three ESF-funding periods (1999-2014); however, the Austrian government now fully funds the offer.

Regional consulting enterprises with lengthy experience in the field provide counselling in close cooperation with the local PES units. The approach aims to expand access of micro and small enterprises to a broad blend of the PES-supported schemes that either target enterprises (training networks, part-funding training costs of low-qualified adults or older employees) or individual employees (various forms of upskilling initiatives or the training-leave scheme that offers an alternative to lay-offs during temporarily lower demands for labour). The counselling therefore belongs to a package of structural (counselling, training networks) and financial (co-funding of training within the networks, co-funding of training for specific groups of employees) instruments.

It also aims to increase the use of a much broader set of support instruments provided by the PES to SMEs and, more specifically, their individual employees. The structural incentives address, first, the 'know-how' related barriers; however, they also focus on the motivational barriers of management or individual workers that limit training. By facilitating access to financial incentives, the support addresses the cost barrier. Given the consultants' intimate knowledge of upskilling opportunities offered by the PES, the counselling also helps to overcome provision barriers. An educational outreach component informs individual employees about existing upskilling schemes. An (unpublished) evaluation of the 2015-18 period led to the decision to prolong the measure for an indefinite period from 2019 onwards.

Source: Cedefop.

Examples for counselling instruments identified across the EU differ considerably by various key features, including:

- (a) topics/areas covered, from targeted ones (e.g. counselling related to the promotion of digital skills) to a broad range enterprises may choose from;

⁽³¹⁾ This type of coding (country code and number) is used across the report to refer to relevant [case vignette\(s\)](#) in the supporting document

- (b) type of services provided, which can be either restricted to counselling (e.g. a predefined sequence of need assessment/training planning/support with implementation) or encompass broader range of services, often including direct access to training, subsidised in various forms;
- (c) form of support provided: while some instruments foresee in-kind provision (meaning that a predefined service provider is offering the services) others provide joint funding of service costs, with the enterprise free to select a provider of their preference;
- (d) quantity of services provided: while some instruments define a maximum of days of services available, others define a maximum amount of contributory funding for counselling available. Other instruments refrain from limiting the support provided and foresee decisions on a case-by-case basis.

Table 5. **Examples of counselling/consulting services on HRD and training in MSMEs**

Policy instrument	Key topics	Key services	Pre-established/selected by MSME	Maximum support
AT_01	Training, HRD, flexibility, access to funding	Counselling, developing training plans	Pre-established	11 days (for free)
DE_05	Personnel development, family-friendly personnel policy, company health management, employability of older employees, work organisation, equal opportunities and diversity management	Counselling	Pre-established	About 12 days (for free)
PL_03	Diagnosis of company needs, diagnosis of competence gaps among the managers, providing development activities to the managers	Counselling, workshops, training sessions	Pre-established	Up to 80% of fees of a maximum amount depending on the size of the company
FI_04	Mapping digital skill gaps – providing tailored training	Counselling, training	Pre-established	Mapping is free (no limit); courses require small lumpsum contributions from the MSMEs (EUR 100 – 300)

Source: Cedefop.

3.2.2. Expanding the range of targeted, suitable CVET offers meeting the demand of MSMEs

This group of instruments addresses the perceived lack of appropriate training opportunities on offer in the training market by providing the financial resources for the development of novel, tailored forms of provision, with service providers and enterprises as joint creators of the new formats. After covering or contributing to the, often high, costs for developing new forms of provision, these can be included in the permanent training offer available on the market, thereby permanently closing a perceived gap.

By supporting training providers in the development of novel CVET opportunities, policy instruments attempt to expand the available training opportunities suitable for MSMEs. Instruments supporting training pilots (Section 3.2.3) or the formation of networks (Section 3.2.5) follow similar goals, but provide financial resources to the enterprises themselves, empowering MSMEs to place their demands for tailored services *vis-à-vis* training providers.

CVET readily available in the 'training market' is perceived as too little tailored to the needs of MSMEs. To overcome this, various instruments seek to bring change by:

- (a) providing funding required for developing novel, tailored solutions, with service providers working closely together with MSMEs over the whole life cycle of a project;
- (b) diffusing developed forms of good practice among both MSMEs and dedicated service providers;
- (c) increasing the pool of consultants and trainers who hold a sufficient level of expertise in working successfully towards meeting the needs of MSMEs.

The novel French framework for supporting Work-situation based training actions – *Action de formation en situation de travail, AFEST* (Box 3) – offers an example of the approach. Training providers are encouraged not only to provide traditional courses, but also develop, together with the MSMEs being supported and the workers involved, work-situation based training action, providing general (concept-rich and theory-based) knowledge as useful for a given type of workplace. By broadening the type of educational services eligible for co-funding – not only standardised courses, but tailored learning-projects complying with pedagogical standards – the instrument responds to the preferences of many MSMEs (which may be underusing co-funding schemes providing support for traditional off-the-job, classroom-based training courses only).

Box 3. **FR_01 – Work-situation-based training actions, *Action de formation en situation de travail, AFEST***

The initiative Workplace training actions ⁽³²⁾ – *Action de formation en situation de travail, AFEST* – is a novel instrument both for training based in the workplace and for funding such activities under the same conditions as traditional CVT courses in external centres. In 2014, a pilot project began that was confirmed by law in 2018. The instrument aims at simultaneously overcoming two challenges. First, training is often more effective and efficient when provided in the learners' workplace with pedagogical cases based on real challenges encountered when working. However, the training offered to MSMEs often does not have workplace based CVT: they are an underdeveloped form of provision in France compared to Germany and Scandinavian countries (Duclos, 2021). Second, since the introduction of the training levy in 1971, French funding almost exclusively provides for class-room-based, standardised training, leaving little space for workplace approaches. This mirrors a challenge found in many frameworks to fund training in enterprises, including MSMEs.

AFEST defines a structure for eligible training projects, so that learning reflects the participant's current work situation. However, the learning project must allow for acquiring generic, transferable skills. This requires a fully developed pedagogical approach and must not merely be adapted to current needs of a workplace and daily work routine. *AFEST* has two sequences: First, the company prepares in advance a work situation for trainees. Second, the trainees and the trainer discuss what happened during the work situation and identify acquired skills. Preparation for *AFEST* requires a diagnosis (reasons to use *AFEST* for an employee or a group of employees), as well as a feasibility study to determine the skills to be developed, the approach to be followed or the selection and training of professionals to become *AFEST* trainers. Trainers experienced in the approach need to develop the pedagogical design for the specific workplace. Each of the eleven sectoral *Opérateur de compétences* (OPCOs) implement *AFEST*. The OPCOs expand their portfolio of available training actions and maintain communities of CVET trainers with professional knowledge of how to support learning by using this approach. [The evaluation of the pilot projects \(2014-16\)](#) revealed the particular suitability of *AFEST* to the constraints of small and micro companies because it can fully adapt training to an organisation's needs and can fund learning processes typically considered informal or not in line with the eligibility criteria for public co-funding. However, because the learning situation is tailored to a small number of participants, costs per participants are high. Since 2018, *AFEST* has been regularly (co-)funded. The relevant OPCO should fund the *AFEST* project foreseen in the development plan of companies with fewer than 50 employees. Employees can participate as part of their individual learning accounts. The unemployed also have access to *AFEST*. Researchers and policy-makers have paid considerable attention to the initiative (OECD, 2021, p. 145) because it can simultaneously address two key challenges of supporting training in MSMEs. However, as of 2020, no formal evaluation of full implementation of the *AFEST* has been available (Duclos, 2021).

Source: Cedefop.

The identification of relevant gaps in the provision of training services can also be assigned to dedicated organisations, which have the tasks to identify the HRD and training needs of the firms working in a particular sector and region. Funds

⁽³²⁾ Translation taken from Duclos, 2021.

available should allow them to set up projects aiming at closing identified gaps in the available training services. Cluster organisations in the Basque country (ES_9, Box 4) is an example.

Box 4. IE_01 – The Skills to advance programme (2019-)

Skills to advance is a framework providing a package of approaches, with one targeting individual employees combined with support for SMEs.

This national initiative offers upskilling and reskilling opportunities to employees in entry or lower-level positions and those currently working in vulnerable sectors. The programme also aids employers in identifying skills needs and investing in their workforce by providing subsidised education and training to their staff, with a specific focus on SMEs as the target group. The initiative focuses – via the Education and Training Boards (ETBs) – on the expansion of suitable training offers in line with the interests of the individual target groups and their employers. Offers include management training suitable for employees in managerial roles in SMEs.

The first round was operational from 6 April, 2019, to 31 December, 2021, and has been continued afterwards. The scheme is funded by the National Training Fund and administered through regional ETBs. The primary target groups include employees across various workforce sectors, particularly those with skill levels below level 5, aged 50 years and above, and in sectors/occupations at risk of economic displacement. Employees can participate in the set of learning offer typically free of charge.

SMEs and other organisations with limited capacity to identify and address skills development needs for their lower-skilled employees, particularly those at risk of displacement, are within the programme scope. Employers are supported in developing their training expertise, including identifying upskilling needs and providing training solutions.

The scheme offers up to 50% of eligible training costs, for up to 70% of small enterprises. There are three access routes to relevant ETB provision for employees and employers: direct employee access, access via enterprise engagement (employees access training through their employer partnering with an ETB), and regional initiatives. Eligible projects related to training need identification or training activities addressing a company's upskilling and reskilling needs are considered.

The allocated budget for 2019 was EUR 6 million. The programme aims to engage over 40,000 workers and 4,500 SMEs by 2021. According to a country expert interview, approximately 5,000 workers were reached in the first year, with a significant increase in the second year.

For current information see [Skills to Advance | Solas | Learning Works](#)

Source: Cedefop.

3.2.3. Providing support for knowledge creation (pilots) within MSMEs and the transfer of outcomes across MSMEs

The support for the creation of collaborative projects aiming at creating new knowledge, expertise, and skills, as relevant for the MSMEs, and the transfer and diffusion of the outcomes of these projects among related MSMEs, is another strategy responding the perceived gaps in tailored solutions. Alongside providing project funding, public intervention can aim at creating a supportive infrastructure

for these activities, as in the implementation of dedicated R&D centres in collaboration with local HE and VET providers.

In contrast to schemes supporting the creation of novel forms of provision (see (c) above), supported training projects are organised around a particular organisational problem, with the provision of a tailored series of training activities contributing to the solution sought. Large enterprises can organise similar training architectures on their own, e.g. for implementing new technologies or large-scale organisational changes, with specialised departments cooperating with external service providers. Support schemes of this type aim at allowing MSMEs access to similar kind training projects. Financial contributions made to the costs of the project allow external service providers to provide the required services, despite the relatively small project size compared to projects for large companies that often include hundreds of days of services.

Calls for pilot projects for training in MSMEs (or in enterprises in general) or similar activities can be organised in various ways. Proposals are typically submitted not by MSMEs in isolation but by consortia of MSMEs together with R&D or training providers.

The ‘SME idea’ framework in the Netherlands described in Box 5 represents a typical example for a framework promoting experimentation with new forms of training projects among MSMEs.

The structural instrument supporting innovative training projects can overlap with other instruments. On the one hand, grants for companies (including some grants provided by training funds) might be organised also as a funding of ‘projects’, selected on a competitive base and allowing also the implementation of innovative training actions (see for example, the interprofessional fund for SMEs established in Italy, #273). On the other hand, instruments discussed later as examples for mediated support, providing funding for innovation projects and any related training costs, might also provide support for activities similar to the instruments discussed in this sub-section. Further examples of this approach include AT_06; FI_03; FR_04; SI_02 or UK_07 (see [case vignettes](#)).

Box 5. **NL_05 – SME idea, MKB !dee**

In 2018, the Dutch Ministry of Economic Affairs designed the *MKB !Dee* [SME Idea] programme to help entrepreneurs devise innovative solutions that improve the skills of their staff and stimulate a learning culture in SMEs, as well as remove barriers discouraging companies from investing in training and development. The programme can support experiments with e-learning modules or innovative plans to improve the learning culture or sustainable employment within the company.

The programme 2020 budget of EUR 10 million devoted at least EUR 2.7 million to applications submitted by small enterprises or firms partnering with at least one small enterprise.

The minimum subsidy per enterprise is EUR 25 000, and the maximum amount is EUR 124 999 including VAT. Projects with higher costs are also eligible for a subsidy, but only up to those limits. The programme covers all reasonably incurred costs

directly related to implementing the project, including wages and costs for engaging third parties.

A platform shares results to maximise the enterprises possible benefitting from the experiences.

Entrepreneurs have found solutions for problems such as:

- too little time or money for staff training;
- discovering relevant developments in technology, digitisation, energy and climate;
- mismatch between education and the labour market;
- uncertainty on yields from an investment in learning and development;
- lack of knowledge about human resource methods or tools;
- finding the desired training.

In 2019, the programme gave high priority to projects related to technical sectors, energy, climate and digitisation.

The programme has not yet been evaluated but it is a strong incentive for developing innovative HRM practices amongst companies, particularly SMEs. Up to December 2018, the programme supported 14 projects; by December 2019 this had increased to 47. The 2018 budget allocated EUR 2 million to projects. In 2019 and 2020, this increased to EUR 7.5 million and EUR 10 million respectively.

Source: Cedefop.

3.2.4. Supporting frameworks for awareness raising about the importance of CVET and the motivation of managers/owners of MSMEs and their employees to participate in CVET activities

Both managers, often owners, of MSMEs and workers have a lesser range of positive experiences with CVET actions and therefore hold typically less positive views on the usefulness of training than their counterparts in large organisations. Instruments aiming at raising awareness about the benefits of CVET in the MSME sector, or in general, aim at overcoming motivational barriers. Related instruments comprise a broad variety of activities, with strategies often targeting managers or owners of MSMEs in an attempt to demonstrate the usefulness of training and organisational learning in a language convincing to them (Figgis, 2001). As acquiring the trust of the groups targeted is essential, peer learning activities are often an important component.

Two types of framework observed in this research study are:

- (a) Public competitions providing an award for excellence to organisations, including MSMEs, for their practices in HRD and training. The competition provides an incentive to review and present own practice. Prize-winning examples of good practice are diffused by the media and various other channels. The award ceremony and its media coverage promote ideas about the importance of training, including the salience of training and HRD practice in MSMEs. Box 6 describes such an award. Further examples following the same lines include ES_07 or IT_05 (see supporting document [Case vignettes](#)).

- (b) Information hubs on the web, organising and tailoring large amounts of information and tools on HRD and training related matters relevant for business owners and managers, particularly MSMEs. Information hubs can be merged with tools supporting access to funding for, and counselling offers on, training, as presented in Box 7. Integrated platforms may have a central role within skill eco systems, providing support for learning in enterprises, as demonstrated in the case study of Poland (see supporting document [Case studies](#)).

Public initiatives in awareness raising can overlap or compete with the marketing activities of business consultancies and training providers, which apply similar approaches for expanding the market for their service. Some approaches had been developed as a joint venture between public policy-making and private business service provides, as with the [Investors in People certification](#) (e.g. see HR_04 case vignette).

Apart from owners and managers, employees, also need to be convinced of the utility of training efforts. Related topics are discussed in the section on outreach activities (Section 2.3.3. and Chapter 5).

Box 6. **FR_06 – Innovation awards, *Innov’Trophées***

The innovation Awards were launched in 2017 by the FPSPP (*Fonds paritaire de sécurisation des parcours professionnels*, a bipartite body supporting lifelong learning for French employees), the COPANEF (replaced by *France Compétences* in 2018) and Centre Inffo (an organisation in charge of developing information on training development, laws, reforms...). The first awards were attributed in January 2018.

The main goal of this Award is to reward innovation in training. In 2018, [Innov’Trophées awarded five winners](#) for innovative actions belonging to five categories:

- actions supported by training providers;
- actions supported by companies;
- actions to support individuals in their training paths;
- pedagogical actions;
- European actions.

So far, the awards have been given annually. There has been no evaluation study of the framework available.

Source: Cedefop.

Box 7. **BG_02 – MyCompetence**

From 2009 to 2013, the [MyCompetence project](#) was implemented by the largest employer organisation in Bulgaria, the Bulgarian Industrial Association – Union of the Bulgarian Business, with the support of the ESF (Operational Programme for the Development of Human Resources).

The project seeks to increase labour market adaptability and effectiveness, as well as improving the labour market by developing a system to assess workforce

competence according to sectors and regions. The project's specific objectives included establishing a Bulgarian Competence Assessment Network by Sectors and Regions (BUCAN) and a Workforce Competence Assessment System (CASSY) and updating them according to current and future labour market demand. The project continues with EU financial support.

MyCompetence currently exists as an online platform for human resource management and development. It offers information on models of sector competences for key positions, job descriptions, assessment tools, e-learning resources and other specialised services for assessment and development of workforce competences. Most resources in the system are free of charge, but users should register.

MyCompetence's primary users include enterprises (managers, experts, human resources management specialists); ministries, agencies and other institutions and organisations related to the labour market, education, continuing education, staff selection and career counselling; vocational high schools, licensed vocational training centres; organisations providing services in selection, management, training and development of human resources; under-employed persons as well as those seeking employment; pupils and students; and any person who would like to assess their knowledge and skills to develop their competences.

MyCompetence was developed because of the need to address challenges related to knowledge, skills and competences of workers.

A second ESF project during 2015-19 under the HRD OP (2014-20) continued the competence assessment initiative. Following its completion in September 2019, the Ministry of Labour and Social Policy (MLSP) assumed the system's ownership and copyrights and continued to run it. The main elements of MyCompetence include sector models, competence assessment, e-learning and economic sector information. [E-learning](#) provides a large variety of training. The project's first phase had 625 training courses at the workplace, consulting at least 125 people and organisations and training at least 2 500 people in key competences. In 2018 about [5 000 have followed e-courses, proposed by MyCompetence](#). The positive evaluations of MyCompetence include a [November 2019 report](#) – Key policy messages report: Peer Review on Competence Assessment System: MyCompetence, Sofia (Bulgaria) that outlines several success factors, as well as the need for more flexibility and consideration of the future of work and digital skills. An additional strength is that an employers' organisation launched this operation and later transferred it to the MLSP.

Source: Cedefop.

3.2.5. Supporting the networking and the cooperation of MSMEs in the provision of CVET and related activities

To overcome the 'liabilities of smallness', various approaches support the creation of networks of MSMEs and the establishment of thematic cooperation in training and organisational learning. As well as the potential of mutual learning, networks of MSMEs strengthen their buying power, and therefore market position *vis-à-vis* the providers of training and related services, which are more likely to provide the tailored services where the related projects are substantial compared to a request from a single MSME. By sharing the burden of implementation, MSMEs may profit from economies of scale. Services required might even be provided by a centralised organisation, catering for networks of MSMEs permanently. Alternatively, existing business interest organisations might provide these services for their members.

Single MSMEs often require specialised HRD and training services of a particular type for one or a few employees, so they rarely organise tailored, internal training. They often lack purchasing power to attract the attention of training providers ready to tailor a training offer to the organisational needs of the particular organisations.

Supporting the creation of networks of enterprises – formed from either MSMEs only or at least a defined proportion of MSMEs – to cooperate in organising and purchasing relevant HRD and training measures is a long-standing and frequently used strategy for overcoming the ‘liability of smallness’ within the training market. By strengthening inter-organisational cooperation within training, further opportunities for informal mutual learning are opened up as well. Networks can include enterprises working in similar areas, with similar training needs, but not competing directly in the same markets (e.g. using similar technologies for producing different end products or catering for different sub-markets). Within networks, organisations may agree on their mutual expectations, for example, with regard to refraining from any poaching or providing compensation if employees switch employers within the network. While some risks of cooperating might prevail, competitive advantages available from such cooperation typically outweigh the potential disadvantages.

Approaches to building up company networks in training differ widely. Networks can be implemented as criteria for eligibility for earmarked co-funding sources for training: see the Austrian example of enterprise networks, where networks composed of at least three companies where at least 50% of them are SMEs can apply for the grant. 100% funding is provided for external consulting for building and operating the confederation, identifying training needs (10 days of consulting max). For various targeted groups of employees, support of up to 50% of training costs is provided (see #226). Alternatively, more emphasis can be put on a ‘knot’, linking the organisations and taking responsibility for organisation or providing the required tailored services (as shown in the Slovenian example in Box 8).

Box 8. **SI_02 – Competence centres for human resources development,
*Kompetenčni centri za razvoj kadrov (KOC)***

The project of the Public Scholarship, Development, Disability and Maintenance Fund of the Republic of Slovenia (*Javni štipendijski, razvojni, invalidski in preživninski sklad Republike Slovenije*) supports the competence development of employees via networks of enterprises. The programme is co-financed by the Slovenian Ministry of Labour, Family, Social Affairs and Equal Opportunities (20%) and the European Union under the European Social Fund (80%). Enterprises decide on the employees participating and their training needs; according to the training plans established, training actions are selected for support.

Competence centres support the cooperation of companies in the development and implementation of their HRD strategies. Sectoral competence models are developed by the centres and used for supporting the exchange of knowledge, experiences and

good practices across participating enterprises. They organise tailored training provision according to the needs identified.

The programme supports all forms of CVET that develop key competences selected by the partnerships and covers project management and participation fees. Programme management costs are covered to 100%. The government aid scheme Training aid reimburses 50% to 70% of the training costs depending on the size of the company. EU de minimis regulation, however, is applicable. So far, the largest share of funding has been devoted to co-funding CVET developing technical competences, followed by funding for the training for management and sales skills and acquiring new knowledge in marketing, design, change, ecology, or digitalisation.

In the programme's first period of implementation, beginning in 2010 and ending in 2015, it supported 19 economic sectors including 300 different companies; these provided training for more than 14 000 employees and invested more than EUR 7 million. In 2017-18, it supported 11 networks (competence centres) for human resources development, which included 250 companies with more than 35 800 employees. In 2019-22, the programme supported 10 networks, which included 327 companies and reached about 22 400 participants in training. The diverse industries supported include computer science, telecommunications, toolmaking, glassmaking, accounting, chemistry, robotics, papermaking, design management, woodworking, logistics, trade, construction, trade, waste management and security. The companies supported ranged in size from micro and small to medium and large enterprises.

Source: Cedefop.

An alternative approach for overcoming the liabilities of smallness is shown in Box 9 in relation to Finland. Here the local PES cooperate with group of firms to design and buy tailored training, meeting the needs of the employers supported as well as their employees, allowing them to meet employment policy goals. The PES uses its influence in the training market to attract service providers willing to tailor the services to the need of the companies involved. The PES also provides a 30% contribution to the training costs. For the PES, cooperation with the enterprises has the advantage that the training provided is better aligned with the needs of employers in the local labour market compared to training opportunities designed without direct contribution from the firms.

Box 9. FI_03 – Joint purchase training, *Yhteishankintakoulutus*

Joint purchase training was first launched in 1991 (based on Regulation 763/1990), there were various reforms in 1990s and, until 2008, the regulation's provisions had varying applications. After establishing regional PES (Regional Centres for Economic Development, Transport and the Environment) and some adjustments to the payment shares at the end of the 2000s, in 2012 the government adopted the current system of the three types of training. The joint purchase training resulted from a policy aiming

to bring more flexibility into labour market training, make the training more oriented to companies' needs and encourage companies to contribute to costs.

The SME and the local PES organise joint purchase training for three different purposes: targeted training for the existing staff; restructuring coaching for laid-off workers; and recruitment training to find new employees.

In all of these, the local PES and the company jointly design the training funded by the local PES. Funds cannot support regular insertion training or training that employers organise to comply with national training standards.

Targeted training involves vocational training tailored to the needs of an employer, which is typically an SME, but can also be a public sector organisation. It should help upgrade the skills of the existing workforce in organisations undergoing major changes or prevent redundancies and lay-offs (during or instead of temporary lay-offs). The SMEs and the government (through the local PES using active labour market policy funds) pay for such targeted training. The SMEs contribute 30–50% of the total price depending on the size, revenue or balance sheet of the company.

Restructuring coaching (also referred to as change training) helps workers find new jobs or change careers when SMEs need to lay them off. The coaching lasts from 10 days up to a maximum of 2 years. Restructuring coaching helps SMEs comply with the legislation concerning employee protection during corporate restructuring that leads to lay-offs. Government funds cover 80% of the costs of the restructuring coaching.

Recruitment training is a minimum of 10 days, but typically lasts 3 to 9 months, with courses tailored to SMEs needs. These training courses should close the gaps between the skills of current job seekers and those needed at the company. The local PES designs the service together with the company and then procures it. The company pays 70% of the training costs and government covers the rest.

Public funding for joint purchase training was EUR 30.13 million in 2016 (total of 279 475 training days), EUR 23.94 million in 2017 (total of 346 964 training days), EUR 18.7 million in 2018 (total of 282 258 training days) and EUR 20.62 million in 2019 (total of 254 059 training days).

Employability serves as a main indicator in monitoring impact. The targeted training has the goal of all trainees maintaining their jobs. Restructuring coaching results in around 45% of trainees finding employment within 3 months after completing the training; this increases to close to 60% after 6 to 12 months. In recruitment training, 70-80% of trainees find employment after the training.

PES have a dedicated system (OPAL) to collect feedback from both trainees and companies. The feedback survey focuses on the quality of the training, impact on skills development, and impact on employability. No formal evaluation has been made since 2012.

The joint purchase training actions seem to address the needs they were originally designed for, even though not always fully reaching objectives on employability. These training activities support trainee and SME ability to adapt to the changing skills needs of businesses and labour markets. The main criticism of these training activities relates to some of the requirements (such as minimum duration of 10 training days, minimum financial cost to companies) and to the administrative burden.

Source: Cedefop.

3.2.6. Improving interest aggregation among employers (e.g. MSMEs in a sector or region) and facilitate collective bargaining on training relevant issues

Instruments might seek to promote interest aggregation in CVET/training among MSMEs, particularly at sectoral level. Collective bargaining regarding training-related issues at national/sectoral/regional levels might also be incentivised.

The industrial relations (IR) system and its patterns of compromise-finding between organised business and organised labour is of paramount importance for shaping the institutional base for CVET, particularly employer-sponsored. Given the stark differences in the IR systems across the European Union (for a typology see European Commission, 2009, Chapter 2), instruments aiming at improving the interest aggregation within one camp and agreements between capital and labour organisations respond to rather different environments.

Alongside determining wages and wage increases, employer and employee representations agree on mutual rights and obligations with regard to training (e.g. rights for paid training leave) and on the ways learning is – or is not – rewarded (e.g. general agreements on rewarding the acquisition of a higher level of formal qualification) (Stuart, 2019). The outcomes of processes of wage determination can provide further dis-/incentives for employers to invest in training, as in the case of high levels of wage compression (relatively high minimum wages, relatively low wage differences according to formal qualification and seniority), where employers have more incentive to invest in the training of the low-qualified (Busemeyer and Iversen, 2012). The involvement of the social partners in steering both the IVET and CVET systems is of paramount importance for its overall functioning (Cedefop, 2013).

Instruments under study had been selected for two key functions.

- (a) Interest aggregation related to CVET: actors within one camp (particularly employers) become further incentivised to identify common needs (going beyond the individual organisation needs) and agree on potentially beneficial approaches. These are then developed, piloted and mainstreamed, enriching the training offer available and know-how among service providers in meeting the needs of MSMEs.
- (b) Interest mediation related to CVET between (organised) employers and organised labour: frameworks enlarge the opportunities for striking agreements between employers and employees on training, thereby strengthening the positions of both parties. As individual employees are typically in the weaker positions, agreements made can expand their access to training opportunities and on rewards available for engaging with them, so the frameworks are expected to help to overcome low levels of motivation among employees to take up training in the first place.

Arrangements supporting interest aggregation or mediation include:

- (a) dedicated frameworks, where either interest aggregation or mediation is at the core of the approach, as demonstrated in the example from the UK in Box 10 below;
- (b) incentivising interest aggregation or mediation by launching project frameworks accessible only for social partners (see the example from Romania in Box 22);
- (c) including representatives of social partners (business interest organisations, trade unions) in the governance of the support frameworks, e.g. by giving them a role in the steering board or inviting them to survey particular needs within their camp.

Across EU Member States, organisations such as chambers of commerce and trade unions have acquired distinct roles within their national skill formation and adult learning systems. The social partners participate to different degrees in the governance of the relevant State institutions. In many countries, employer organisations and trade unions developed their own education providers, which may be dominant in their respective fields.

Box 10. UK_11 – Learnwithunite

Learnwithunite is the online learning environment of the trade union 'Unite the Union', the second largest trade union in the UK, representing mainly workers across construction, manufacturing, transport, and logistics. The project represents an example of the type of activities implemented based on the sources from the Union Learning Fund and the related framework of Union learning representatives (see supporting document [Case studies](#), the UK case study for details).

The Learnwithunite platform offers a wide range of courses to benefit members. The approach has been running since 2013 and uses the institutions of Union learning representatives (ULRs). These are specially trained union members engaged with securing training opportunities for their colleagues and representing their interest regarding training *vis-à-vis* the employer: to negotiate a robust relationship between employers and education providers, underpinned by learning agreements. This scheme requires employees (via their ULRs) to engage with their employers with the support of the union, to generate commitments within enterprises to upskill and train staff, with the enterprise covering the costs of training.

Through this mechanism, thousands of members were able to increase their personal skills and qualifications via a range of courses. The programme also offers a range of learning offers at the Unite offices: ICT courses, continuous professional development, ESOL & English courses, fully-funded courses, short courses and tasters, and higher-level skills.

The 45 new learning agreements with employers are a significant success. The approach's strength comes from its ability to respond well to the needs of employees and employers and to facilitate a 'home-grown' commitment to training. This suggests a sustainable form of incentivisation. Similarly, this approach will lead to more relevant training for all beneficiaries.

Source: Cedefop.

In some countries, historic traditions of workplace learning seen as part of the industrial conflict between organised capital and labour are still relevant. The provision of job-related CVET – and also non-job adult basic education – used to be seen as ‘worker’s education’, organised by unions at or near the workplace for their members (Bratton et al., 2003); this could include language courses for recent immigrants (Fenwick, 2007). Such strategies are regaining importance in areas where unions are becoming increasingly active.

CHAPTER 4.

Mediated support for training in MSMEs

This chapter discusses policies following a mediated approach to support training in MSMEs. As explained (Section 2.3, II), such policies aim at increasing skills-in-use within organisations (MSMEs), for example by promoting innovation. By increasing the range of skills-in-use, the opportunities for better/proper use of CVET in MSMEs are expanded.

The mediated approach, giving emphasis to innovation and what innovation can deliver, provides a lever to overcome overall low levels of interest in training among the management/owners of MSMEs. As the approach focuses on the current needs for change in the organisation – new technologies to be adopted, new markets to be explored, novel approaches to organising work to be developed, detrimental environmental effects to be reduced – it can attract the attention of decision-makers separate to a more general plea for ‘more training’.

Within the field work in this research project, policy instruments have been sampled which provide support for different forms of innovation and where support for related CVET activities is embedded. Instruments were searched under the following labels:

- (a) support for innovation (product, process) in general;
- (b) support for projects related to digitalisation/industry 4.0;
- (c) support for entering new (international) markets;
- (d) support for policies aiming at increasing diversity and gender equality (as a type of organisational/process innovation);
- (e) support for policies supporting productive ageing and intergenerational cooperation within firms (as a type of organisational/process innovation);
- (f) support for projects related to environmentalism and sustainability (as a part of product/process innovation);
- (g) support for projects focusing on the improvement of work organisation and job design (as part of process innovation);
- (h) projects providing generic support to increase business development, including support provided to start-ups ⁽³³⁾.

Particular attention has been paid to frameworks supporting either innovation (product, process) in general or providing, more specifically, support for activities related to digitalisation/industry 4.0.

Examples of policy instruments for mediated support are presented below, structured along six main approaches intending to respond to a particular (single)

⁽³³⁾ The search matrix had also included support for health and safety projects, but no examples supporting this particular aim were discovered in the field work.

barrier to innovation (Section 2.3, II). However, real world policies typically represent a mixture of approaches, answering to more than one barrier at once.

4.1. Financing instruments

Providing co-funding (ranging from a small financial incentive/contribution to covering any/full costs related to the innovation activity promoted) can be used – in isolation or in combination with other instruments – to overcome cost/liquidity constraint barriers to innovation. The provision of co-funding is frequently one of the interventions to support innovation within a bundle of measures taken. For the current study, particular attention had been given to financial incentives for innovation which explicitly offer contributions to any related training costs incurred as part of an innovation activity.

Similar to financing instruments supporting training (targeted support), instruments providing financial contributions to the costs of innovation cover a specified proportion of the eligible costs (e.g. external services and wage costs of involved personnel) up to a set threshold. EU de-minimis regulation often applies and MSMEs may receive preferential treatment. Projects are selected either on a first-come first-served basis or using competitive selection procedures. As well as grants, tax incentives can be used to provide an incentive.

In Lithuania (Box 1111), funding for R&D projects has been available, with preferential treatment for small organisations (refund of 45% of eligible costs), with a ceiling of EUR 1.2 million per project. R&D related training costs are part of the eligible costs.

Financial incentives can be also provided as vouchers, to be used to cover a broader set of innovation related services and goods. For example, ‘innovation vouchers’ are available in Slovenia (Box 12) and Finland (see supporting document [Case studies](#), the Finnish case study).

Box 11. **LT_02 – EU-funded business innovation promotion measure
Experiment ,ES finansuojama verslo inovacijų skatinimo priemonė –
Eksperimentas**

The EU-funded measure Experiment seeks to encourage companies to invest in R&D activities and infrastructure necessary for developing innovative products, services or processes. More specifically, it aims to increase activities related to research, experimental development and innovation in the private sector. This measure was implemented in 2019-20 as part of the Lithuanian Operational Programme for EU Structural Funds Investments for 2014-20. Total volumes of public funding allocated to the measure amounted to over EUR 153 million, with an expected private

contribution of at least EUR 99 million. By 31 December 2023, the measure should reach 224 companies and create 160 new workplaces for researchers.

Eligible applicants for funding are private legal entities, including MSMEs, and public institutions carrying out R&D activities (excluding research and study institutions) in the areas of the RIS3 (Smart Specialisation) strategy.

Eligible funding includes R&D activities and initial investments in R&D and innovation infrastructure which cannot be accessed publicly or through clusters. Purchase and installation of innovative infrastructure makes up about 30% of all the R&D projects. The measure also covers the costs of training employees using the purchased computer and other equipment as well as software. The European Regional Development Fund covers 45% of the costs of micro and small enterprises, and 35% for medium enterprises. The maximum amount of support depends on the activities implemented within a particular project: R&D activities, EUR 1 200 000; initial investment by enterprises in the R&D and innovation infrastructure, EUR 3 000 000; certification of new products/technologies and related activities, EUR 200 000. Up to Nov 2020, 154 companies had been supported.

Source: Cedefop.

Box 12. **SI_04 Slovenian Enterprise Fund, *Slovenski podjetniški sklad***

The Slovenian Enterprise Fund provides incentives in the form of small-value vouchers that support innovative young companies with fully-funded international training for high-tech companies. The fund specifically targets SMEs as well as start-ups. The Ministry of Economic Development and Technology and the European Regional Development Fund provide resources for the fund.

The Government Office for Development and European Cohesion Policy decided to support the Establishment of a comprehensive voucher system of small value incentives for SMEs 2019-23. In 2019, the 2 631 vouchers had an allocation of EUR 10.14 million. The 13 public calls distributed vouchers for raising digital competences, quality certificates, patents, models, trademarks, market research of foreign markets, participation at international forums, participation in economic delegations abroad, group presentations of the Slovenian economy at international fairs, digital marketing, preparation of a digital strategy, cyber security, status transformation of companies, introduction of business excellence according to the EFQM model in small and medium-sized enterprises, and transfer of ownership. The Fund's 2019 annual report indicated that business support exceeded the planned levels.

Source: Cedefop.

4.2. Structural instruments

4.2.1. **Offering organisational counselling/consultancy services at any step required to implement innovation**

The provision of counselling can be used to overcome barriers to any type of innovation process. Such counselling needs to be tailored to the clients and capable of providing solutions to the challenges identified, requiring a knowledge base specific to MSMEs. If counselling is not offered directly but public intervention consists of funding provided for buying related business consultancy services, the

effectiveness of the intervention depends on the availability of the expertise sought in the market (as discussed also under ‘targeted support’ to training). The provision of counselling is one of the most frequently observed examples within the mediated support, either as the sole measure or as part of broader packages of instruments.

Counselling is understood as a broad concept here, going beyond short interventions and including, for example, the joint development of an innovation project plan or the analysis of the feasibility of a particular type of innovation (e.g. a change in the work organisation). Counselling can be supported or expanded by various other options, such as exchanges, mutual visits, and workshops. It can include providing access to dedicated training sessions on relevant topics for the selected staff.

Support instruments provide either a delineated quantity of counselling (perhaps measured in days) or funding up to a certain ceiling. In both cases, enterprises might be expected to cover a part of the costs themselves. MSME might be the only eligible group or receive preferential treatment.

In Sweden (Box 13), for example, MSMEs receive support for counselling related to automatisisation of up to about EUR 14 000 per consultation, including related training costs. Small enterprises receive beneficial treatment with 75% of funding of the project costs. In Luxembourg (Box 14), a voucher of EUR 5 000 is available to cover the cost of counselling for activities related to digitalisation. Examples for in-kind counselling services include the Danish Business counselling and skills development (DK_02) or the Slovenian Incubators (SI_05).

Box 13. SE_02 – The robot boost, *Robotlyftet*

Robotlyftet (in English, The robot boost) funds automatisisation projects including related training costs for SMEs. The measure is part of the government’s national programme Smart industry and has been implemented by Tillväxtverket (Agency for economic and regional growth) since 2018. The Ministry of Economic Affairs made available SEK 100 million (EUR 9.5 million in 2/2020) for the period 2019-21. The programme targeted 4 500 SMEs in the manufacturing sector to increase knowledge and uptake of automatisisation projects. It tried to reach 500 SMEs in the manufacturing sector that fit the Swedish standard industrial classification (SNI) based on NACE revision 2. Implementation of the initiative is arranged by a broad network of organisations active in business development in the manufacturing sector (e.g. IUC network, Automation Region, Robotdalen, RISE and SWIRA). The nationwide programme has regional development agencies that provide services tailored to sub-sectors and regions. *Robotlyftet* foresees a stable work programme in each company. First, the expert team provided by Tillväxtverket analyses the current production process and the related business model, then it identifies options for automation. Companies can apply for up to SEK 150 000 (EUR 14 000) for the process and for related training activities in 6-month projects. The funding formula foresees funding 75% of eligible costs for small companies (2-49 employees) and 50% for companies with 50-250 employees. Mutual learning is supported by seminars and workshops provided free of charge. There is no evaluation study available (at the time of this research), but a yearly event presents the results achieved and experience made with projects of the Smart industry programme. In February 2020,

Robotlyftet had reached 1 100 participants in workshops, with 165 pilot studies implemented since the project start in 2018.

Source: Cedefop.

Box 14. LU_04, Fit 4 Digital

The Chamber of Skilled Trades and Crafts and the Chamber of Commerce guide and help businesses with digital transformation. Their support includes raising awareness, providing information, diagnosing business challenges, providing recommendations and helping implement the suggested IT solutions. The Chamber of Commerce and the Chamber of Skilled Trades and Crafts use services offered by the Luxinnovation – Luxembourg’s central business development and innovation agency – Fit 4 Digital framework to support SMEs with digital technologies. More specifically, SMEs wanting to start or develop their digitisation process contact the professional chamber with whom they are registered.

The businesses must fill an application on Luxinnovation’s website to benefit from the Fit for Digital programme. They then must choose a consultant from the programme who will analyse how their different departments (such as human resources, purchasing, accounting) use information and communications technologies (ICT). The consultant assesses the digital maturity of the business and potential for improved use of ICT. After diagnosing the business, the consultant provides recommendations for implementing IT tools. The concrete benefits and added value for each business shape each support proposal. During the digitalisation process, businesses may benefit from different types of financial aid granted by the Ministry of the Economy.

This digitalisation programme for SMEs focuses on SMEs in commerce, industry, crafts or the hotel/restaurant/café sector who hold a business permit from the General Directorate for Small and Medium-Sized Enterprises.

According to a government site, immediately after accepting the application for the Fit for Digital programme, the Ministry of the Economy will send, without any other formality, a voucher/*Chèques-services entreprise* to the applicant that will cover diagnostic expenses up to the amount of EUR 5 000 excluding VAT. Businesses which decide to implement the proposed measures may also use the SME aid scheme to cover the cost of consultancy services provided by external specialists, and benefit from investment aid to cover equipment and software investments relating to the Fit 4 Digital project.

During implementation, the programme may pay for continuing vocational training for the necessary digitalisation and operation of [new IT tools](#). Data on participating enterprises were not made available and no evaluation study had been implemented by the time of the research.

Source: Cedefop.

4.2.2. Supporting innovation-related CVET activities which strengthen the skills required for implementing specific innovation or for expanding the ‘absorptive capacity’ in general

Instruments can provide support for the development of the skills required by a specific innovation activity or can aim at supporting the acquisition of a broad range of skills considered as crucial for expanding ‘absorptive capacity’ (Cohen and Levinthal, 1990; Zahra and George, 2002) for innovation in an MSME.

Many of the instruments reviewed include a financial contribution to the costs of training in support of the underlying innovation activity; this can be a significant part of the whole financial support provided (compare Box 18, where about of one-third of the funding made available can be used to cover incurred training costs).

However, many instruments put the emphasis on the provision of training offers related to the field of innovation supported. They may do so by creating new lines of supply-side funded training opportunities accessible for MSME employees, seeking to secure adequate provision of services within less specialised fields such as generic ICT courses. Instruments are often on the borderline of approaches where targeted support for training is provided or where individuals are supported, with MSMEs invited to support employee participation (e.g. CY_05, EE_03).

Instruments may aim at developing novel forms of training provision supporting a specific field of innovation activity in MSMEs or MSME innovation capacity, as with the technology workshops in the Basque Region presented in Box 15. Training opportunities offered as part of business incubator programmes can be considered a specific subtype of related programmes, as presented in the Croatian Startup Factory (Box 16).

Box 15. ES_03 – Technology workshops, *Barnetegi Teknologiko*

The Basque Business Development Agency (SPRI) and the Basque Department of Economic Development and Infrastructures collaborated to launch the Technology workshops in 2007. Funding for this initiative comes from regional funds of the Basque Government. The initiative's main objective is to raise awareness and disseminate new technological trends among Basque SMEs to speed up their digital transformation. The contents of these Technology workshops have been constantly updated according to the new and emerging ICT innovations available for companies. The initiative focuses on managers and high-rank individuals within their companies who can disseminate information within their organisations. It consists of short intensive seminars (up to 7 hours) carried out in an isolated space (such as rural hotels) in 1 or 2 days, so participants may better use their time to understand the new technological trends/tools and their expected impacts on their organisations. These workshops follow the 'learning by doing' model of training participants on the selected subject. The work in group sessions (with expert advice) emphasises the subsequent promotion of the topic within their respective organisations. In 2020, the workshop topics related to data analysis: business intelligence, digital transformation, industry 4.0, cybersecurity, digital marketing, ICTs and personal productivity. Participants pay a fee for each workshop, which can vary from EUR 50 to 100 (depending on the accommodations for 2-day sessions). Although the initiative has not been comprehensively evaluated, the most recent version (at time of this research) organised 40 workshops with 475 participants, more than half of them women. The participants generally gave a very high evaluation (4.5 out of 5). There are no data available on budgets. During the COVID-19 crisis, these workshops were cancelled.

Source: Cedefop.

Box 16. **HR_05 – Zicer (Zagreb Innovation Centre) Start-up Factory, Zagrebacki inovacijski centar**

Established in 2016, the Startup Factory is the first publicly funded pre-accelerator programme in Croatia at city level (Zagreb city) and beyond, that includes intensive training. This comes as eight programme modules and support from top mentors for teams and startups younger than 12 months that are developing high-tech solutions and consist of three to five (at least 18-year-old) members with complementary skills. The Startup Factory also provides Zagreb Innovation Centre's (ZICER) infrastructure, promotional support, and networking.

The programme was successfully completed by 56 teams across four generations. Over 4 years (2016-19) over a total of 22 top team winners (entrepreneurs) and 203 team members were allocated over HRK 3 million (EUR 396 615.55) for their innovative development. The main recommended areas of innovation are: health and quality of life, energy and environmental sustainability, transportation and mobility, safety, food and bio economics, education, robotics, fintech, tourism and data, and artificial intelligence. More than 134 workshops were held, 137 trainers and 116 mentors engaged.

The topics entrepreneurs could learn from include design thinking/ideate & validate, customer journey map, business development, finance and legal, branding & marketing strategy, pitch training intensive. The training topics are of a general nature and the knowledge acquired could be supportive for learners in developing their business; they are therefore offered to startups irrespective of their field of innovation.

Areas in which entrepreneurs could receive counselling in the form of guidance for the development of skills and competences for the development of competitiveness/innovation include taxes, product development, company development, pitch improvement (text, topics, performance, speech, body language, etc.), marketing/LinkedIn, business consulting (strategy, marketing, business model, business development, business analysis and planning), ICT product development, IT system architecture, grants & funding, financing, venture capital, fintech, cybersecurity, business and financial modelling, user experience, design thinking, sales, IBM free technology for startups, startup development, taxes, artificial intelligence, data science, risk analysis, big data analysis, law, marketing and branding for startups, how to make sales in a B2B business model, product/service positioning and market research. Participation in workshops and training, mentoring, and counselling are free of charge.

In 2020, there are 37 active start-up companies after completing the programme. This is an indicator that the support provided (financial and non-financial) has equipped the start-ups with the knowledge and equipment needed to develop innovative products and to broaden the business to the new markets.

Source: Cedefop.

4.2.3. Providing support for knowledge creation ('pilots') within MSMEs and the transfer of outcomes across MSMEs

Instruments can aim at overcoming a lack/shortage of successful approaches for the management of innovation projects in line with MSME-specific needs. By initiating and funding projects where MSMEs receive support in developing solutions to their specific innovation needs, a gap can be overcome in the services market, where solutions are often tailored to the needs of large organisations. The diffusion of novel solutions tailored to MSMEs can be made the key or a further lever of an initiative, thereby unleashing further spill-over effects.

Instruments can be either specific to MSMEs or targeted at all enterprises, with MSMEs invited to use the support available to meet their specific needs. They can support specific services or provide a broad framework, allowing for a wide range of projects to be supported.

The Danish project Digital catalyst (Box 17) provides an example of a targeted project design, with the outcomes of pilot projects in a further stage spread among a broad set of MSMEs. In contrast, the Austrian Support for digitalisation (Box 18) provides a broad framework for the implementation of pilot projects in all enterprises, with dedicated funding available for the preparation and planning of projects, for implementation and for any related training activities required.

Box 17. DK_03 – Digital catalyst, *Digital katalysator*

Digital catalyst is a research programme funded by the Danish Industry Foundation. The project director is the University of Aarhus working with University of Southern Denmark (SDU), Danish Technical University (DTU) and Business Hub Central Denmark. The project funding was DKK 6.71 million (EUR 0.9 million) when running from 2018-20.

The programme targets the management boards of SMEs with the aim of creating short- and long-term growth. It specifically focuses on equipping the SME management boards to handle digitalisation and innovation as part of their strategic management to develop and implement a strategy.

The programme consists of three parts.

(1) The first part is a research study identifying the main challenges and barriers within SME management boards in generating growth using new digital technology. The first part of the study finished in 2019 resulting in the report *The SME-board in a digital age*.

(2) The second part develops three different models for digital competence management, to be tested and evaluated in 45 SME-boards. The models focus on how Danish SME-management boards can better handle digital initiatives and innovation as part of their strategic management, to develop and anchor a strategy.

(3) The third part is an open-source tool that will enhance Danish SME management board ability to develop a strategy for digital initiatives and innovation ensuring growth.

The project is working not only to create growth but to ensure that the management and employees of SMEs continue to develop new strategies, tools and working patterns.

Source: Cedefop.

Box 18. AT_02 – Support for digitalisation, *aws Digitalisierung*

The *aws* digitalisation (*aws Digitalisierung*) programme supports SMEs (and to some extent larger enterprises) in production and services related to digitalisation projects; it is administered by the Austria Wirtschaftsservice Gesellschaft GmbH (*aws*) and the promotional bank of the Austrian federal government. Funds for *aws Digitalisation* come from the Austria Fund (Österreich-Fonds), financed by taxes on wages and devoted to funding basic research, promoting applied research and developing

technology and innovation. The measure was first implemented in 2015 under the name *aws Industry 4.0*.

The programme period observed started on 1 January 2020 and lasted till the end of 2021. Eligible enterprises can apply for funding of projects up to 2 years following three phases:

- (1) Planning phase (maximum EUR 150 000);
- (2) Investment phase (maximum EUR 200 000);
- (3) Qualification and training (maximum EUR 150 000). Eligible costs include training and education costs, personnel expenditures, consulting, software development and investment in digital equipment.

The third phase mainly focuses on qualification and training to develop digital skills among low-skilled employees. The programme planning document describes the interrelationship of skills acquired in the work process ('digital experience') and in training modules provided by external trainers.

Source: Cedefop.

4.2.4. Supporting frameworks for awareness raising about the importance of innovation among MSME owners/managers

MSME managers or key personnel might not be aware of the potential gains available from specific areas of innovation. Policies following the mediated approach can include measures aiming at awareness raising or provision of information on a topic already enjoying the attention of managers in MSMEs. An already established interest in a key topic – possibly a temporarily overused 'buzz word' such as digitalisation or sustainability – is used to attract the attention of organisation representatives, including among MSMEs. By providing further information, a path is created into the organisations, allowing for providing further relevant support.

Awareness raising can be organised as programmes or campaigns, as demonstrated the Hungarian Model factory programme (Box 19). Alternatively, novel permanent structures might be established, as shown by German example of Competence centres digitalisation for SMEs (Box 20).

Box 19. **HU_07 – Model factory programme, Ipar 4.0. Mintagyár Program**

The Model factory programme, established in June 2017, helps SMEs to start digitalising. The programme raises awareness, changes the mindset and approach of SMEs, and educates them about their opportunities.

It has three elements:

- (1) demonstration (visiting model factories);
- (2) knowledge transfer (organising training for SMEs on digitalising, Industry 4.0 and designing A3 strategy);
- (3) A3 strategy (design a one-page storyboard on A3 paper that helps SMEs visualise their future goals).

The programme provides the following services to SMEs: business consultation, workshops, training programmes, professional events, the 'night of modern factories' special event, visiting model factories and [entrepreneur portal](#).

Planned indicators: 1 000 SMEs in the demonstrations; 380 SMEs in training; 350 SMEs in A3 strategy design. The total budget for the project period from June 2017 to December 2019 was EUR 7.3 million.

Source: Cedefop.

Box 20. **DE_02 – Competence centres digitalisation for SMEs, Mittelstand-Digital**

In 2011, the Federal Ministry for Economic Affairs and Energy (*Bundesministerium für Wirtschaft und Energie – BMWi*) launched an initiative to support SMEs in issues related to digitalisation and industry 4.0 under the German name Mittelstand-Digital. The overall programme has changed its focus over the years from providing support for the implementation of electronic modes of business relations and communication processes to the promotion of digital processes.

The core activities as of today include the provision of 26 regional and thematic SME 4.0 competence centres, that figure as provider-neutral contact points over the whole country raising awareness and providing information and training. Among the thematic competence centres are, for example, those covering e-standards, communication or usability; other competence centres address certain sectors, such as crafts, retail, construction or textile industry.

SMEs, with an emphasised attempt to reach out to crafts enterprises, are addressed to experience potential advantages of digitalisation through practical examples, information events and mutual exchange. The regional competence centres provide their services across economic sectors based on regional consortia of organisations active in research and development.

Instruments used to support SMEs include checks on the degree of how prepared a company is to address digital change and counselling on ways forward, workshops and training as well as support in implementation projects. Network activities with role model companies are promoted.

Since 2016, an external research institute (Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste) has been conducting scientific monitoring, accompanying evaluation.

Source: Eva Steinheimer.

4.2.5. Supporting the networking and the cooperation among MSME in the implementation of innovation

MSMEs might profit from joining forces in any innovation activity with other MSMEs or enterprises belonging to their sector, cluster or value chain. Alternatively, by increasing inter-organisational cooperation, MSMEs key personnel might simply become aware of novel development, learning about relevant current areas for innovation. Alongside inter-firm cooperation, ties to R&D organisations, including universities of applied sciences, as well as IVET and CVET providers might be useful for learning about innovation opportunities and in implementing successfully innovation projects.

While many instruments consider MSME involvement in networks supportive for innovation and a welcome component of their approach, some use support for networking and cooperation between R&D and MSMEs as a lever of their activity. Within Business mentoring in the Opolskie Voivodeship (Box 21), support for networking plays a marked role.

Box 21. **PL_05 – Business mentoring in the Opolskie Voivodeship, *Mentoring biznesowy w Województwie Opolskim***

The Business mentoring programme in the Opolskie Voivodeship seeks to popularise the idea of business mentoring as well as to transfer the knowledge and successful experiences of Opole entrepreneurs to SMEs with high growth potential.

Successful entrepreneurs from Opole serve as mentors willing to share their knowledge and experience. The mentees are young entrepreneurs managing SMEs registered in the Opolskie Voivodeship, operating on the market for no more than 5 years, willing to discover and develop their potential through the relationship with the mentor.

This initiative is financed from the State and the EU budgets (the European Regional Development Fund) as part of two projects Cooperative Opolskie – professional business environment (within Regional Operational Programme of the Opolskie Voivodeship for 2014-20). The project's first round was carried out from January 2016 to June 2018, and the second from September 2018 to August 2022. Both rounds primarily intend to increase the region's competitiveness by improving business-related services to develop an innovative economy, as well as help promote innovation and entrepreneurship.

The training, guidance and mentoring activities include training workshops for mentees preparing for participation in the programme, workshops for mentors preparing for participation in the programme training workshop for mentees on legal, economic and managerial issues, at least five meetings between the mentor and the mentee, legal advice for mentees, visits to SMEs run by mentees. There is also a conference summarising and evaluating a given round and providing a ceremonial ending.

The mentors and mentees do not need to achieve any specific targets or indicators. This programme primarily seeks to help transfer knowledge and experience as well as develop a relationship between mentors and mentees that often continues even after the end of the particular round.

The partner institutions implementing this programme consist of Business Centre Club Opole Lodge (leading role), Opole Chamber of Commerce, Chamber of

Commerce Silesia, Chamber of Crafts in Opole, Opole Centre for Economic Development (Opolskie Centrum Rozwoju Gospodarki).

The programme's fourth round ran from March 2020 to November 2020. Each round has approximately 10 mentors and 10 mentees.

The participants do not incur costs and mentors do not receive remuneration (considered as a pro bono activity). The State and the EU budgets (ERDF) fund all necessary organisational and material costs. The mentee receives a certificate by attending at least 80% of the scheduled meetings and actively participating in mentoring meetings.

The programme should be assessed as useful and necessary, both from the point of view of promoting the idea of mentoring and increasing the competitiveness of young enterprises by acquiring knowledge from more experienced entrepreneurs.

Source: Cedefop.

4.2.6. Improving interest aggregation among employers (e.g. MSMEs in a sector or region) and facilitate collective bargaining on innovation

Coordination across enterprises, particularly enterprises belonging to the same economic sector, can be a key lever in developing effective support for innovation. Collectively secured resources can be used to solve the problems facing a large group of enterprises, with interest aggregation within the business camp being a main source for developing effective policies for innovation support. Strengthening cooperation between organised business and organised labour can also support innovation activity, with agreed safeguards for employees whose employment opportunities are negatively affected by the innovation (such as retraining programmes) and distribution of economic returns on innovation activities implemented, for example, in wage determination reflecting progress in labour productivity.

Similar to some targeted approach instruments, these may invite business interest organisations, or combination of business interest organisations and trade unions, to participate in or lead the governance of frameworks of support for innovation; this can promote exchanges on related matters within the area of organised business interest and between social partners representing capital and labour. Such social partner-governed instruments directly deliver benefits and also strengthen cooperation between social partners in general. The Digital competences for SME employees framework in Romania (Box 22) demonstrates such an approach, where projects funded require the participation of the social partners and follow the outcomes of their exchanges on the prioritisation of forms of services developed.

Alternatively, non-profit organisations can be funded to organise enterprises clusters to improve interest aggregation among employers beyond the scope of any given industrial relations system; inclusion of social partner current interests might be a formal or informal requirement. The support for clusters, as presented in Box 23, can be regarded as a sample of this strategy. Beyond project-based

approaches, there are also those where stable cluster organisations permanently support the coordination in innovation-related policies.

Box 22. **RO_07 – Digital competences for SME employees, *Competențe digitale pentru angajați***

Digital competences are essential for Romania's transition to a knowledge-based economy and to lifelong learning, as well as for the successful introduction of electronic public services. However, in 2012, the EU-27 survey indicated that, compared to the EU average of 47%, in Romania 85% of persons between the ages of 16 and 74 years do not have computer skills. Because of this, the Romanian government declared, through the National Strategy on the Digital Agenda, the strategic objective of increasing digital competences of all public and private employees (especially in SMEs) and also improving the digital business environment. In support, the ESF launched in December 2019 a call for applications to develop digital competences of SME employees operating in potentially competitive economic sectors and in areas of intelligent specialisation. The allocated budget of EUR 20 million (with a maximum budget of EUR 1 million per project) supports activities such as digital skills training programmes, evaluation, validation and certification for digital competences related to job requirements, support to companies organising workplace learning programmes to develop employees' digital skills, organising and conducting SME awareness campaigns. Applicants accepted for this call include employers' organisations (associations, federations, confederations or territorial employers' unions), business associations, chambers of commerce and industry. These projects should not last more than 18 months and should improve digital competences of up to 5 000 SMEs. [Public debate on the draft guide for this call](#) continued until the end of February 2020.

Source: Dana Stroe.

Box 23. **ES_08 – Support for innovative business groups (clusters) in the Autonomous Community of Galicia, *Axudas ás agrupacións empresariais (clúster) innovadoras na Comunidade Autónoma de Galicia***

The Regional Government of Galicia, in collaboration with the Galician Institute for Economic Promotion (IGAPE), is promoting innovative business groups (clusters) in the Autonomous Community of Galicia. The purpose of this aid is to promote competitiveness, innovation and business cooperation in different sectors of economic activity. Main clusters are grouped around key sectors in Galicia, including car manufacturing, biotechnology, aquaculture, textile, shipbuilding, wood industry, tourism, health, food processing or ICTs.

Clusters must promote collaborative projects among sector companies in different domains, including R&D&I or internalisation projects, as well as collaborative training projects aimed at improving workers' and managers' skills in areas related to Industry 4.0, eco-industry, sectoral innovation challenges or digital transformation. These training areas must be well aligned with the Galicia Industry 4.0 Competitiveness Agenda.

The initiative is aimed at legal, not-for-profit entities (clusters) that develop and manage cooperation projects of a cluster group composed by a significant share of regional companies belonging to each specific sector. Established Galician large and

small and medium companies are supported indirectly. The public support may cover 50% of the investment costs.

The 2019 call is the third one, following previous calls in 2013 and 2016. In the last edition, a total of 11 clusters were subsidised and the volume of aid reached EUR 1.9 million for the years 2019, 2020 and 2021. In 2016, the data were quite similar (11 clusters and EUR 1.6 million), but in 2013 the budget was significantly higher (EUR 3.8 million distributed among 12 clusters). Funding comes from regional and own financial sources.

No public evaluation of this incentive is available but it could be suggested that it is important: it supports the development of several key sectors within the regional economy of Galicia, fostering collaborative projects among companies in different domains (including human resources and skill development). The fact that the incentive has been renewed several times suggests the importance attributed to it.

Source: Cedefop.

CHAPTER 5.

Cooperating in educational outreach activities with MSMEs

5.1. Promoting the participation of MSME employees in external CVET opportunities offered to individuals

MSMEs can be invited to provide the platform for informing about and promoting participation in CVET opportunities – typically provided free of charge or at low fees – relevant for their employees.

Supply-side funded CVET provision targeting individuals is an important opportunity for enterprises as employers might reach an agreement with their employees to participate in such form of CVET to meet enterprise needs. Enterprises are often prepared to provide some form of contribution (e.g. paid time off) or incentive (e.g. a salary bonus) in return for employee willingness to undertake training paid by a third party. Providing free CVET to employees is a form of indirect support to enterprises, although the individuals are the main beneficiaries.

Outreach frameworks may also aim at winning the support of enterprises in motivating their employees to take advantage of training offers even if the learning outcomes are not of immediate use for the organisation.

Focusing on MSMEs, approaches may offer CVET opportunities in close proximity to MSMEs, with offers addressing equally the organisation as such (e.g. the owner, members of the organisation with some managerial responsibility) or the individual employees. The Romanian pilot Community centre for lifelong learning (Box 24) exemplifies a strategy where novel CVET offers are created locally to micro-enterprises, their employees and the local community in general. The example shows that areas where CVET is practically non-existent, and local micro-enterprises have little experience with CVET and show a low level of formalisation of organisational structures, one needs a bottom-up approach where provision is developed with and by participants who are invited to express their needs. In short, approaches for community development become an important source for supporting MSMEs, with borders blurred between support for individuals and support for MSMEs, as well the approaches of ‘targeted support’, ‘mediated support’ and ‘cooperation in educational outreach’ policy strategies.

Otherwise, a thematic approach can be developed, with novel free training opportunities offered in fields attractive to individuals but also of relevance for enterprises as such. The novel training opportunities funded in relation to the

National Digital Strategy 2012-20 in Cyprus (Box 25) represent an example for such an approach.

Box 24. **Community Centres for Lifelong Learning, *Centre comunitare de învățare permanentă***

In a pilot programme, four community centres for lifelong learning (CCLL) were established in rural, poorly developed parts of Romania, partly mirroring the broadly developed Hungarian model (OECD, 2020). The methodology for the establishment and functioning of the centres was approved by Governmental Decision in 2017. The CCLL is a public entity under the local public administration, set up by decision of the local authorities with the aim of implementing lifelong learning policies and strategies at community level. The expected medium- and long-term result of this initiative is to contribute to a significant increase of the current participation rate in education and training of adults.

CCLLs are expected to have a significant role in the training/retraining and professional counselling of SME employees as well as in supporting the development of cooperation networks among public and private entities, SMEs included. The CCLL may organise SME employee training programmes for qualification, retraining, conversion and further training, non-formal education programmes, and certification programmes for key competences. Career counselling, testing of personal interests and skills, facilitating meetings with people who work in human resources to identify the need for professional development, are also a part of the centres' repertoire. CCLLs also support networking/partnerships of SMEs with public and private bodies, non-governmental, trade union and employer organisations.

In the pilot, CCLL were introduced with the help of different foreign funds, including ESF and the Swiss contribution to EU development. In the Western Region of Romania, a project co-funded from the Swiss contribution started in 2015, in partnership with the local authorities from the rural communities of the four counties: Timiș, Hunedoara, Caraș-Severin and Arad. The applicant organisation and the project coordinator is the Romanian Institute of Adult Education, in partnership with: the Swiss Federation for Adult Education (SVEB), the German Foundation (FRG) and the Foundation for Rural Assistance (CAR). Four CCLLs have been set up in four rural areas. For the target group, participation was free of charge. The total value of the project was CHF 247 524.75 (approximately EUR 228 029) of which financial assistance was CHF 222 772.27 (approximately EUR 204 765) with 90% of the total budget funded from the Swiss contribution and 10% by the project's partners. Starting from 2018, these CCLLs have been fully financed from the local budgets.

The concept of CCLL is extremely valuable in the Romanian context, where the need for individualised support and counselling, especially for persons coming from vulnerable groups is high, but their development is still at an early phase and significant efforts are needed to extend them and to assure their efficient functioning (for more details and the outcomes of the initial implementation phase, see the in-depth case study in supporting document [Case studies](#)).

Source: Cedefop.

Box 25. **CY_05 – Scheme Promoting e-Government and Digital Skills Systems, *Έργο Προώθησης Συστημάτων Ηλεκτρονικής Διακυβέρνησης και Ψηφιακών Δεξιοτήτων***

Information and communication technologies (ICTs), especially those related to the internet, impact both the traditional way of doing business and everyday human

activities in general. The Cypriot Government has assigned the Cyprus Productivity Centre (CPC) to undertake and implement, with the cooperation of Department of Electronic Communications (DEC) as far as training is concerned, the National Digital Strategy 2012-20.

Within the context of this Strategy, the CPC embarked in 2017 on the development of several training activities/workshops, funded by the national budget, to meet the current training needs of several specific groups. Specifically, the CPC has been running activities including workshops promoting digital skills addressed to employees and the unemployed (age 20-55) in different digital fields (basic digital skills, ECDL and advanced levels in Microsoft Word, Excel and Microsoft PowerPoint, e-government).

The training activities/workshops are offered free of charge to participants. Participation in the programmes is high. Although activities are not addressed directly to enterprises but to employees, they have an important impact on MSMEs in terms of upgrading the digital skills of the workforce. The activities are assessed by the participants, and the training contents are modified according to their opinions and the prevailing business and social needs. At the time of this research, the scheme was planned to be continued.

During 2017-18, a total of 303 sessions were run under the scheme, attended by 4 053 individuals; during 2019 the figures were 131 and 1 545, respectively. A survey conducted at the end of 2018 by an external independent evaluator showed that the scheme was positively or very positively evaluated by 79% of the participants, with only 1% having a negative opinion.

Source: Cedefop.

5.2. Providing work experience or on-site training spells to non-employees

Enterprises make important contributions to both initial and to continuing education and training by providing access to workplace learning experiences to students. While enterprises can benefit from providing workplace learning in multiple ways (mainly the productive contributions of the learners), offering this type of learning can also be an important investment by enterprises in a public good. Various instruments aim at promoting enterprises' willingness to offer more high-quality workplace learning, though they are typically reported under headings other than 'cooperation in educational outreach'.

For example, a new financial incentive was created in Denmark in 2016 (Box 26) aiming to achieve a higher number of available internships (in essence, any form of vocational training at the workplace, including apprenticeships). However, this also falls under the 'cooperation for educational outreach' heading.

Another area where financial incentives for targeted support and outreach strategies overlap is the broad area where employers are incentivised to offer more apprenticeship places, receiving contributions to the costs incurred in work-based learning in various forms. For example, in Estonia, with a limited tradition in apprenticeships as a form of IVET or CVET, where apprenticeships are seen mainly as a form of second chance education supporting young drop-outs or (long-

term) unemployed, enterprises are encouraged to offer an apprenticeship spell (Box 27). A full account of incentives and strategies aiming at convincing employers to offer more apprenticeship places is available in Cedefop (2020) and [its related database](#).

Box 26. Denmark – Bonus-Malus system for workplace training, *Praktikplads-AUB*

In 2016, a bonus/malus regulation was introduced in Denmark, rewarding enterprises providing (vocational) workplace training while requiring those not providing the expected number of internships to pay a levy. The instrument provides support for workplace training of both students in initial education (including apprentices) and adults in CVET.

The instrument aims at increasing the number of internship spells provided. Internship-AUB (Praktikplads-AUB) is mandatory for all employers with at least one full-time employee holding a vocational qualification. For each employer, a target is set for the expected number of 'units' (student points) per year, reflecting the size and the composition of its workforce out of employees with different vocational qualifications. For various types of internships offered, a specific number of units are calculated. Employers have to report annually the number of internships foreseen for the upcoming year. If employers hire more than the foreseen number of 'interns' (or 'trainees', including those in formal programmes e.g. apprentices), they will receive a bonus for every additional intern hired. Firms that reach their target receive a fixed bonus of DKK 25 000 (EUR 3 352.50) for every extra intern hired. The firms that do not reach the number of interns targeted have to pay an extra contribution to the Praktikplads-AUB scheme.

The Internship-AUB is a part of the Danish labour market supplementary pension fund (ATP) paid by the employers. The annual bonus amount should not exceed the extra contributions paid by firms that did not reach their number of vocationally trained employees.

With the tripartite agreement between the government and the social partners from 2017 the bonus was increased from DKK 15 000 (EUR 2 011.50) per intern to DKK 25 000 (EUR 3 352.50) per intern.

Source: Cedefop.

Box 27. EE_02 – Work-place based learning, *Töökohapõhise õppe*

To meet labour market needs better by improving vocational training and education, Innove Foundation (established in 2003 under the Estonian Ministry of Education and Research and financed from the national funds and ESF) has national responsibility to promote adult learning and vocational education and training. Innove promotes workplace-based learning and cooperates with the Estonian Confederation of Employers, Entrepreneurs and Vocational Education Institutions.

Innove works to develop an apprenticeship scheme to increase the number of apprentices. An education institution has responsibility for one-third of the education and two-thirds comes from supervision/mentorship in a company. Work-based learning is open for both young people entering their first profession and for adults who want to retrain or acquire another qualification. Employers state their needs for worker skills and vocational education schools create study places.

The contract between an employer and vocational education school determines the distribution of the costs and benefits related to the work-based training according to

the following criteria: employers are compensated up to 50% of costs related to supervision of a trainee (supervisor/mentor salary); the trainee receives a salary (no less than a minimum wage) and allowance through the school to cover transportation expenses (based on performance results, a trainee can also receive a study allowance); and a vocational education institution receives public funding that covers 50-100% of all work-based learning expenses.

Innove Foundation also initiates various models of work-based learning in vocational education institutions and for companies; facilitates cooperation and mutual learning between companies and vocational schools; monitors international practices in work-based learning; and can help develop legislative changes related to work-based learning. During 2015-18, 1 426 people completed the programme. In 2018, 4 200 students participated in the programme. In 2020, the target increased to 7 200 students.

According to the studies (Kantar Emor 2018 and Innove Foundation 2019), the graduates valued the programme, with 96% receiving information about the programme from the employer and 95% of participants evaluating their experience with the school as 'good'. However, they were less satisfied with the study curriculum, which suggests a constant need to improve and upgrade both the curriculum and the qualifications of teachers/instructors. The study indicated that 83% of participants passed the qualification exam but, in many cases, companies did not provide sufficient instructions during the practical training.

Source: Cedefop.

Many schemes within active labour market policies (ALMP) offer support to employers if they provide workplace learning opportunities to possible candidates for future employment. As well as wage subsidies, schemes often foresee contributions to the training costs for the newly hired up to 100% of the costs of provision. Box 28 presents an example for a related ALMP measure relevant for the outreach approach provided in Belgium (Flanders), where external coaches are provided to support on-the-job training of newly hired employees; this both reduces insertion costs and also mitigates time constraints for existing staff in supporting newly hired employees.

Box 28. **BE_01 – Job coaching of new employees, *Jobcoaching op de werkvloer***

The programme Job coaching of new employees guides new employees, facilitating their quick integration in the workplace with a particular focus on (soft) skills and attitudes rather than technical skills. Since 2008, the initiative has covered Flemish companies irrespective of their size.

The programme is the result of a partnership between the Federal Public Service Employment, Labour and Social Dialogue (FOD WASO), Flemish Social Profit Funds (Vlaamse Social-Profitfondsen (VSPF), the Flemish Community and the Flemish Employment Agency (VDAB); it is financed via VIA agreements (Vlaamse Intersectorale Akkoorden), i.e. public means. The coaching itself is supplied by Werkplekarchitecten (a network of 38 non-profit organisations specialised on-site/on the job counselling, coaching and training).

Specifically, employers (small or large) in need of external support for training a new employee can apply for this programme. Job coaching is customised (frequency can be chosen by the employer), on-site and aims for fast integration on the work floor of

employees. To benefit, employees have to work in Flanders, be employed in the firm less than 1 year, and be in need of additional support to train for his/her new job. The job coaching activity can last up to 6 months and is free for both employers and employees. Coaching activities cover both employer and new employee(s).

No evaluation studies are available on the programme but from a qualitative perspective, it is probably a useful mechanism, especially for speedy integration of new employees from disadvantaged groups (low skilled, non-Dutch speaking, employees with special needs or disabilities).

Source: Cedefop.

5.3. Providing training (on-site or external) to the employees of one organisation

A particularly important field of activity under ‘cooperation in educational outreach’ is approaches where enterprises are won over to allow third parties to organise CVET activities exclusively for their employees, typically on-site, even when the training provided is understood mainly as within the interest of the individuals targeted.

In some countries, related frameworks have a long tradition within the adult basic education field, where literacy, numeracy and ICT courses, as well as courses supporting ‘second language acquisition’, are organised on-site for all employees with relevant needs, typically after regular working hours. Participants can join the courses with their peers, profit from improved options of tailoring the provision to the needs of the learners present, and save time taken in travelling to external providers. An example in France is presented in Box 29.

Box 29. **FR_08 – FIT Integrated training at work, *Formation intégrée au travail (FIT)* 196 FR**

FIT is an innovative action – based on earlier pilots – introduced in 2018 in the construction sector by Constructys (the skill operator of the construction sector) in the Hauts-de-France Region. The project is funded by the French government, the European Social Fund and ADEME (Agence de la transition écologique, Public agency dedicated to ecological transition).

The initiative primarily seeks to improve access to training for construction workers by bringing training directly to building sites and therefore overcoming typical barriers (lack of time, time limits). The aim is also to increase the skill levels of low-qualified workers within the construction sector.

The construction projects selected as suitable for being a site of learning involve various activities following an environmental agenda. Workers involved learn about the general foundations of sustainable, low energy construction and renovation in

class-room sessions (delivered on site) and acquire practical and tacit knowledge by implementing related project work together with experienced team members ⁽³⁴⁾.

The theoretical and practical curricula are typically broken down into short units (4 to 7 hours), with a total amount of tuition of 10 days, however, arrangements are flexible and adjusted to the needs for a specific sites/the participating employees. Learning units are provided by vocational teachers, experts or practitioners of the construction sector.

By the time of this research, 29 building sites have experienced the FIT action, of which 11 have ended. Overall, 192 workers have been trained in 69 companies.

Source: Cedefop.

Organising on-site CVET opportunities for employees is an important area of activity for trade unions, at least in some industrial relations contexts. Trade unions work towards making the on-site provision of training possible, often by exploring available public funding frameworks, and negotiate with the employer for permission to use the facilities, receive organisational contributions to the costs and ensure some form of reward for skills acquired. Organised training activities also support the trade union's overall organising agenda.

A particular prominent example of a large-scale framework, where a public policy supports unions in organised educational outreach with and within companies, concerns the Union Learning Fund and its related Framework of Union Learning Representatives, summarised in Box 30 and also presented in the UK case study (see supporting document [Case studies](#)).

Box 30. UK (In-depth case study), the Union Learning Fund and the Union Learning Representatives

The UK has a long tradition of trade unions organising learning opportunities for workers at or near the workplace, thereby also strengthening their membership base. Unions then use the collectively improved skills as an asset when entering wage negotiations with the management (Bratton, Mills, Pynch, & Sawchuk, 2003; Clough, 2008; Fenwick, 2008; Stuart, 2019). The trade unions had also a strong position within the system of levy-based sectoral skill councils, now dismantled (Thelen, 2004). In 1998, an attempt was made to revive weakened traditions of union-led workplace learning.

The Union Learning Fund (ULF) was established in by the government, in line with a renewed policy interest in lifelong learning. From the beginning, the ULF followed two main approaches.

The first was to provide the resources for establishing a system of Union Learning Representatives (ULRs), specifically trained union members who can give advice on CVET to their peers at company/shop floor level. Using peers in the workplace to inform about and encourage taking up learning opportunities aimed to increase

⁽³⁴⁾ As one example for a construction site turned into a learning site, see Spotlight on integrated work training (FIT 2.0) | CREFAB – Regional Training Centre for Craft Enterprises in the Building and Public Works sector.

participation among low-skilled workers in lifelong learning activities, whether union-led, employer-provided or provided by a public framework.

Second was to provide the means for innovative union-led CVET projects, with unions expected to use the funding available to create broader coalitions and also generate funding from the employers, who were seen as underinvesting in CVET, in particularly training of their unskilled workers.

The Union Learning Fund (ULF) is managed and administered by Unionlearn, the UK TUC (Trades Union Congress) Learning and Skills Organisation, under an agreement with the UK Department for Education (DfE). Its aim is to provide a continuing framework to support union-led learning in England. Similar schemes exist in Scotland and in Wales.

The scope of the ULF has gradually broadened as union capacity has grown and government strategic objectives have changed. Unions have been encouraged to work on improving access to work and to work in the community.

Any trade union, or national organisation representing trade unions, is eligible to apply for project-based support from the fund. The ULF is intended to engage with employers to create and facilitate learning programmes which tackle both organisational and individual needs. In this regard, ULRs trained by Unionlearn, play a key role in the success story of the implementation of the ULF in the UK. Since 1998, about 40 000 ULRs have been trained. Among the functions of a ULR is to analyse training needs, provide information and advice on training, promote the value of training, and consult the employer over these activities. They can strike learning agreements with the companies (Stuart, 2011).

They have the right for reasonable paid time off to train and carry out their functions in a similar way to union representatives in general. ULRs are widely recognised as trusted intermediaries. Their role has been seen by the government as crucial to help to deliver the national learning targets, particularly in respect to literacy and numeracy and low levels of vocational qualification. Several evaluations found the ULR network is particularly important and effective in reaching individuals with poor experiences of education and whose return to learning can have major positive implications for them, their employers and their families.

Funding for ULF is provided by government to unions through a series of funding rounds. The programmes funded under ULF are delivered in collaboration with the Association of Colleges, the Association of Employment and Learning Providers, City and Guilds and many others to ensure that relevant education and training is provided. The learning activity supported by the ULF covers a broad spectrum from higher education to vocational and non-vocational courses, apprenticeships, functional skills learning, GCSEs, CPD and other further education provision. Projects must specify learning outcomes and show evidence in support of their projects. ULF increasingly funds online distance learning in partnership with online training providers: union members and other workers can access free online courses.

While the framework of the ULF and the ULRs can be seen as an important achievement, the size of the overall framework should not be overestimated. A recent OECD study (OECD, 2021b) reported about 150 000 participants within the framework for 2019/2020, down from 210 000 in 2016/17.

From 1998 to 2016, the ULF has disbursed GBP 180 million to unions to support learning and skills opportunities. This has resulted in learners participating in 1.45 million learning exercises. The evaluation of the ULF published in 2016 included a large-scale survey, and included the following results regarding its effectiveness:

- The benefits of union learning are recognised by learners, employers and wider stakeholders. One in five learners (19%) achieved a higher level of qualification

and over three-quarters of employers (77%) report they get a positive return on the investment that they make when supporting ULRs and union learning.

- One in five union learners report gaining a promotion or increased responsibility at work, 13% report that they had stayed in a job that they might otherwise have lost, 7% got a new job and 11% received a pay rise.
- 11% of employers reported that employees were more likely to get a pay rise as a result of union learning. A third of employers (32%) reported that organisational performance has increased as a result of union learning and nearly half (47%) that employee commitment has improved.

Source: Cedefop.

CHAPTER 6.

Using the ‘support arrangement’ concept to explore the effectiveness of policies in increasing MSME training provision

This chapter contributes to studying the effectiveness of policies to support enterprise – particularly MSME – training provision by examining the ‘support arrangements’ for MSMEs training in selected skills ecosystems and skill formation systems. The term ‘support arrangement’ (section 2.4) refers to all types of support available to MSMEs, located in a given region or sector. Section 6.2 explores ‘support arrangements’ in Spain, the Basque Country (skill ecosystem – sector), Poland (skill ecosystem – region), and Ireland (skill formation system – national level). Section 6.3 summarises the findings of the analysis of support arrangements across all 15 [case studies](#) and Section 6.4 provides a summary and outlook.

6.1. Selected support arrangement examples for MSME training

6.1.1. Support arrangements in the Basque machine-tool sector

The Basque machine-tool ⁽³⁵⁾ case study provides an example of a well-developed support arrangement, illustrating how national support can be complemented by regional and sectoral approaches. Support arrangements for MSMEs in the Basque metal sector became highly developed and provide, in comparison with Spain’s national average, a higher level of support for CVET in companies and in general. One regional and sectoral CVET and research organisation (IMH, Advanced Manufacturing Education Centre) plays an important facilitating role in coordinating the various instruments within the support arrangement.

The machine-tool industry has a long tradition in the Basque Country and produces around 80% of all Spanish machine-tool products. The organisation representing advanced and digital manufacturing interests in Spain, the [AFM Cluster](#), has its headquarters in the Basque Country. The cluster comprises five industrial associations and involves more than 500 companies, mainly MSMEs, with 16 500 employees and revenue of EUR 3 000 million. The sector sells more than 80% of its production to international markets. A fundamental reason for the

⁽³⁵⁾ For further details on the of support arrangements examples see supporting document [Case studies](#).

success of the Basque machine tools sector is its commitment to innovation and technological development: the sector allocates approximately 5% of its turnover to R&D&I. To be internationally competitive, the industry has a strategy that emphasises innovation, design and quality.

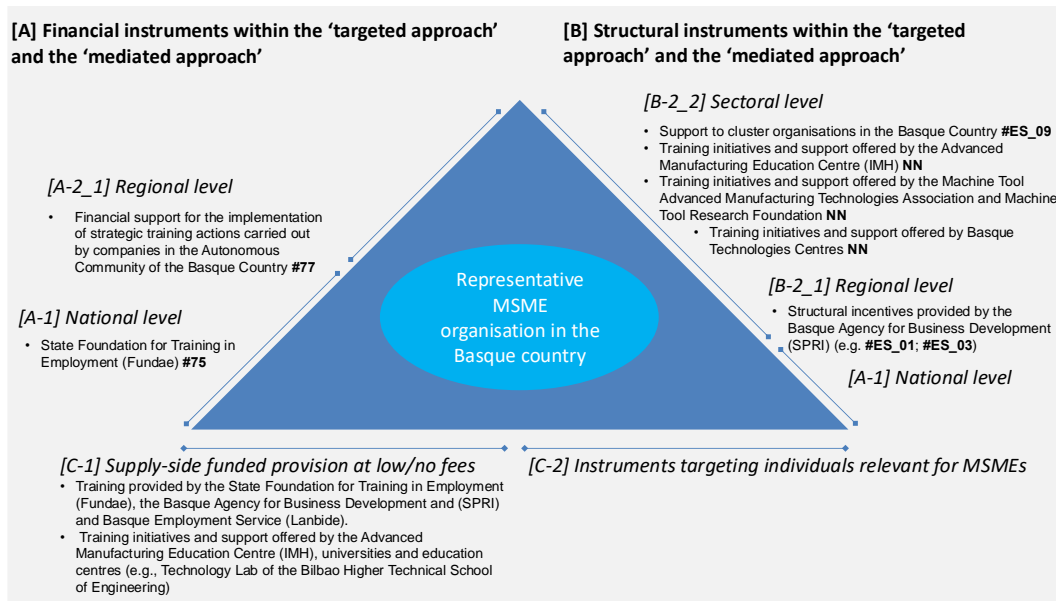
The AFM Cluster offers varied support services to associated companies, mostly located in the Basque Country, including employee training and personnel selection. The main entities of the AFM Cluster include:

- (a) AFM, Machine Tool Advanced Manufacturing Technologies Association (the original association that gave its name to the cluster);
- (b) ADDIMAT, Additive Manufacturing and 3D Printing Association;
- (c) AFMEC, Machining and Metal-Mechanical Transformation Association;
- (d) ESKUIN- Manual Tools, Hardware and Industrial Supply Association;
- (e) UPTEK, Technology-based Companies Association;
- (f) IMH, Advanced Manufacturing Education Centre.

The cluster represents 90% of the machine tool and advanced manufacturing technology companies in Spain. AFM's technology unit uses INVEMA, the Machine Tool Research Foundation, to support technological development for associated companies. The AFM Cluster also includes the University of the Basque Country (UPV/EHU), with its Machine Tools and Manufacturing Technology Classroom, and the IMH Advanced Manufacturing Education Centre (Vocational Training Centre of the Basque Government). Also, the Basque Country has a large network of technology centres – including Tecnalia, Ideko, Tekniker, Ikerlan and Lortek – that help and support Basque manufacturers. The machine-tool sector also benefits from training incentives at the Basque and national levels provided by Lanbide (Basque Employment Service), and Fundae (State Foundation for Training in Employment), as well as from other training-related activities carried out by SPRI (Basque Business Development Agency).

Figure 7 summarises the support arrangements available for MSMEs in the Basque metal or machine-tool sector.

Figure 7. **Interplay of financial and structural instruments within the support arrangement for the machine-tool sector in the Basque Country (skill ecosystem level)**



Source: Cedefop.

Basque companies in the machine-tool sector can access both regional and national financial incentives available for all sectors. At the national level, *Fundae* #75 manages funds that support training planned and managed by companies (demand-side training). In this instrument, all private companies devote a small percentage of their social security contributions to pay for vocational training (professional training fee of 0.7% with employer contributions of 0.6% and employee contributions of 0.1% of gross wages). These funds cover a company's training expenses by allowing the company to deduct training costs from their expected social security contributions.

Local entities of national programmes offer financial incentives adapted to regional needs. There is also a regional instrument – managed by Lanbide – providing financial support to Basque companies with 35 or more workers for strategic training actions aimed at improving skills directly related to a company's productive process.

Regional structural instruments supporting Basque companies include initiatives implemented by SPRI. For example, the initiative *Enpresa Digitala* (Digital Enterprise) organises courses, seminars and training and dissemination days that address issues such as cyber-security, creation and management of web pages and use of different computer programmes. The initiative *Barnetegiko* (Technology Workshop) has the main objective of raising awareness and disseminating new technological trends among small and medium-sized companies in Basque Country.

Sectoral-level structural instruments include initiatives specifically supporting the Basque machine-tool sector. The IMH offers different services to companies, such as custom-made training courses, collaborative projects for innovation and technological improvement, or consultancy services for staff development.

AFM and INVEMA (AFM's technological unit), also offer support services for their associated companies. AFM offers training and personnel selection services, promotes cooperation and synergies between companies and helps them in their internationalisation processes. INVEMA, works with companies to determine their individual and joint technological projects and supports companies' technological innovation. INVEMA encourages development, offers technological services and promotes inter-company and auxiliary management programmes.

The Basque technological centres carry out research projects on providing companies with knowledge and technological solutions, including training actions. The largest technology centre in Spain, Tecnalía Research & Innovation, has many international activities such as R&D contracts signed with other countries and with foreign researchers. Other examples include IDEKO, which provides technological services such as technical consultancy or equipment-based services, or Tekniker Foundation, which helps increase the innovation capacity of Basque industries. Also, IKERLAN collaborates with companies in the integral development of new products.

Companies in the AFM Cluster can benefit from the support to cluster organisations in the Basque Country promoted by the Department of Economic Development of the Basque Government. The department focuses on promoting the competitiveness of SMEs and the Basque economy and supports actions such as accompaniment for internationalisation, benchmarking actions and strategy planning, joint training activities, and organisation and promotion of conferences, meetings and (training) events.

Beyond those instruments mentioned, MSMEs receive support from measures that offer supply-side funded provision at low or no fees. The Fundae, SPRI and Lanbide offer supply-side training initiatives where employees can take part. Normally, these are free courses to improve worker competences and can be provided by accredited external training centres. This also includes courses offered by IMH. IMH offers both VET medium-level (ISCED 3B) and VET high-level (ISCED 5B) courses related to the machine-tool sector. The IMH engineering school offers university training programmes with the dual training system (in-company and in-school learning). Courses are partly or completely supply-side funded but require individual contributions to match available public funding.

Along with the training provided by IMH, the public Basque University has a machine tool classroom (at the Bilbao School of Engineering), which develops an advanced training plan on the design, control and use of machine tools. It is aimed at students in the final years of the specialisations for industrial engineering, automation and industrial electronics.

The IMH plays a particular role in supporting CVET in the Basque machine-tool companies. This public vocational training centre of the Basque Government acts as an 'intermediate innovation body' for the Basque Science, Technology and Innovation Network. Thanks to its technical training courses for the metal and mechanics industries, the IMH now serves as a vanguard centre in the professional training network in the Basque Country, with important activities also in Spain and abroad. It is the National Reference Centre in mechanical industries.

The IMH offers both specialised training services in advanced manufacturing and innovation services for SMEs. It has responsibility for most training programmes in the machine tool sector and provides initial training activities in the field (e.g. manufacturing-related VET degrees and university degrees) and also continuous training activities aimed at both employed and unemployed workers.

The IMH offers custom-made courses either at the company's premises or at the IMH. The course content seeks to address the problems of an enterprise and adapt to its needs, objectives and strategy. It includes a commitment to recruiting workers, in collaboration with the Department of Employment and Social Affairs of the Basque Government. The company and the IMH together design the course, adapted to the requirements of the workplace. This training involves hiring 50% of the people participating in the course for 6 months or more, an approach that guarantees targeting the specific needs of a MSME.

In addition to training actions, the IMH actively provides consultancy services in R&D&I activities, including the initiative ITAUN-TKGUNE for very small companies. The Basque government partially funds these consultancy services provided by (groups of) VET teachers from the IMH. The services help companies solve technological problems in their daily activities and also allow VET trainers to identify the real problems of specific companies. Both participating companies and trainers/teachers highly value this programme.

To conclude, the IMH contributes in various ways to the overall support arrangements. It plays a key role in ensuring high quality training adapted to the needs of companies in the local sector. It acts as a centre of innovation and translates novel technologies into its CVET programmes. It offers a broad range of services, for structural targeted support (consultancy/counselling for employers, custom-made training) or structural mediated support (joint R&D) projects. National funding creates support instruments targeted to the needs of the local sector.

Support arrangements for the MSMEs in machine-tool sector in the Basque Country can be characterised as:

- (a) demonstrating a high 'density', with numerous financial and structural support services building on supply-side CVET for free, or with low fees and support instruments targeting individual workers;

- (b) building a strong 'complementarity', with funding provided by regional business development agencies and, even more important, a set of sectoral organisations and business interest organisations.
- (c) a well 'targeted elaboration' of the support arrangements to meet sectoral needs, with one organisation playing a key role in developing and implementing targeted services or mediated structural support.

6.1.2. Support arrangements in the Warmia-Mazury region in Poland

This case study demonstrates how a support arrangement ⁽³⁶⁾ can be adapted to the needs of an economically disadvantaged region, ensuring that regional MSMEs have effective access to national instruments.

Warmia-Mazury is a region (voivodship) located in northeast Poland, famous for its well-preserved natural landscape. The fourth largest region in Poland has an agricultural character; state-owned farms dominated the region's economy during the centrally planned era (pre-1990). In the transition process and until today, the region has had exceptionally high unemployment and social exclusion rates. Although the labour market has improved, as of 31 December 2019, the registered unemployment rate (9.1%) remains above Poland's average (5.2%), average gross monthly wage constitutes 84.1% of the national average, and migration remains negative (-2.63 persons per 1 000 population). GDP per capita in 2019 was 68.5% of Poland's average. At the EU-27 level, Warmia-Mazury is among the poorest regions with GDP per capita (in PPS) at 50% of EU average.

The EU structural funds target Warmia-Mazury as a less developed region. As elsewhere in Poland, the MSME sector dominates: in 2020 micro-enterprises accounted for 96.2% of all companies in the region, small enterprises for 3.0%, while medium and large ones (employing more than 50 persons) for 0.8% (SO 2021). MSMEs employ a larger share (76.6%) of the workforce in the region than the Polish average (48%) (Lojko, 2016).

The Warmia-Mazury region faces many challenges in improving workers' skills so that the region's companies can be competitive. Improving human capital is a critical need: only 2.4% of adults in the region participated in lifelong learning activities in 2017 (see WMRB, 2018). This is well below the Polish average (4.0%), which also is significantly lower than EU leaders (Sweden 30.4%) or the average level (EU-27: 10.4%).

In 2007, the regional stakeholders responded to this need when they developed a skill ecosystem in line with the OECD approach to local skill ecosystems (see Martinez-Fernandez and Weyman, 2013). They launched the Warmia and Mazury pact for the development of vocational counselling, with the Olsztyn Regional Job Centre as implementor. The pact encompasses around 80

⁽³⁶⁾ For further details on the examples of support arrangements see supporting document '[Case studies](#)'

institutions, including such as labour market institutions, training providers, schools, universities, and research institutes.

The Pact coordinates seven task groups whose activities include conferences and seminars focused on the regional labour market, workshops, career weeks, study visits in schools, companies and business-support institutions. An important added value of this initiative is systematically sharing knowledge about lifelong learning (LLL) and between institutions developing LLL. Schools, universities and training providers are important stakeholders of the pact. Essential support to MSMEs comes from vocational schools, technical secondary schools, and post-secondary schools, which provide education leading to vocational qualification exams (in the school education system). Such schools are usually managed by vocational training centres⁽³⁷⁾ which also provide vocational counselling, apprenticeship opportunities, and adult training courses leading to formal qualifications in line with EQF. Higher education institutions⁽³⁸⁾ also serve the important role of providing highly qualified individuals to MSMEs in the region (especially in STEM programmes, like mechanical engineering or IT-related courses). Training providers, listed in the Register of training institutions (containing 527 institutions) managed by the Olsztyn Regional Job Centre, and in the Database of development services (56 organisations only in Olsztyn, the capital of the region) deliver training programmes in response to needs of adults and MSMEs.

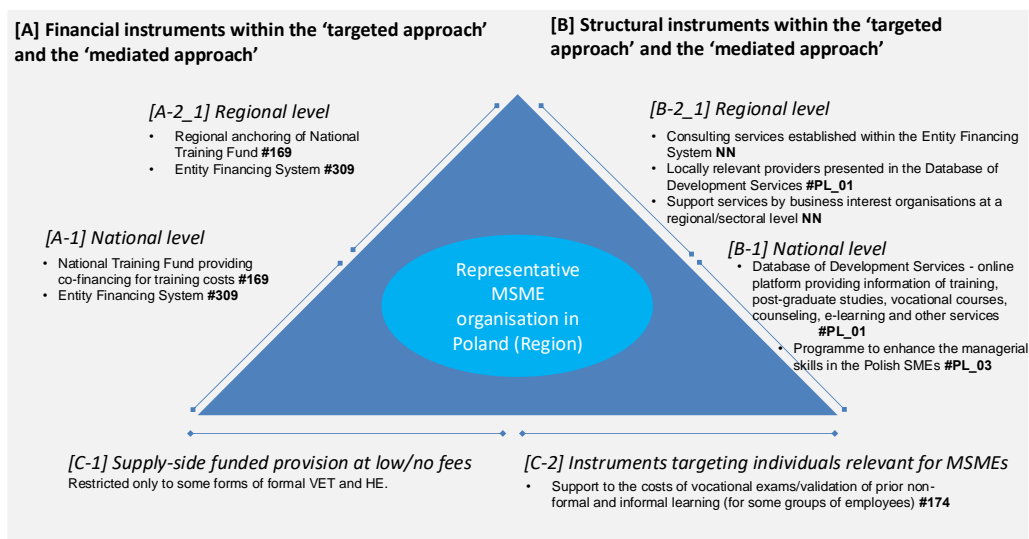
Many business-support institutions do not belong to the pact. However, they participate actively in developing the regional skill ecosystem in the Warmia-Mazury Region, by creating semi-formal networks of cooperation. One group of such institutions covers craft organisations, which play an important role in developing and validating skills (qualifications). These institutions⁽³⁹⁾ organise, in companies, practical vocational programmes for the young (between 15 and 18 years of age), provide vocational training courses for adults, and organise exams to validate vocational qualifications. The other group comprises regional and local agencies and employers' organisations who provide consultancy services, training opportunities and financial resources to companies in the region, including MSMEs. Business support institutions usually provide both financial and structural/non-financial instruments enhancing training in MSMEs, often co-funded from European Funds within Operational Programmes (mainly Regional Operational Programme).

⁽³⁷⁾ For example, [Centrum Kształcenia Zawodowego w Ełku](#) and [Elbląskie Centrum Edukacji Zawodowej](#).

⁽³⁸⁾ For example, [University of Warmia and Mazury in Olsztyn](#) and [State University of Applied Sciences in Elbląg](#).

⁽³⁹⁾ For example, [Warmia and Mazury Chamber of Craft and Entrepreneurship; Craft Guild in Olsztyn](#).

Figure 8. **Interplay of financial and structural instruments within the support arrangement in the Warmia-Mazury region in Poland (skill ecosystem level)**



Source: Cedefop.

The support arrangements (Figure 8) in the Warmia-Mazury region need to be understood against the backdrop of Poland's overall framework for training schemes to develop MSMEs. In this national system, regional organisations (and, to some extent, sectoral) play an important role in providing support.

Support arrangements in the regional skill ecosystem are emphasised in regional policy documents, such as the Updated employment and human resource development strategy in the Warmia and Mazury Region until 2025 (WMRB 2015), and the Strategy for the socio-economic development of the Warmia and Mazury Region until 2025 (WMRB, 2013). Since public sources (EU funds and Polish public funds) have co-financed many activities related to development of the skill ecosystem in the region, public organisations play an important role; the Marshal Office of Warmia and Mazury serves as the key stakeholder of the skill ecosystem. The Marshal Office initiates and supports regional development, manages EU-funded programmes at the regional level, and introduces LLL instruments into the strategic framework (for example, in the strategic document Warmia-Mazury 2030. Strategy for socio-economic development).

The Public Employment Service manages many financial instruments that assist training for unemployed adults. However, most of this training targets individuals (the unemployed and job seekers registered in district job centres) not MSMEs, so they play only a limited role in the support arrangement.

The National Training Fund (NTF) targets companies (with preferential treatment for MSMEs) to provide training activities adapted to their needs. The regional and district job centres of the PES focus on human capital development.

In 2019, the NTF initially allocated PLN 6.1 million (approximately EUR 1.4 million) for the region (more than double that of 2018). However, the Ministry of

Family, Labour and Social Policy provided additional resources because the companies' training needs were higher. The PLN 7.1 million (approximately EUR 1.6 million) allocation enabled 3 463 individuals (almost 1 400 more than in 2018) to take advantage of training co-financed by the NTF in the region (WMRB, 2020b).

The Polish Agency for Enterprise Development coordinates the essential element of the support framework, the Entity financing system (linked to the Database of development services). However, the regional operators (real access points) provide regional support to MSMEs. The MSMEs can also have access to infrastructure and training investment schemes within the Regional Operational Programmes co-funded by the European Funds. The Marshal Offices act as main access points in each region; this framework differs considerably and is not represented in Figure 8.

The regional iteration of the Entity financing system for the Warmia-Mazury region – the WA-MA FUR system – provides training within the Entity Financing System. The system is managed by the four regional operators: Stowarzyszenie Centrum Rozwoju Ekonomicznego Pasłęka, Techpal Sp. z o.o., Warmińsko-Mazurski Związek Pracodawców Prywatnych, and Krajowa Agencja Informacyjna INFO Sp. z o.o. The financing scheme is based on reimbursement. The regional operator diagnoses a company's needs and then recommends a suitable training/development service available in the Database of development services. Since 2019, the system in the region has provided co-financing only to micro and small enterprises, with maximum financing at 80% for training activities and 50% for consultancy services; this cannot exceed PLN 70 000 (approximately EUR 13 000) per enterprise. However, since the beginning of its operation, micro-enterprises have been 67-79% of all companies granted support in the region from the Entity Financing System (between 2017-20).

As well as the instruments included in the support arrangements, it is important to consider existing business interest organisations (e.g. regional development agencies, chambers of commerce, business associations, and training institutions) and their services, supporting MSMEs. The key players in the region include [Warmia and Mazury Association of Private Employers](#), [Warmia and Mazury Regional Development Agency S.A.](#), [Warmia and Mazury Chamber of Craft and Entrepreneurship](#).

The region's support arrangement has the following characteristics:

- (a) comparatively low 'density' with only a few instruments, almost no support for employed individuals, limits on supply-side funding;
- (b) a medium level of 'complementarity', with funding provided by the local adaptation of the Entity financing system, including some instruments of targeted structural support (e.g. needs analysis) and some further regionally offered structural support mechanism.
- (c) advanced 'elaboration' of the arrangements to regional needs, with a past strategy process as one facilitating element.

6.1.3. Support arrangements at national level in Ireland

The third example ⁽⁴⁰⁾ of the case studies provides insight in the support arrangement for the Irish skill formation system, exploring the vital role of the National Training Fund (NTF) #109 as a vehicle for collecting funds for CVET at a national level. This supports a broad range of policies for both training activities in enterprises and individual participation in CVET, with policies tailored to sectoral and regional needs.

Ireland's policy-making is characterised by a long-term policy commitment to lifelong learning and the strengthening of CVET, with a continuous series of policy commitments made since the early years of the millennium, and ambitious policies only disrupted by the Great Recession and the related austerity measures. However, in recent years, lifelong learning commitments have been broadly restored or even expanded. Participation in lifelong learning has caught up over the past two decades, with particular progress made in employer-provided training, where Ireland has been among the best performing countries of the EU according to the CVTS 2015 data).

The National Training Fund is the central component of the approach to supporting the training of those in employment and those seeking employment. It was established by the National Training Fund Act (2000) which also provides for the funding of research to provide information on existing and likely future skills requirements of the economy.

Management of the NTF is entrusted to the Department of Further and Higher Education, Research, Innovation and Science (since 2020) ⁽⁴¹⁾. The NTF is financed through employers paying a fixed share of payroll. The levy was originally set at 0.7% and raised to 0.8% in 2018, 0.9% in 2019 and 1.0% in 2020. These increases were planned to deliver an additional annual investment of the NTF of EUR 190 million; they were accompanied by a package of reforms that made the NTF more responsive to employer needs and gave employers a greater say in informing NTF priorities.

The 2018 NTF levy generated EUR 566 million (covering an estimated 75% of all insured employees) and about EUR 750 million in 2019 ⁽⁴²⁾. As the economic climate improved between 2010 and 2019 there was a corresponding reduction in expenditure, leading to a budget surplus since 2015. There is currently a debate about how to utilise the large surplus that the NTF has generated over recent years, particularly its use in funding higher education.

A wide range of programmatic activity is captured under three main themes:

⁽⁴⁰⁾ For further details on the examples of support arrangements see supporting document [Case studies](#).

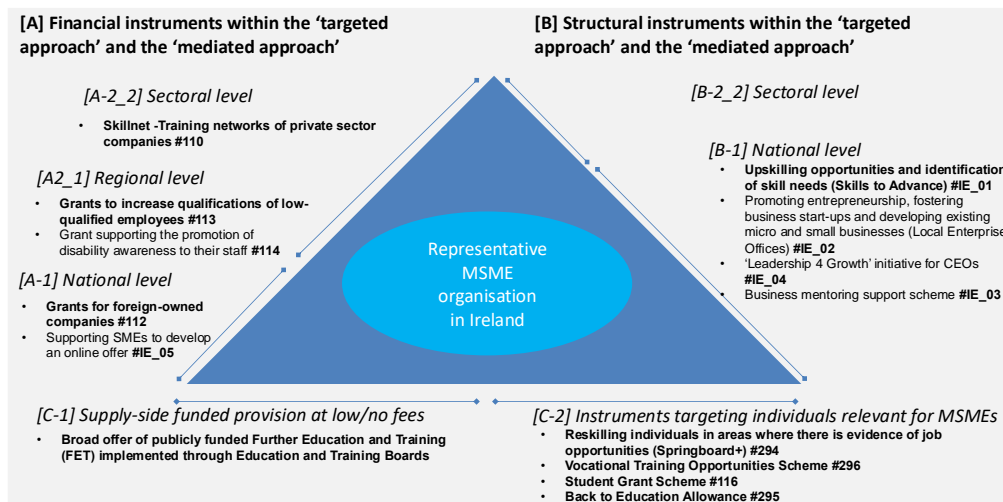
⁽⁴¹⁾ Previously, NTF was under the responsibility of the Department of Education and Skills.

⁽⁴²⁾ Parliamentary Budget Office (PBO) (2023). [An Overview of the National Training Fund \(NTF\)](#).

- (a) training for employment: Training People for Employment, Labour Market Focused Higher Education, Springboard+, Community Employment Training (DEASP), Technical Employment Support Grant (DEASP), Training Networks Programme (Skillnets), European Globalisation Fund);
- (b) training in employment: Apprenticeship (SOLAS and HEA), Training Networks Programme (Skillnets), Training Grants to Industry, Workplace Basic Education Fund (SOLAS), Traineeship for those in employment (SOLAS), Regional Skills Innovation, Community and Voluntary Organisations (The Wheel), Continuing Professional Development (Engineers Ireland);
- (c) provision of skills needs: Regional Skills Fora, Skills Analysis Unit (SOLAS), Expert Group on Future Skills Needs.

Figure 9 shows the interplay of financial and structural incentives and other support structures available to MSME organisations in the retail sector to help to provide training. While the NTF as a collection mechanism is not represented, it provides (at least parts of) the resources for various instruments displayed (highlighted in bold).

Figure 9. **Interplay of financial and structural instruments within the support arrangement at national (skill formation system) level in Ireland**



Source: Cedefop.

The NTF provides the funds for grants supporting training in enterprises on a national (Grants for foreign-owned companies #112) and sectoral level (Skillnet-Training Network #110). Skillnet is a government initiative that funds and facilitates training, with the primary objective of increasing participation in enterprise-led workforce development. Each sector area (including retail) has a specific Skillnet made up of sectoral businesses. MSMEs can use the training support for individuals (MSMEs employees) available when they become a member of their sector Skillnet.

The NTF also provides the resources for programmes, combining the support for training in enterprises with a strategy to support disadvantaged groups of workers (grants to increase qualifications of low-qualified employees #113). A key part of the NTF resources goes to supporting IVET (not represented in the graph: apprenticeship programmes, higher VET).

Beyond the programmes mentioned, several different organisations (including Skillnet Ireland and SOLAS) are funded through the NTF to administer various instruments. There are a wide range of eligibility requirements depending on the specific scheme or instrument.

The NTF also provides the funding for some structural incentives, such as upskilling opportunities and identification of skill needs (see case vignette IE_01).

The NTF is a key source of funding for a wide range of supply-side funded CVET, including employment-related higher education. It also funds the demand-side scheme for the employed (Springboard+ #294) as well as other programmes ⁽⁴³⁾.

As well as the NTF-funded schemes, there are also other, mainly small, schemes, such as a training grant from the Disability awareness training support scheme (#114), which any employer can apply for.

Further structural incentives at national level available to MSMEs are provided by business development organisations. They include the Leadership 4 Growth Programme (case vignette IE_4), delivered by Enterprise Ireland, which provides CEOs (or leadership) training/counselling for companies with the 'ambition and potential' to achieve significant scale in their identified market. The MentorsWork (case vignette IE_3) programme provides support to businesses through structured 12-week business-support programmes delivered by a relevant specialist mentor who provides guidance, advice and mentorship and supports the development of a business improvement plan, including the identification and development of employee skills through education and training. This support is specifically targeted at small firms in Ireland and is delivered by the Small Firms Association in partnership with Skillnet.

With the NTF forming a strong funding collection mechanism, the Irish support system at skill formation level is characterised by high density of support instrument (both financial and structural), demonstrating a strong level of complementarity, and delivered by a varied set of agencies; these work both at a sectoral (Skillnet) and at a regional level (ETB boards), allowing for an 'advanced' level of elaboration.

⁽⁴³⁾ For example, the programmes for the long-term unemployed (see #295 and #296; not displayed in Figure 9).

6.1.4. Summary

Table 6 summarises the ratings given for each of the three proposed dimensions (density, complementarity, targeted elaboration) characterising the support arrangement within analysed skill ecosystem (examples of Basque Country and Poland), or at the level of the skill formation system (example of Ireland).

Table 6. **Summary of ratings for three dimensions of the support arrangement**

	Spain – machinery sector/Basque Country – region	Poland – Warmia-Mazury region	Ireland – national level
Dimensions	skill ecosystem	skill ecosystem	skill formation system
Density	High	Low	High
Complementarity	Strong	Moderate	Strong
Targeted elaboration	Advanced	Advanced	Advanced

Source: Cedefop.

6.2. Observations on all analysed support arrangements (15 case studies)

Table 7 provides an overview of all 15 [case studies](#)/support arrangements, with an indication on the level of analysis (skill formation system versus skill ecosystem) and the particular topic studied. The examples of three support arrangements – in the Basque Country, Poland and Ireland – have been discussed in detail (Section 6.2). This section presents some main findings on the various support arrangements in the remaining 12 [case studies](#) included in this research.

Table 7. **Case studies overview (including topics selected for the in-depth analysis)**

Country groups	Selected case studies and in-depth topic	Level of analysis
Nordic (DK, FI, SE)	DK: The national AMU system topped up by sectoral approaches to support MSMEs	Skill formation system
	Studying the interplay of the levy-based AMU system with selected structural instruments	
	FI: Interplay between supply-side funding schemes for adult learning and structural support for MSMEs	Skill formation system
	Studying the importance of structural instruments following a 'targeted' or 'mediated' (e.g. innovation voucher) approaches directed at MSMEs.	

Country groups	Selected case studies and in-depth topic	Level of analysis
Western (IE, UK)	<p>IE: National Training Fund (NTF)</p> <p>Studying the ways the company levy (2020: 1% of wages) collected by the NTF is used for different purposes/activities, including support for MSMEs</p>	Skill formation system and skill ecosystem (retail sector)
	<p>UK: Union Learning Fund</p> <p>Studying the State-endowed Union Learning Fund as a form of support for collective bargaining on CVET and for outreach strategies (enterprises, including MSMEs are invited to become partners in educational outreach targeting their employees)</p>	Skill formation system
Central (AT, BE, DE, LU, NL, SI)	<p>AT: Support for adult learning (and learning in MSMEs) in the City of Vienna</p> <p>Impact of a local public organisation on increasing cooperation within the skill ecosystem</p>	Skill ecosystem
	<p>DE: Interplay of regional, sectoral and federal policies/instruments in Germany – construction sector in Hessen</p> <p>Impact of a sectoral and local social partner-led organisation on a skill ecosystem; their role in facilitating access (of MSMEs) to supporting policies/instruments</p>	Skill ecosystem
West Mediterranean countries (ES, FR, IT, PT)	<p>ES Cooperative metal sector – Basque Region</p> <p>Studying interplay of national regional and sectoral approaches and dense organisational network within one leading economic sector/region. Looking at one regional/sectoral/research organisation (IMH – Advanced Manufacturing Education Centre) playing a key role in coordinating the various support instruments (for MSMEs)</p>	Skill ecosystem
	<p>IT: Joint interprofessional funds for continuing education</p> <p>Exploring the role of Interprofessional Funds in supporting training in companies, in particular MSMEs</p>	Skill formation system
	<p>FR: The new arrangements within the Training fund</p> <p>Exploring the multiple roles of the Training fund and its related institutions in providing financial and structural support for training, in particular in MSMEs</p>	Skill formation system
South Mediterranean countries (CY, GR, MT)	<p>MT: Malta Enterprise</p> <p>Exploring the role of a single organisation (Malta Enterprise) in supporting training activities of MSMEs in a small country</p>	Skill formation system

Country groups	Selected case studies and in-depth topic	Level of analysis
Visegrad countries (CZ, HU, SK, PL)	PL: Regional strategy for disadvantaged Warmińsko-Mazurskie region, including support for MSMEs Reviewing implementation of strategic cooperation within a skill ecosystem in economically disadvantaged region allowing to safeguard MSME access to national support policies /instruments	Skill ecosystem
	HU Access for SMEs to EU funding Exploring the use of EU funding in supporting MSME training activities	Skill formation system
Baltic countries (EE, LT, LV)	LT: ESF/ERDF measures in Lithuania Exploring the use of EU funding in supporting MSME training activities	Skill formation system
South East European countries (BG, HR, RO)	BG: Access to funding for MSMEs – the evolution of the My competence framework Studying the development of a platform for integrating support available for MSME training activities	Skill formation system
	RO Lifelong learning centres Studying the attempted creation of local community centres as a basis for cooperation (with local enterprises, in particular micro- ones) in educational outreach strategies	Skill formation system

Source: Cedefop.

6.2.1. Support arrangement patterns in skill formation systems

The following review starts with the examples of the support arrangement within the skill formation systems in Denmark and Finland. Participation in lifelong learning is high in both countries. In Denmark, the level of company training activity is slightly above the EU-27 average; the MSME training gap is considerably large. In Finland, company training activity is slightly below the EU-27 average but the MSME training gap is considerably low.

The Danish support arrangement for MSMEs is characterised by the AMU system, providing financial support for companies and for individual employees. The AMU system consists of training centres providing supply-side funded training for free or at low fees to anyone: employees sent by their employers, employees participating at their own initiative, and the unemployed. Employers receive – from funds collected via a company levy – a wage subsidy during employee participation in training (#60). Social partners govern the system with strong sectoral differentiation, with some additional supporting demand-side funding instruments based on collective agreements in a complementary role (#268). Strong social partnership arrangements that give employer associations and labour unions a role in the governance of adult learning act as structural incentives and complement

the strong engagement of the State in supporting CVET. While the AMU system is an effective way to provide targeted financial support and guarantee the availability of high-quality training tailored to sectoral needs, there are ample examples of structural incentives following the targeted or the mediated approach as well, pointing to the complementarity of approaches. For example, the Danish PES has a network of consultants targeting MSMEs with the goal of securing a higher number of internship places (as a part of an outreach strategy) while at the same time strengthening the HRD processes of the firms supported (see the dedicated sections in the Danish case study for more details). Examples of the mediated approach include programmes provided by the business hubs, for example the national-level SME:Digital initiative (case vignette DK_01) or the growth counselling meetings of the Business Hub of Northern Jutland (case vignette DK_02). Instruments from the 'business development field' add substantially to the overall support arrangement. Overall, the Danish support arrangement (at skill formation system level) is characterised by a high density, a strong complementarity and an advanced elaboration, the last of these achieved by the strong sectoral components of the AMU system.

The Finish support arrangement, as part of the national skill formation system, builds on supply-side funding schemes, with education and training programmes accessible for everyone for free or at low cost, and demand-side financial support for individuals. There is little room for demand-side funding targeting MSME employers; a scheme providing wage subsidies for employees who were formerly unemployed is the only option. However, there are many structural instruments targeting companies, particularly MSMEs, with the PES and its local branches having a key role (see Box 9). Some of the instruments apply a targeted strategy and some follow a mediated approach, as for example, the 'innovation voucher' (discussed in the dedicated section of the Finish case study). Stable large-scale schemes are complemented by project-based initiatives, such as those based on ESF funding (e.g. the case vignettes FI_04, 05, 06, and 07). Instruments are generally established at the national level, though local branches of public institutions, the PES, anchor the programmes within the regions and tailor them to local needs. Sectoral approaches play no prominent role. To conclude, the Finish support arrangement is characterised by a high density. The absence of co-funding schemes for MSMEs is compensated mainly by supply-side funded provision and various structural instruments, so that complementarity is also strong. Targeted elaboration has a regional aspect but lacks a strong sectoral component ('partial').

Support arrangements as part of skill formation systems are seen also in the examples of two Western countries, Ireland and the UK. The UK is an example of a 'liberal' non-coordinated form of capitalism and Ireland is an example of a country departing from a 'liberal' to a more 'coordinated' pattern (Vossiek, 2018). In both countries, participation in lifelong learning is slightly above the EU-27 average. While company training activity is low in the UK, it is very high in Ireland. For both

countries, the most frequent pattern of the MSME training gap does not apply (see the case study for the UK for details).

Support arrangement in Ireland was discussed in detail in Section 6.2.2. In the UK, support arrangements for England, Scotland, Wales, and Northern Ireland show similarities (with basic frameworks applied across countries) but also differences (with frameworks implemented in variations). In the following, only England is discussed. Overall, financial support provided under a targeted approach is limited, with the funding based on the apprenticeship levy (introduced in 2016, 0.5% of the payroll for larger companies with wages above GBP 3 million) as the most important, given that companies make the use of the scheme for providing training to staff (Richmond, 2020). Beyond this, only selected sectoral initiatives are relevant (such as the training fund for the construction sector, #207). Supply-side funded provision of IVET/CVET is relevant mainly for the young and young adults, with limited opportunities or demand-side support for adults. The absence of financial support for enterprises is partly balanced by the presence of instruments providing structural support, following a mediated approach, offered by business development organisations. With the Union Learning Fund (ULF) founded in 1998, and its key framework, the training of Union Learning Representatives, the UK has a unique approach aiming at supporting collective bargaining on training related issues as well as including firms in outreach activities (for details, see the UK case study). England's support arrangement shows, at best, a medium level of density, with only a moderate level of complementarity and – on a skill formation system level – a rudimentary level of targeted elaboration; this reflects that the present sectoral approaches are concentrated in a small number of sectors, such as construction, the healthcare or the British film industry.

The context of the support arrangements at national (skill formation system) level in Italy and France is that both countries show the levels of participation in lifelong learning close to the EU-27 average. In France, companies provide more training than the EU-27 average, but a significant MSME training gap is observable. In Italy, companies show a slightly weaker training performance than in the EU-27, also with a stark MSME training gap. In each of the countries, a system of training funds plays a key role.

In France, the support arrangement for enterprises is filled mainly by financial incentives and structural instruments provided by sectoral training organisations (OPCOs), with funding stemming from a mix of sources (national, regional), with the mandatory contributions of companies being the most important: 0.55% of the payroll for enterprises with 1-10 employees; 1 % for companies with 11 and more employees. Beyond the obligation to pay a levy, companies are also mandated to develop a training plan and to offer training leave, so there are further legal requirements working towards increasing training provision by companies. Small and medium-sized organisations enjoy higher co-funding rates. Enterprises profit indirectly from the availability of the individual learning account (#259), as their

employees might select courses on their own that provide skills also valuable to the enterprise. MSMEs can profit from the availability of support for prolonged individual training of their employees (Transition Pro); with regions involved in the funding, there is also a regional component to be considered. The OPCOs, under the control of the sectoral social partners, provide supply-side funded courses and support schemes for individual employees. They also offer various structural instruments with the novel AFEST scheme (Box 3). Overall, the support arrangement can be characterised as showing a high density, a strong complementarity and an advanced level of targeted elaboration.

In Italy, from 2002 onwards, the National bipartite Interprofessional funds for continuous training, known as the Interprofessional funds, are expected to contribute a broad range of different instruments to the support arrangements relevant for companies, particularly MSMEs. The existing 19 (in 2021) Interprofessional funds provide financial and structural instruments, following both a targeted and a mediated approach. As the funds enjoy high levels of autonomy, arrangements differ between them and there is no overview available on the actual range and mix of instruments used across all 19. The Italian case study, therefore, provides insight into a fund attracting mainly micro, small and medium-sized enterprises as its members (FAPI). While all companies in Italy are required to contribute 0.3% of the payroll, only a quarter belong to a fund and MSMEs are strongly underrepresented among the beneficiaries. The support arrangement includes frequently changing regional schemes targeting companies and/or individuals, financed from ESF sources. Instruments offered by organisations from the business development policy field complement the picture. Regional disparities across Italy are known to be significant, so any representation of the support arrangement at national level needs to be interpreted with a knowledge of the stark differences between the north and the south. To summarise, across the regions the support arrangement is considered as showing a medium level of density; the complementarity of measures is, at best, moderate (again with large interregional differences); and the level of targeted elaboration is rated as advanced, given the key role of the Interprofessional funds and the regions in shaping the arrangements to meet local/sectoral needs.

Among the South Mediterranean countries, Malta demonstrates participation in adult learning close to the EU-27 average, and a CVET performance strongly above the average, across the four indicators selected for observation (see the case study). With only a small number (68 in 2019) of companies, the MSME training gap is outstandingly large.

Reflecting the country's size, all financial and structural instruments in Malta are implemented at national level. There is one major, rather generous, ESF co-funded financial instrument providing co-funding for training costs (from 50% to 70% depending on the company size) of training expenses, including a wage subsidy; it is managed by the Public Employment Service (#310). There are

various and often updated structural incentives supporting MSMEs, all implemented by Malta Enterprise, the key organisation of business development policies in the country. The largest structural instrument in terms of volume of funds involved is the Skills investment scheme (discussed in detail in the case study on Malta) with total funding of EUR 30 million; this helps finance the development and update of employee skills and knowledge. Others include the Aid for research and development projects, allowing companies to claim tax credits on costs incurred directly or indirectly in carrying out R&D projects; there are also smaller schemes (Investing in crafts, Family business support, Cooperate for growth, Certify) targeting particular sectors (artisans) or micro-enterprises. Malta Enterprise adjusts its schemes at short notice to identified future needs, with a focus on the key economic sectors relevant for industry in Malta. The support arrangement also includes supply-side funded provision for adult education programmes, with the contribution of non-profit organisations, mostly part financed through the ESF and the ERDF. Regarding demand-side support for individuals – relevant for MSMEs – there is one grant for individuals, also co-financed by the ESF, providing a contribution of 75% of costs related to training (up to EUR 1 000). The support arrangement is generally considered to be of high density, given that the available incentives are generous, its complementarity is rated as strong, given that the involved organisations coordinate (informally) their forms of support, and that targeted elaboration is advanced, given that the organisations involved respond to different sectoral needs, with regional needs being of secondary importance.

Among the Visegrad countries, the support arrangement for MSMEs in Hungary was selected as case study. Participation in adult learning in Hungary is close to the EU-27 average, but the training performance of Hungarian companies is much weaker than for the EU-27, particularly for small enterprises. Given their weak performance, the MSME training gap is large.

The support arrangement for companies at skill formation system level has practically no financial incentives for companies going beyond support for the unemployed. Companies used to pay a vocational training levy (until 2022), however, beyond IVET; this was used mainly for funding supply-side provision of training. Hungary has become well known for establishing a framework of community training centres (OECD, 2020), which are also an important resource for companies. There is a long tradition in the Hungarian adult learning sector that training available free of charge is largely supported by supply-side funding mechanisms. For incentives targeting individuals, only job-seekers and individuals belonging to vulnerable groups may benefit from co-funding for training. The situation is partly improved by structural incentives at national level, mainly co-financed with the help of EU funds, providing support to MSMEs to train their employees within their project architectures; more detail is given in the Hungarian case study. Organisations from the business development field and of the social partners (chambers of trade) provide structural instruments, following a targeted or

mediated approach. The support arrangement in Hungary is generally regarded as of medium density, with the absence of demand-side funding approaches as its key omission. Complementarity is moderate(ly) developed, and there is only rudimentary targeted elaboration, with the sectoral component underdeveloped.

In the Baltic States, the support arrangement for companies in Lithuania features only instruments delivered at a national level, with practically all instruments, financial and structural, relying on European Union funding. Though several instruments are offered (density: medium), with an emphasis on co-funding instruments following targeted support (e.g. the Competence voucher), there is a significant lack of structural instruments. Support measures are poorly coordinated across the boards of policy fields (education versus employment versus innovation) and complementarity is only fairly developed. No specific instruments are tailored to the particular needs of regions or, even more important, to sectoral needs (targeted elaboration is rudimentary). The case further points out that the overreliance on the EU funding, with its specific set of rules and its funding cycles, hampers the development of a sustainable and effective support arrangement.

Bulgaria and Romania, representing the group of Southeast European countries, conclude the review of support arrangements at a national (skill formation system) level. The two countries have the weakest economies among the EU-27 and are marked by low levels of participation in adult learning and a weak training performance of companies. In both cases, the training performance of small and medium-sized organisations is particularly weak, resulting in a considerably large MSME training gap.

The support arrangement for companies in Bulgaria includes national sources, specifically demand-side funded formal adult education and CVET programmes, and co-funding of CVET for the unemployed. At its core, financial support for company training activities relies on ESF funding, with changing frameworks across the ESF funding periods. Some structural instruments are in place (see, for example, BG_01), with organised employers having an active role in developing and sustaining them. All instruments are established at national level and under the control of national authorities; at local level, however, the establishment of network structures can be observed, allowing use of the national level resources within local initiatives. The establishment of a platform solution (My Competence, see Box 7 and the Bulgarian case study) grew into an important support structure in this regard. To sum up, the support arrangement can be rated as being of medium density at best, with a moderate level of complementarity. Despite observable local level adaptations, the degree of targeted elaboration is still considered to be only rudimentary.

The support arrangement relevant to MSMEs for the Romanian skill formation system relies mainly on project-based funding arrangements, using the ESF. Companies are invited to suggest training projects, largely co-funded (75% to 85%) with a total volume of up to EUR 960 000. Around EUR 500 million was made

available over the 2014-20 ESF funding period, but details of how effectively the resources were used for setting up training opportunities in MSMEs are broadly unknown. There are practically no further instruments in place beyond these project-based frameworks. Support for individual CVET is also absent except for the unemployed. Where it had been possible to establish examples of instruments providing structural support following a targeted or mediated approach, they seem generally scarce. The example selected as a topic for the case study refers to pilot exercises for centres for lifelong learning; this should be regarded as a form of outreach activity, where companies are invited to cooperate in local communities (see the Romanian case study). Provision of adult learning opportunities is poorly developed in Romania and receives little supply-side funding except in active labour market policy schemes. As a result, former traditions of liberal adult education are continued mainly by non-profit private organisations with little regular public support beyond EU-funded project-based activities. Overall, despite the considerable ESF input, the density of the support arrangement is considered as low, the complementarity only fairly developed and the level of targeted elaboration only rudimentary.

6.2.2. Support arrangement patterns as part of specific skill ecosystems

Four case studies have explored the support arrangement pertinent to a skill ecosystem. The examples of the support arrangements for MSMEs in the Basque machinery sector and in the Polish Warmia-Mazury region have been presented in Section 6.1.

Two further case studies (representing the group of Central European Member States) have been analysed: the support arrangement pertinent to the skill ecosystem of the construction sector in the German State (*Länder*) Hessen, and that of the City of Vienna, one of the nine Austrian states (*Bundesländer*).

The support arrangement for the construction sector in Hessen is underpinned by one organisation run by the social partners, the BiW BAU, which is also a key topic of the related case study. While the organisation does not necessarily manage its own instruments, it functions as a mediator between support instruments established at national, regional or sectoral levels and the organisations of the construction sector in Hessen. Financial support for adult-learning is mainly provided via various demand-side funding schemes targeted at individuals and employers, and provided at a national level (Support according to the Qualifications Opportunities Act #384), regional (Qualification cheque Hessen, available between 2015 and 2021) or sectoral. Measures from the national Public Employment Service are the most relevant in supply-side funding. There is also a broad bundle of structural incentives targeting companies and MSMEs, including at the national level but particularly at the sectoral and regional levels. These include the support of applied industrial and commercial research activities in SMEs in Hessen, or sectoral programmes of Hessen's construction sector that

adjust IVET and CVET to the digital transformation, provided by a social partner training institution. With sectoral and regional organisation in place, any framework providing support for training following a targeted or mediated approach can be presented to the specific audience of companies in ways which make it much more likely that companies find how to dip into the support available than they would in the absence of a mediating organisation. In consequence, the support arrangement is considered as being of moderate density, though this mainly reflects the limited availability of co-funding for companies and individuals as a feature of the German arrangement in general. It is considered as having strong complementarity and an advanced level of targeted elaboration.

Support for training in companies in Vienna is illustrated in a specific case study. Support arrangements for MSMEs derive mainly from financial and structural instruments available at national level but instruments might not always be accessible to companies in Vienna, given the strong regional governance structures of the Austrian PES. Nevertheless, the financial contributions to the costs of training for low-qualified and older employees (forming the most significant public contribution with the demand-side funding policies) are accessible (#5). Vienna-based agencies contribute to the available financial and structural support, though schemes targeting companies are subject to frequent change and sometimes short-lived. MSMEs in Vienna might profit more from the overall support available for CVET than from measures supporting training activity directly. In Vienna, as in the country at large, the pattern is that public support for adult learning is mainly provided to individuals, with emphasis on the unemployed, balanced by regional schemes (funded by the Bundesländer) targeting individuals. Support for training in companies, particularly MSMEs, is not strongly developed, with the exception of policies belonging to the core of the active labour market policies. Vienna has created the Vienna Employment Promotion Fund for providing support for CVET. The organisation mainly supports employees living in Vienna and, to a lesser extent, the unemployed (respecting the PES legal competence for them), but it also has schemes for companies (with forms of outplacement and emplacement specific to the Austrian active labour market policy) and plays a key role in the lifelong learning policy agenda, thereby contributing to the interest aggregation. Despite the lower number of financial incentives, the local support arrangement in Vienna can be characterised as being of high density, and a moderate level of complementarity. Targeted elaboration is at least partially achieved, with coordination between employment policy and business development policy regarded as the key source of further improvement.

6.2.3. Summary across case studies

Table 8 summarises the ratings assigned to the key features of the support arrangements analysed in the 15 [case studies](#).

At skill formation system level, arrangements have been rated high across all three framework dimensions (density, complementarity, targeted elaboration) in Denmark, Ireland, France and Malta. The arrangement for Finland has also been rated high, with only one medium level evaluation for targeted elaboration. At skill ecosystem level, the examples for the Basque machinery sector and for the construction sector in Hessen have been rated high across all three categories.

Examples of support arrangements with a strong rating in one or two dimensions and weaker ratings for the remaining dimensions include Italy (skill formation system level) and Austria and Poland (skill ecosystem level).

Examples of support arrangements with mainly weak ratings include Bulgaria, Lithuania, Hungary and the UK (all observed at skill formation system level). The arrangement in the Romanian skill formation system is considered to be the weakest, with the lowest possible rating in all three observed dimensions.

Table 8. **Summary of support arrangement features across the 15 case studies**

Group of countries	Country	Level of analysis	Density	Comple- mentarity	Targeted elaboration
Nordic (DK, FI, SE)	DK	Skill formation system	high	strong	advanced
	FI	Skill formation system	high	strong	partial
Western (IE, UK)	IE	Skill formation system	high	strong	advanced
	UK	Skill formation system	medium	moderate	rudimentary
Central (AT, BE, DE, LU, NL, SI)	AT	Skill ecosystem	high	moderate	partial
	DE	Skill ecosystem	high	strong	advanced
West Mediterranean countries (ES, FR, IT, PT)	ES	Skill ecosystem	high	strong	advanced
	IT	Skill formation system; Skill ecosystem	medium	moderate	advanced
	FR	Skill Formation system	high	strong	advanced
South Mediterranean countries (CY, GR, MT)	MT	Skill formation system	high	strong	advanced
Visegrad countries (CZ, HU, SK, PL)	PL	Skill ecosystem	low	moderate	advanced
	HU	Skill formation system	medium	moderate	rudimentary
Baltic countries (EE, LT, LV)	LT	Skill formation system	medium	fairly developed	rudimentary

Group of countries	Country	Level of analysis	Density	Comple-mentarity	Targeted elaboration
South East European countries (BG, HR, RO)	BG	Skill formation system	medium	moderate	rudimentary
	RO	Skill formation system	low	fairly developed	rudimentary

Source: Cedefop.

6.3. Key lessons

Key lessons from the review of the 15 support arrangements include the following.

- (a) Various policy instruments (being a part of the support arrangement) can represent broad packages, combining different forms of financial and structural support. When developing further the support arrangement, it is important to take into consideration the nature and the complexity of the policy instruments.
- (b) To have impact, support arrangements require that at least some instruments are underpinned by substantial funding, preferably from different policy fields (e.g. business development and employment). Instruments underpinned by generous funding may be complemented, by smaller, targeted instruments.
- (c) European Union funds play a role in many support arrangements. However, total dependence on the EU funding cycle may work as an impediment to long-term structural development.
- (d) One or a smaller number of organisations should take over leadership for the coordination of instruments forming support arrangements, working towards higher levels of complementarity and targeted elaboration. At skill ecosystem level, one player assuming a coordinating role can greatly facilitate the implementation of new instruments/elements, as shown in the case studies on the Basque metal sector or the construction sector in Hessen.
- (e) Social partners can play an important role in supporting the further development and better integration/coordination of the support arrangements. They often have a role in the governance of a range of instruments forming support arrangements and are often well positioned and motivated to adopt a holistic role across subfields of policy-making. By including representatives of business and labour, potentially diverging or conflicting interests can be considered/addressed when working towards better integration of support arrangements.
- (f) Efforts towards better policy integration/coordination seem particularly promising where the potential gulf between activities rooted in adult learning and/or employment policy and those rooted within the business

development field are addressed, offering room for mutual learning and adjustment.

While the usefulness of the analytical unit support arrangement has been established in this chapter, further refinement of the operationalisation and measurement of the concept will be required, beyond the scope of the present study. Using a refined measurement of support arrangement features, econometric studies on the varied effectiveness of arrangements and the effects of their modifications over time will be possible. This will close an important gap in the literature on the evaluation of policy instruments aiming at increasing training provision by companies, particularly MSMEs.

CHAPTER 7.

Conclusions and suggestions for policy-making and further research

7.1. Conclusions

For more than two decades, identifying effective levers for increasing MSME training provision has been a top priority in policy-making by the EU as well as international organisations such as the OECD and the ILO. In the literature, a range of barriers to training in enterprises, which are more prevalent in MSMEs than in large enterprises, are discussed (Cardon and Stevens, 2004; Cardon and Valentin, 2017). Reviews of policies (EIM, 2005a; Stone and Braidford, 2008) have identified various approaches to overcoming barriers to training provision in the MSME sector, with particular attention paid to public co-funding and cost-sharing arrangements.

7.1.1. Taxonomy of policy instruments supporting MSMEs to provide training

This study looks at different types of financing instruments targeting enterprises – such as training funds, grants, tax incentives and payback clauses – in EU countries and the UK. It reviews instruments going beyond financial support and addressed as ‘structural support’: this includes consultancy/counselling services, novel forms of training provision, support for knowledge creation, awareness raising, support for networking, and interest aggregation. These instruments providing financial and structural support, and explicitly aiming at helping enterprises to overcome barriers to training to meet their current training needs, are summarised as ‘targeted support’.

The study goes beyond the established frameworks and proposes a new perspective. It suggests taking into consideration the differences in skill utilisation when explaining differences in the training provision between MSMEs and their larger counterparts. The study emphasises that the range and quantities of skills used by an organisation, as well as their distribution across an organisation’s workplaces, determine the opportunities for making good use of CVET. It therefore examines different forms of so-called ‘mediated support’ which aims at promoting various forms of innovation in MSMEs, increasing the skill utilisation at MSMEs workplaces; and in consequence, increasing the use of CVET to expand their workers’ set of skills. MSMEs may face barriers to innovation, considered similar to barriers to training. Policy instruments relevant to mediated strategies can be

analogous to those applicable to targeted support and are summarised in this study under the headings 'financing instruments' and 'structural instruments'.

As a possible way to narrow the MSME training gap, the study looks at policy instruments aiming at gaining MSME management support for educational outreach activities targeting MSME employees and/or taking place at their premises. Such policy approaches respond to the fact that employees of MSMEs are not only less frequently invited to participate in employer-provided training, but they also participate less frequently in individually arranged CVET activities, even when supply-side funded opportunities are available. The MSME workforce has more hard-to-reach groups with a lower likelihood of undertaking CVET compared to the workforce of large organisations. While the target is mainly individuals/MSME employees, organisations benefit by participating in educational outreach and improving their workers' skills/performance. In addition, MSME HRD and training activities can be improved based on their involvement in outreach projects.

7.1.2. Implementation of policy instruments supporting MSMEs to provide training across the EU and UK

The review of the policies supporting training in enterprises/MSMEs shows that all EU Member States and the UK have some instruments providing financial contributions to enterprise training costs. Practically all public co-funding (grants and tax incentives) and other cost sharing schemes (training funds and payback clauses) covered in the study are accessible for MSMEs, and about 40% of instruments give preferential treatment to MSMEs. A thorough review of these instruments is provided in the [Cedefop Database on financing adult learning](#). Financing instruments are generally well established and have received the attention of policy-making for a long time. However, instruments currently understood as 'financing instruments' may combine financial and structural support. This means that the analytical distinction between financing and structural instruments is often blurred.

The review also illustrates that policy instruments providing structural support following 'targeted strategy' are multifaceted and widespread across the countries under study. Many examples have been collected regarding organisational counselling/consultancy services, tailored training provision and awareness raising approaches. Some examples had been identified of other types of structural instruments (see supporting document [Case vignettes](#)). While in some countries (such as Czechia, Croatia, Slovakia) the number of existing relevant instruments appears limited, in other countries it seems likely that there are more examples of

structural support that those reported ⁽⁴⁴⁾. Public investment under structural instruments can be considerable and needs to be taken into consideration when reviewing the support for MSMEs available in any country. Those such as Finland, which have only limited financial incentives targeting enterprises/MSMEs, may run a considerably large framework of targeted structural support. It is important to observe all forms of support provided to MSMEs together to achieve a (more) complete picture.

The fieldwork findings also suggest that financing and structural instruments following a mediated strategy – where training is explicitly embedded in the policy package – are widely established across all EU Member States and the UK. The study methodology does not allow to state whether some Member States do not have policies following a mediated approach or to make detailed statements on the frequency of instruments applied. However, it is safe to say that providing co-funding for innovation, offering organisational counselling/consulting services for the innovation activity, and providing innovation-related CVET opportunities are the most frequently used approaches. For further details, see [Case vignettes](#). Practically all instruments grouped under mediated support exploit more than one mechanism to reach their objective and would therefore be addressed best as bundles of instruments, forming a particular profile.

The study collected only a small number of examples of approaches where enterprises are invited to support educational outreach (see [Case vignettes](#)). However, this should not be taken as a sign that cooperation in education outreach is not prevalent or has low importance. It is assumed that any future study exclusively dedicated to the role of MSMEs in educational outreach activities, which has also a strong focus on CVET provider strategies to cooperate with MSMEs in outreach activities, would harvest more examples. Especially for the MSME sector, the line between policies targeting the enterprise and those aiming at reaching the individual with CVET is considerably blurred. Activities where enterprises are invited to facilitate educational outreach targeting their employees and forms of structural support trying to foster MSME training provision often partly overlap in practice. For the management in many MSMEs, supply-side funded CVET opportunities targeting their employees often provide an important entry point for further training activities, with the individuals provided such training becoming advocates for further CVET activities, whether paid by the enterprise or

⁽⁴⁴⁾ Subject to the available resources for the fieldwork, the study could collect only between 4 and 15 examples of instruments per country (depending on the size of the country) relevant for different types of support provided to enterprise/MSME (structural instruments under targeted support strategy, financial and structural instruments under mediated support strategy, approaches for winning MSMEs to cooperate in educational outreach).

third parties. The role of supply-side funded CVET, as well as demand-side schemes targeting individuals, should therefore also be observed when discussing/analysing the support for MSME training.

7.1.3. Effectiveness of policy instruments supporting MSMEs to provide training

The study advocates looking at the availability and interplay of different policy instruments supporting MSMEs to provide training, as their effectiveness likely depends on their complementarity. The existence of sets of relevant policy instruments (and their interaction) may help to explain some observed differences in the training behaviour of organisations, including MSMEs. The study proposes the concept of ‘support arrangement’ which refers to all forms of support accessible to a particular enterprise (notably MSME) belonging to an economic sector and located in a particular geographic area. The relevant forms of support include financing and structural instruments supporting CVET in enterprises, following a targeted or a mediated strategy. Also considered are the instruments seeking enterprise support for educational outreach and those supporting CVET where enterprises (notably MSMEs) are only indirect beneficiaries (e.g. supply-side funded provision of CVET opportunities and demand-side part-funding schemes targeting individual (MSME) employees). Support arrangements may include instruments offered at national level (as part of a skill formation system) and instruments specific to a particular economic sector and/or a particular region (as elements of an ecosystem). Support arrangements are considered to be more effective where they provide more (or more extensive) instruments, achieve a well-adjusted balance between instruments applying different approaches (targeted and mediated support, cooperating in educational outreach) and types of instruments (financing and structural), and allow for adjustment to the particular circumstances and needs of a particular sector or region. It is proposed, therefore, to observe the ‘density’, the ‘complementarity’ and the ‘targeted elaboration’ of support arrangements.

Even though the report does not analyse this issue, it should be fully acknowledged that the effectiveness of a support arrangement can be studied only against the backdrop of all the other features of skill formation systems or skill eco systems (such as the landscape of CVET providers or the patterns of work organisation and the consequent role of standardised qualifications). For future research on the effectiveness of policies supporting MSME training, and in developing more comprehensive approaches to policy-making, it is recommended to reconstruct the ‘support arrangements’ and study their contributions to changes

in MSME training provision instead of isolated evaluation of single policy instruments.

Examples of support arrangements in skill ecosystems and skill formation systems

Three examples of ‘support arrangements’ are presented in more detail in this report. As demonstrated for the skill ecosystem and its relevant support arrangement of the machine-tool sector in the Basque region, a regional skill formation system can provide much more support (for MSME training) than the national skill formation system. Against the backdrop of the regionally highly developed industrial sector, with important research and development centres providing support, the ‘support arrangement’ is characterised by a high ‘density’ (with numerous financial and structural instruments in place), a strong ‘complementarity’ (with national level instruments expanded by regional and sectoral instruments, which address the specific local needs) and a strongly developed ‘targeted elaboration’ (with the organisations of the Basque machine tool sector playing an active role in the aggregation and articulation of the needs of their members, being mainly small and medium sized enterprises).

As shown for one disadvantaged region in Poland, support arrangements (for MSME training) can be developed considerably despite unfavourable overall conditions. The Warmia-Mazury region in the northeast of Poland is determined by its strong leaning towards agriculture and its overall economically disadvantaged position. Based on regional cooperation, steps have been taken to improve the regional ‘support arrangement’, which is – reflecting the situation at national level – characterised by only a low number of instruments (low density). However, a medium level of complementarity has been achieved (via interplay of national and regional instruments) as well as an advanced level of targeted elaboration (as the regional implementation of key national approaches has been tailored to the regional needs as expressed by a broad set of stakeholders cooperating with each other).

Ireland illustrates how the vast resources of the national training fund (based on a company levy) can be used for different purposes/activities, including support for MSME training. Regarding the latter, the Skillnet approach and the broad range of offers provided by the Education and Training Boards (ETB) play a key role. Moreover, the extensive support for higher education is organised partly in ways tailored to the needs of the enterprises. The Irish support arrangement is characterised by high density and a strong level of complementarity of financial and structural instruments. With different agencies in charge of implementing policy instruments, operating both at sectoral (as Skillnet) and at regional level (as

the ETB boards), the arrangement is characterised by advanced level of targeted elaboration.

With regards to all 15 [case studies](#) conducted (including three examples discussed above) and based on the (non-comprehensive) evidence collected within the project, support arrangements at skill formation system level have been rated as high across all three categories (density, complementarity, targeted elaboration) in Denmark, Ireland, France and Malta, with the arrangement for Finland rated as almost as good as the former. At skill ecosystem level, the examples for the Basque machinery sector and for the construction sector in Hessen have been rated high across all three categories. Examples of support arrangements with a strong rating in one or two dimensions, and weaker ratings for the remaining dimensions, include the examples of Italy (skill formation system level) and Austria and Poland (skill eco-system level). Examples of support arrangements with mainly weak ratings include Bulgaria, Lithuania, Hungary and the UK (all observed at skill formation system level). The support arrangement in place within the Romanian skill formation system is considered the weakest and received the lowest ratings. Details are available in the corresponding [case studies](#).

Lessons learned include that support arrangements depend on the complementarity of instruments, but the availability of at least some larger, substantially funded policy instruments remains crucial. It seems desirable that one organisation (or a smaller number of organisations) assumes a coordinating role within the support arrangement, especially at a skill ecosystem (i.e. sectoral or regional) level. Working towards better coordinating/integrating policies rooted in the adult learning and/or employment policy field with those rooted in the business development field is expected to be particularly promising. Representatives of business and labour are often well-positioned and should be encouraged to contribute to further integration of the policies making up the support arrangement.

7.2. [Policy suggestions](#)

Helping MSMEs to improve their training provision requires a well-coordinated or an integrated set of policies and instruments, offering targeted and mediated support as well as inviting MSMEs to cooperate in educational outreach. This calls for broad stakeholder cooperation – including policy-makers and social partners – and holistic policy approaches linking different policy domains: lifelong learning, employment, business development and innovation. Much can be gained from better coordination/integration of the support services relevant for MSMEs (those aimed at ‘developing organisations’ as well as those oriented more towards

supporting individuals/MSMEs employees) provided by the organisations established in various policy fields. There is a need to combine financing and structural instruments to tackle different root causes of MSME low training provision.

7.2.1. Policy suggestions on targeted support (financial and structural) for training in MSMEs

7.2.1.1. Further strengthen and systematise instruments providing targeted financial support

Training funds based on a levy and their grants, grants provided from the resources collected through general taxation or social security contributions, (can) play a systemic role in developing CVET in enterprises, in MSMEs in particular. However, more attention should be paid to how financial support provided to enterprises by policies currently understood as ‘financing instruments’ is already combined with other policies. For example, training funds are often multifaceted organisations providing not only targeted financial support (grants) but also a range of structural instruments, such as counselling/consultancy services, the development of tailored training or frameworks using a mediated strategy for supporting training. It is important to learn from the existing experiences of combined instruments for future developments, where packages of policies are applied to mitigate the ‘MSME training gap’.

7.2.1.2. Offer instruments going beyond the provision of financial support

To increase MSME training activities, policy-makers should pay equal attention to structural instruments such as counselling/consultancy services, creating novel and targeted forms of training provision, supporting pilot projects that can offer novel solutions to challenges, investing in awareness-raising activities, supporting cooperation between MSMEs and between MSMEs and larger companies as well as educational and R&D institutions, and improving employer/MSME interest aggregation and training-related collective bargaining.

7.2.1.3. Aim at a comprehensive mix of instruments within the overall support arrangements to address all barriers to training in MSMEs

Not one but a combination of barriers typically impedes the training performance of organisations, and particularly MSMEs. Therefore, the effectiveness of any instrument to mitigate one training barrier (e.g. shortage of tailored training provision) depends on other measures that help overcome other relevant barriers. A balanced set of instruments is required, that simultaneously address more than

one barrier within a framework (such as combining instruments to provide counselling/consultancy services, funding, and a tailored CVET offer). Alternatively, special attention should be paid to the interplay of different instruments available to MSMEs (within the overall support arrangement) in different policy fields (lifelong learning, employment, business development).

7.2.1.4. *Make good use of existing intermediary organisations providing services to MSMEs for implementing new instruments*

Attracting the attention and trust of MSME management and employees is a complex and cumbersome activity. Organisations such as regional/sectoral bodies/development agencies with close ties to MSMEs of one sector or region are in a good position to add targeted support initiatives. Those trying to reach out to MSMEs and their employees (e.g. in lifelong learning), should be encouraged to team up with organisations with access to a network of MSMEs that may promote new activities while providing well-established services. New initiatives (e.g. national or ESF-funded) may use calls for including already established intermediary organisations (including social partner organisations) to provide the relevant services.

7.2.1.5. *Give particular attention to instruments aiming at ensuring that CVET provision is tailored to the needs of MSMEs and their employees*

It is important to foster and organise training targeted to the needs of MSMEs, as market mechanisms frequently do not deliver the desired level of CVET provision.

Approaches include:

- (a) developing organisations to provide training responding to needs expressed by MSMEs (such as various training funds in France or Italy or instruments as 'joint purchase training' in Finland);
- (b) implementing new and targeted training measures;
- (c) funding pilot training activities to develop novel approaches;
- (d) supporting networks of MSMEs, where aggregated demand attracts training providers to develop tailored offers.

Spill-over effects of the supported activities are likely to occur and to include strengthening the market-based provision of training (with a broader variety of CVET tailored to MSME needs) and trainers/experts developing specialised knowledge on how best to address the needs of MSMEs. The acquired know-how and approaches developed by trainers/experts can be used later to provide training tailored to MSMEs needs, even without public support. Activities funded, in part or wholly, by the public should be mandated to demonstrate how their outcomes might be diffused or sustained after the project's end.

7.2.1.6. *Create approaches for supporting workplace-based forms of CVET*

The preferred form of CVET/skill formation within MSMEs is often training within or close to the workplace (providing general skills in the context of a given workplace). Smaller organisations typically do not have the capacity for tailored learning projects provided by external providers. Co-funding arrangements often only help cover the costs of external training courses, so MSMEs cannot apply for financial support for projects close to the workplace. Therefore, novel approaches should, on the one hand, have training providers offer new forms of workplace-related CVET, and, on the other hand, make these forms eligible for co-funding similar to class-room offers. The French AFEST (Box 3) provides an example of the successful implementation of such an approach. Special care is recommended in designing procedures capable of limiting any potential misuse of schemes providing funds for learning in/near the workplace.

7.2.2. Policy suggestions on mediated support (financial and structural) for training in MSMEs

7.2.2.1. *Mainstream policies expanding the skill use, and therefore strategies, of mediated support as a vital component of approaches fostering training in companies*

The adult learning and skills policy field still has not sufficiently recognised that organisational and individual engagement with CVET depends in a vital way on actual skill use in the workplace. Supporting organisational development and innovation activities needs to be seen as a fundamental component in any strategy to increase CVET in MSMEs. Many instruments that support innovation activities also explicitly include support for related training activities. However, only a few policies emphasise the positive impact of innovation activities on the long-term use of training in MSMEs achieved by the related the expansion of the use of skills.

7.2.2.2. *Strengthen frameworks to support the creation of learning-conducive workplaces*

Improving job design to make work more learning-conducive is a key lever for increasing skill use in the workplace and therefore increasing both the organisations' opportunities for using CVET effectively and the motivation of employees to undertake it. Supporting changes towards higher proportions of 'decent jobs' with good opportunities for informal learning is still high on the agenda of transnational organisations (the ILO in particular), the European Social Partners and the European Commission (Pot et al., 2021). However, contrary to expectation, the field research identified hardly any instrument directly aimed at increasing learning-conducive work organisation. Renewing policy to provide

incentives for designing jobs to unleash more workplace learning should be a priority. The interaction between policies working towards an increase in ‘decent jobs’ and policies aiming at the improvement of skill use, (informal) workplace learning and CVET should be revitalised and further strengthened ⁽⁴⁵⁾.

7.2.2.3. Offer more policy packages combining support for innovation and training

MSME managers frequently pay more attention to instruments supporting various forms of innovation relevant for MSME needs, because they offer solutions for concrete challenges ranking high on the business agenda (e.g. ‘market expansion’, ‘waste reduction’, ‘technological upgrading’). These problem-solving innovation activities promote the use of training activities in ‘package deals’. This particularly happens where the planned innovation projects already foresee CVET.

7.2.3. Policy suggestions on cooperating in educational outreach activities with MSMEs

7.2.3.1. Promote and fund educational outreach projects targeting MSMEs

While the importance of educational outreach projects in the MSME sector is well accepted, little is known about the current state of play within the field. Overall, educational outreach frameworks targeting MSMEs seem to be rare across EU Member States beyond support for the former long-term unemployed and some frameworks supporting apprenticeships for adults. Based on an initial mapping, the availability of related outreach project frameworks should be systematically extended. While reaching out to MSME employees is the main aim, MSMEs as organisations also benefit: they may not only receive some contributions to the costs related to outreach projects, but also receive further support for improving their training provision (combining cooperation in outreach with targeted support measures).

7.2.3.2. Provide incentives to CVET providers to include MSMEs in educational outreach projects

CVET providers are assumed to be more likely to approach large organisations than smaller ones as partners in educational outreach projects, because cooperating with a few large organisations instead of many MSMEs requires lower

⁽⁴⁵⁾ One previously established example for such a programme, show-cased in the OECD Renewed skills strategy (OECD, 2019b) would be the Finnish Workplace development programme (1996-2010), see also Alasoini (2004). For a recent review of EU policies related, see Pot (2021).

efforts to achieve the targeted level of cooperation (number of participants in courses/programmes (e.g. adult basic education), number of work placements). To counterbalance this pattern, new forms of instruments should be developed to help integrate small organisations in related frameworks (e.g. additional funds for coordination and including MSMEs in projects) or which offer incentives to CVET providers for engaging with MSMEs.

7.3. Further research

The current study has broken new ground regarding what can be done to mitigate the low level of CVET provision by MSMEs. It has achieved this by

- (a) developing a taxonomy allowing to classify instruments that help MSMEs to increase their training provision;
- (b) collecting and analysing examples for a broad range of the respective instruments established within the EU-27 Member States and the UK;
- (c) attempting to display the interplay of instruments within the 'support arrangements', a vital element within national skill formation system and within regional and/or sectoral skill ecosystems.

As usual with research projects entering uncharted territory, however, the current study also reveals gaps in available evidence and unsolved conceptual challenges. The study might be understood best as a starting point, having demonstrated what can be gained from acknowledging the broad range of instruments supporting training in MSMEs beyond the provision of financial support for existing training needs. Further research is required regarding many questions, including the following:

(a) Refinement and extension of the analytical framework.

The current framework would benefit from further refinement and extension regarding barriers to training, and also to innovation, prevalent in MSMEs. With regards to 'mediated support', this study only considered approaches using support for innovation (understood as a broad conception), though support within the field of business development and regional development policies might also offer further approaches relevant for mediated support for training. The 'cooperating in educational outreach' approach could not be analysed satisfactorily within this project, because too few examples had been collected using the methodology applied. The role of supply-side funded CVET should be better reflected within the framework and the framework of skill ecosystems, understood as the wider environment underpinning a given 'support arrangement', awaits further elaboration and operationalisation.

(b) Further develop and apply strategies for systematic mapping of instruments relevant for one region and/or sector or national skill formation systems.

Future projects should go beyond collecting examples of relevant instruments and should aim at systematically mapping all instruments accessible to companies working in a particular region and/or (sub-)sector or belonging to a particular cluster or value chain. Mapping exercises should start the reconstruction of the support arrangement as present with several well-defined skill ecosystems and not with national skill formation systems, which would have many approaches to be mapped. Mapping of instruments should also include supply-side funded CVET opportunities; these play an important and often increasing role in many skill ecosystems and skill formation systems.

(c) Systematically collecting data on MSME joint use of the variety of support instruments.

Currently, only cursory observations made by administrators of schemes are available regarding the question whether MSMEs use a larger number of instruments offered to them within the relevant support arrangement. Little is known about the conditions under which MSMEs will effectively use the whole range of available support instruments and it is unclear whether such systematic use is even possible, given the sometime limited resources made available for the various instruments of the support arrangements. Collection of evidence might start with qualitative case studies on a smaller selection of MSMEs within a well-mapped skill ecosystem, with the intention to reconstruct the use of instrument in recent years and an attempt to trace the impact of the instruments used at organisational level. A representative sample of MSMEs in skill ecosystem could be targeted to establish reliable estimates on the joint use of various instruments offered within the support arrangement.

(d) Developing and applying an approach for measuring the contributions of the support arrangement to changing MSME training performance. Little is known about how various instruments forming the support arrangement do or do not complement each other and – in combination – induce meaningful change. Little quantitative evidence is available on how different instruments in support arrangements, help expand MSME employer-provided training. Extending the availability of cross-sectional data sources on CVET in MSMEs would be beneficial, along with data collection capable of providing estimates for selected skill ecosystems. To estimate the contribution of different support arrangements, cross-sectoral surveys on CVET should be complemented by longitudinal enterprise services, following up organisational training activities – together with other indicators on organisational features – over longer stretches of time (e.g. 5

years). As a starting point, attempts might be made to use existing enterprise panels to estimate the effects of 'support arrangements' over time, both on the level of training activity and of reported forms of skill use.

(e) Developing a realistic benchmark approach for capturing MSME training performance across countries.

Little is currently known about what general level of MSME training provision could reasonably be achieved at country level, when barriers to training are mitigated and the skill use is driven up to a high level. This lack of information hampers any use of benchmarks in policy-making. From research and from private benchmarking initiatives, MSMEs with a strong training provision clearly provide many more hours of training to a much larger selection of their employees than suggested by the statistical average, the latter strongly influenced by the large numbers of enterprises with only a negligible level of training activities (Hefler and Markowitsch, 2008; 2009). MSMEs performing strongly typically include more than half of their employees in training each year and average duration of training exceeds 5 days per employee. Even in countries where MSMEs perform well in training, according to the available survey-based measures, indicators represent not how far an enterprise can get but the considerable leeway for improvement. To build a strong argument in favour of training, alternative data sources are required, which are more capable of mirroring the training performance of enterprises with a well-developed, 'expansive' approach.

(f) Better exploring the role of industrial relations systems for the understanding of training in MSMEs.

While the importance of industrial relations systems for CVET is broadly acknowledged, more research is required concerning how patterns of industrial relations effectively shape training in MSMEs: forms of interest aggregation by businesses; arrangements for collective bargaining and its provisions with regard to training rights and benefits available from training; forms of worker interest representation on company level. This should take into consideration both the effects of arrangements on MSME management decisions on CVET and employee motivation to participate. Emphasis should be placed on the effects of recent policy changes or agreements on developments in CVET provision.

Acronyms

ADDIMAT	Additive Manufacturing and 3D Printing Association (Spain)
AES	Adult education survey
AFEST	<i>Action de formation en situation de travail</i> ; Work-situation based training actions
AFM	Machine Tool Advanced Manufacturing Technologies Association (Spain)
AFMEC	Machining and Metal-Mechanical Transformation Association (Spain)
CVET	continuing vocational education and training
CVT	continuing vocational training
ESKUIN	Manual Tools, Hardware and Industrial Supply Association (Spain)
ESF	European Social Fund
EU	European Union
FUNDAE	State Foundation for Training in Employment (Spain)
GDP	gross domestic product
HE	higher education
HRD	human resource development
HRM	human resource management
IMH	Advanced Manufacturing Education Centre (Spain, Basque country)
LFS	Labour force survey
LLL	lifelong learning
MSMEs	micro, small and medium-sized enterprises
NFBS	non-financial business sector
NTF	National Training Fund
OPCO	Les opérateurs de compétences (France)
PES	public employment service
ROI	return on investment
R&D	research and development
R&D&I	research and development and innovation
SMEs	small and medium-sized enterprises
SOLAS	Further Education and Skills Service (State agency in Ireland)
SPRI	Basque Business Development Agency
UPTEC	Technology-based Company Association (Spain)
VET	vocational education and training

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Annex I. Supporting overviews

Table 9. Evaluation studies on financial incentives identified during the project

ID	MS	Type	Name of the incentive – English	Name of the incentive – Local language	Title of the evaluation / monitoring report
282	CY	4	Scheme for the employment and training of tertiary education graduates	Σχέδιο Στελέχωσης Επιχειρήσεων με Απόφοιτους Τριτοβάθμιας Εκπαίδευσης	HRDA Annual report 2018
283	CY	5	Initial training programmes / Training of the unemployed	Προγράμματα Αρχικής Κατάρτισης / Κατάρτιση Ανέργων	HRDA Annual report 2018
285	EL	5	Entry voucher to the labour market (funded by the NTF)	Επιταγή Εισόδου στην Αγορά Εργασίας για Ανέργους νέους ηλικίας έως 29 ετών	Evaluation of the Entry voucher to the labour market, 2014
287	PT	4	COMPETE 2020 – Qualification and internationalization of SMEs	COMPETE 2020 – Qualificação e Internacionalização de PME	Annual implementation report 2017
288	PT	4	COMPETE 2020 – Training and capacity building of entrepreneurs, managers and workers of companies	COMPETE 2020 – Formação e Capacitação de Empresários, Gestores e Trabalhadores das Empresas	Annual implementation report 2017
291	PT	5	PO IES – Training voucher	PO IES – Cheque Formação	Physical and financial execution report, from January 2015 to October 2019
293	IT	5	Training funds	Training funds	The last report available refers to programming period 2007-13. Intermediate reports may be available at regional level (there is no compulsory publication)

ID	MS	Type	Name of the incentive – English	Name of the incentive – Local language	Title of the evaluation / monitoring report
294	IE	5	Springboard+	Springboard+	Higher Education Authority (2016): Developing talent, changing lives: an evaluation of Springboard+, 2011-16
295	IE	5	Back to education allowance (BTEA)	Back to education allowance (BTEA)	Kelly, Elish, McGuinness, Seamus, Walsh, John R. (2015), An evaluation of the Back to education allowance
296	IE	5	Vocational training opportunities scheme	Vocational training opportunities scheme	Sweeney, Dr John (2013), A strategic review of further education and training and the unemployed
302	SK	5	Supporting the re-qualification of jobseekers – REPAS	Podpora rekvalifikácie uchádzačov o zamestnanie – REPAS	Ex-post evaluation, Labour market in Slovakia 2019+
303	SK	5	KOMPAS (KOMPAS+)	KOMPAS (KOMPAS+)	Monitoring report 2018
316	HR	4	Programme Lifelong education for crafts	Program Cjeloživotno obrazovanje za obrtništvo	Active employment policy measures under the Croatian employment jurisdictions: Conditions and ways of using means to implement measures in 2020
317	HR	5	Education for unemployed: vocational training, retraining and further training programme (specialisation)	Obrazovanje nezaposlenih: strucno osposobljavanje, prekvalifikacija i usavrsavanje	Active employment policy measures under the Croatian employment jurisdictions: Conditions and ways of using means to implement measures in 2020
318	HR	5	Education and training of employed persons	Obrazovanje zaposlenih	Active Employment Policy Measures under the Croatian Employment Jurisdictions: Conditions and Ways of Using Means to Implement Measures in 2020
322	UK	1	Flexible workforce development fund	Flexible workforce development fund	Evaluation of the first year of the flexible workforce development fund Final report for the Scottish Government
324	UK	4	Skills support for the workforce	Skills support for the workforce	ESF programme summary – Skills support for the workforce round 2

ID	MS	Type	Name of the incentive – English	Name of the incentive – Local language	Title of the evaluation / monitoring report
328	AT	5	Skilled workers' grant	Fachkräftestipendium	Stadler, E., Kausel, M. (2015), Evaluierung Fachkräftestipendium 2015; Endbericht im Auftrag des Arbeitsmarktservice. Papouschek, U. (2017), BezieherInnen von Fachkräftestipendium, Weiterbildungsgeld und Bildungsteilzeitgeld, Endbericht der Forschungs- und Beratungsstelle Arbeitswelt (siehe auch unter der Maßnahme „Weiterbildungsgeld und Bildungsteilzeitgeld“).
329	AT	5	Support for individual course costs	Beihilfe zu Kurskosten	Sozialministerium (2019). Aktive Arbeitsmarktpolitik in Österreich 2014-2019
344	PL	5	Internship voucher	Bon stażowy	Efektywność świadczenia usług rynku pracy, NIK 2018
352	SE	5	'Fast track' entrance to the labour market	Snabbspår	Vågen, Arlid, Ivan Cvitic, Andreas Hällund, Marie Lindbäck, and Sara Petersson. 2019. Arbetsförmedlingens nulägesbedömning av arbetet med snabbspår

Source: Cedefop.

Table 10. Evaluation studies (public) on structural instruments identified during the project

MS	Name of the incentive – English	Name of the incentive – Local language	Title of the evaluation
DK	Digital catalyst	Digital katalysator	SMVbestyrelsen i en digital Tidsalder – En undersøgelse af SMV-bestyrelser arbejder med digitalisering
DE	Counselling network for SMEs	Beratungsnetzwerk Fachkräftesicherung	Fachevaluierung Aktion A1 – Beratungsnetzwerk Fachkräftesicherung – Endbericht

MS	Name of the incentive – English	Name of the incentive – Local language	Title of the evaluation
DE	National coaching network for mobility in VET	Berufsbildung ohne Grenzen	Evaluation des BMWi-Förderprogramms zur betrieblichen Beratung zur Erhöhung der grenzüberschreitenden Mobilität von Auszubildenden und jungen Fachkräften („Berufsbildung ohne Grenzen“ – BoG) – Abschlussbericht
DE	Educate well	Gut ausbilden	Evaluationsbericht über das ESF-Programm „gut ausbilden“
DE	Coaching for SMEs in Baden-Württemberg	Coaching für Kleinere und Mittlere Unternehmen in Baden-Württemberg	Evaluationsbericht zur Förderlinie „Coaching für Kleinere und Mittlere Unternehmen“
IE	Local enterprise offices	Local enterprise offices	Measuring the impact of Local enterprise office supports in 2018
IE	Leadership 4 growth	Leadership 4 growth	Evaluation of Enterprise Ireland Leadership 4 growth programme 2006-10
IE	Future skills programme	Future skills programme	Evaluation of Skillsnet Ireland programmes 2015
CY	Scheme for the enhancement of female entrepreneurship	Σχέδιο Ενίσχυσης της Γυναίκειας Επιχειρηματικότητας	Evaluation report of the OP competitiveness and sustainable development 2018
CY	Scheme for the enhancement of youth entrepreneurship	Σχέδιο Ενίσχυσης Νεανικής Επιχειρηματικότητας	Evaluation report of the OP competitiveness and sustainable development 2018
LT	EU-funded business productivity measure – Industry digitization LT	ES finansuojama verslo produktyvumo priemonė – Pramonės skaitmeninimas LT	Evaluation of SME competitiveness measures under the 2014-20 Operational Programme
LT	EU-funded business innovation promotion measure – Experiment	ES finansuojama verslo inovacijų skatinimo priemonė – Eksperimentas	Evaluation of measures fostering business RDI under the 2014-2020 Operational Programme
AT	aws Support for digitalisation	aws Digitalisierung	Mid-term evaluation of the aws Support for digitalisation (not published)

Beyond subsidising training costs

MS	Name of the incentive – English	Name of the incentive – Local language	Title of the evaluation
AT	FemTech – Support for gender sensitive HR management in technical R&D	Femtech Karriere	Evaluierung des Programms FEMtech
PL	Database of development services	Baza Usług Rozwojowych in Polish	Ewaluacja „Wpływ Bazy Usług Rozwojowych na jakość i dostępność usług rozwojowych świadczonych na rzecz przedsiębiorców i pracowników z uwzględnieniem działania Podmiotowego Systemu Finansowania”
UK	Business basics programme	Business basics programme	Business basics programme: progress report October 2019

Source: Cedefop.

Annex II.

Research team and the Advisory Board

Research team

Name	Institution/Affiliation	Role
Günter Hefler	3s	team leader
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Daniel Unterweger	University St. Gallen	national expert - Germany and Finland
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Name	Institution/Affiliation	Role
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Jari Romanainen	Technopolis	national expert - Finland

NB: The institutions mentioned are the ones the experts were working at/affiliated with at the time of our research.

The Advisory Board

Name	Institution/Affiliation	Role
Liliane Volozinskis	SMEunited	member
Robert Plummer	BusinessEurope	member
Mario Patuzzi	ETUC	member
Tatjana Babrauskienė	ETUC	member
David Kunst	European Commission DG EMPL	member

NB: The persons listed were working at/affiliated with the institutions mentioned at the time of our research.



Beyond subsidising training costs

Policies to increase training provision in micro, small and medium-sized enterprises

This report aims to contribute to better understanding of policies which can effectively support MSMEs in increasing their training provision. It also works towards a new approach for reviewing these policies. First, it investigates the causes of the ‘MSME training gap’. Second, it develops a novel taxonomy of policies supporting MSMEs to increase their training provision. Third, it analyses a broad range of policy instruments aiming at mitigating the MSME training gap, implemented across the EU-27 and the UK with roots in different fields of policy-making. Fourth, it provides insights into the effectiveness of the policies supporting increased MSME training provision. It proposes the novel concept of ‘support arrangement’ – which refers to all forms of support available to MSMEs located in a given sector/region – and explores the support arrangements in selected skill ecosystems and skill formation systems. The report concludes with suggestions for policy-making and further research.

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