

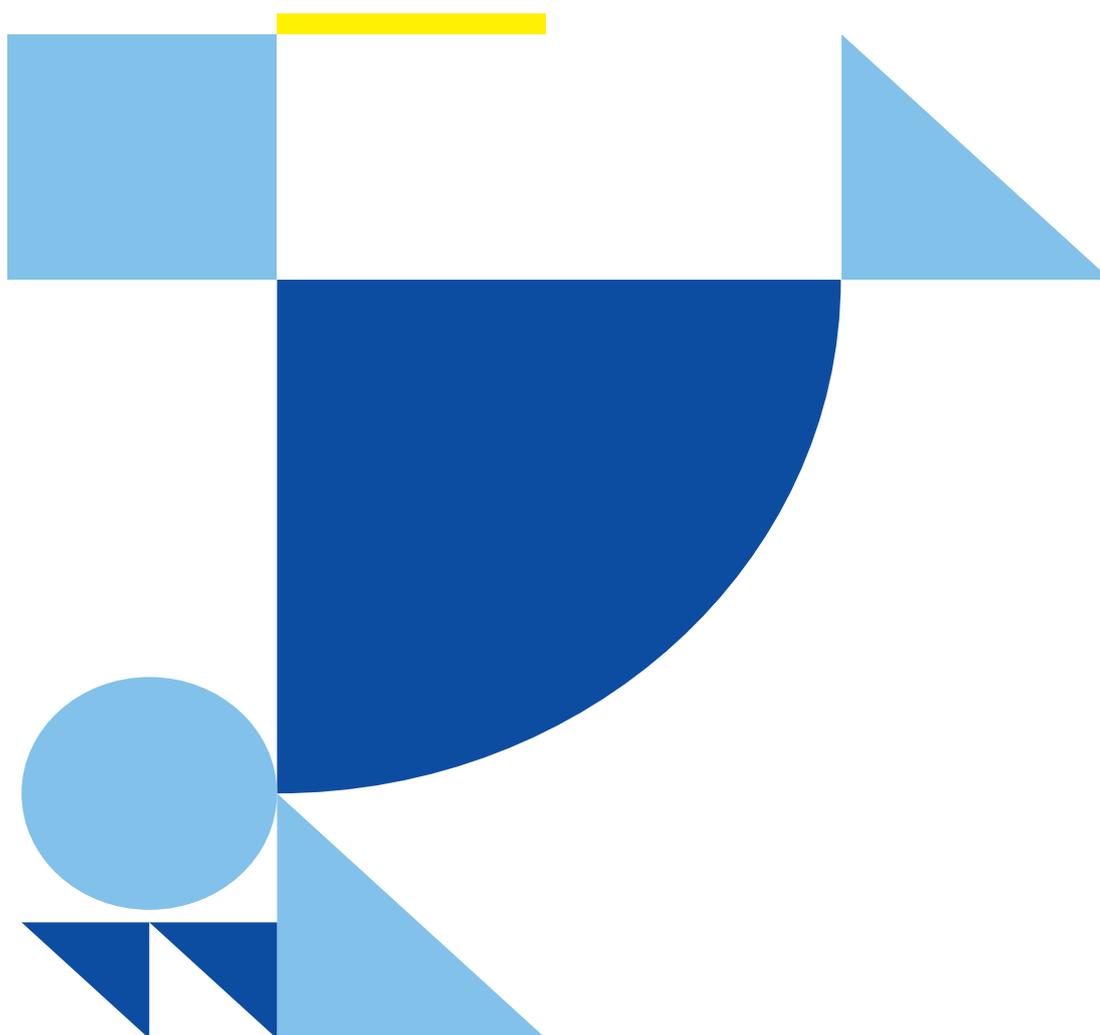


RESEARCH PAPER

No 46

Tackling unemployment while addressing skill mismatch

Lessons from policy and practice
in European Union countries





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Foreword

Skill mismatch research tends to be concerned with methodological issues, the incidence of mismatch and its impact. While there is much research and analysis on mismatch, little work has focused on policy and practice addressing it. This means that it is difficult to assess systematically what works and what does not in skill mismatch policy instruments. This study aims to fill this knowledge gap by reviewing recent policies and practices aiming to tackle unemployment through addressing skill mismatch in the EU-28 Member States.

Matching skills to jobs is gaining attention among policy-makers. Earlier Cedefop work and reports by the European Commission have mapped the extent of mismatch in European Union (EU) labour markets and reflected on its consequences. This work has shown how complex and multidimensional the phenomenon is and that careful and robust analysis is needed to reach the right policy conclusions.

What has not been systematically researched is to what extent education, employment and other policies can be combined to address mismatch. Much current action in employment policy focuses on getting people into work. But ensuring a good match between the skills people have and labour market needs is also important to ensure that Europe makes full use of the skills of its citizens. Achieving this while meeting employment objectives has been a trend in some EU Member States with skill strategies covering multiple policy domains. Moving to a policy context with more awareness of the importance of tackling skill mismatch, and taking relevant action, is a challenge for other countries.

Policy learning can be important mechanism in helping countries make the right choices when introducing and implementing new policy instruments targeting skill mismatch. But copy-paste approaches to transferring entire policies or measures are rarely useful, as the national policy context, labour market characteristics, education systems and other national contextual conditions impact on the effectiveness of policy measures. What is helpful when trying to learn from experience elsewhere is information on specific features or principles of policies and practices that have proven their effectiveness. Such information is hard to come by as policy evaluation is not well developed in many countries.

This report systematically reviews skill mismatch policy instruments targeting unemployment in all EU Member States and so contributes to better understanding of the implementation of these policies and impact. The report is not a comprehensive overview of all policy measures in Europe, but it presents promising ideas for innovative policy practices. I am confident that these can inspire policy-makers.

Joachim James Calleja
Director

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Executive summary

Skill mismatch policies and unemployment

Even though Europe is currently struggling to overcome high levels of unemployment, some employers in some sectors are reporting skill shortages. EU enterprises are expected to face a growing number of hard-to-fill vacancies due to adverse demographic trends in most economies. Shortages, unemployment and skill mismatch have negative financial and non-monetary consequences for employers, individuals, and society as a whole. Europe faces a double challenge: to overcome the current economic situation, by creating new jobs to reduce unemployment and social exclusion, but also to develop solutions to reduce skill mismatch on the labour market. While it is acknowledged that tackling skill mismatch cannot, by itself, be a solution to the high rates of (youth) unemployment that Europe currently faces, it is nonetheless a critical part of the equation.

Most skill mismatch research focuses on methodological issues, the incidence of mismatch and its impact, and not on actual policies and practices addressing it, making it difficult to assess which policy instruments work and which do not. To fill this knowledge gap, this study reviews recent policies and practices aiming to tackle unemployment through addressing skill mismatch in the EU-28 Member States. It is based on reviews by national experts of innovative approaches to dealing with unemployment or preventing it through explicit focus on reducing skill mismatch. The report presents the most innovative policy instruments targeting skill mismatch for every Member State. A limited number of instruments were selected for in-depth analysis, based on interviews with policy-makers, stakeholders and end users.

This summary presents the main findings, and discusses successful and innovative elements contained in national approaches; it aims to support better policy learning between European stakeholders.

Refocus active labour market policies on skills matching

Active labour market policies (ALMP) have been in place for many years in the EU and support the reintegration of the unemployed into the labour market. Member States increasingly understand that a well-defined connection between skill needs anticipation and ALMP is crucial to support the unemployed in finding employment. There are also several ways to improve the skills of the

unemployed: getting workplace experience by making workplace learning part of the training or by temporarily subsidising jobs is an accepted way to support them. Gaining such experience is not only a means for the lower-educated unemployed, but may also help the higher-educated. It is becoming clear that it is not always necessary to train in the skills specifically needed in the labour market; training in generic skills may be sufficient, as long as they can be transferred to a wide range of potential occupations or sectors. Voucher systems help because the unemployed person may know best for him- or herself which skills are lacking. Getting beneficiaries, whether employers or unemployed, involved in defining skill shortages, supports Member States' strategies. Also, new and innovative information and communications technology (ICT) tools which help the unemployed find a job and promote the matching process itself have the potential to support job seekers and employers. Using all the European tools and instruments from education and training to support the unemployed (such as recognition of learning, competence-directed training) may strengthen active labour market measures.

Promote matching through education and training

The main contributions from education and training to combatting skill shortages are guiding students to professions where their skills are needed, reforming qualification standards, and adapting curricula in cooperation with employers (or their representatives). Consistency is required between the labour market (and skill shortages) and the choices made by students. This may be achieved by supporting more direct contact between schools and students on the one hand and the social partners on the other. This means not only offering the students self-service systems, but also accompanying them with personal counselling to ensure that they can find and use the information they need and to enable informed career choices. At the same time, reducing early school leaving may be linked with skill shortages, for instance by redirecting early school leavers toward training with a favourable labour market perspective.

On the demand side of the labour market, schools should (try to) get direct feedback from the business environment, to adapt the training they provide to the latest skill needs of the local/regional labour market; for that reason schools have to be part of the relevant networks. In a growing number of countries, employers have a valuable role in education, though still limited in the Mediterranean and newer Member States. Innovative approaches identified in this study include one-stop shop career centres, networking by individual teachers instead of schools and interviews between teachers and students directed at prevention of early

school leaving. In one innovation, the 'assured skills' programme in Ireland, part of attracting foreign companies involved immediate attention from the education sector to their skill needs.

Target the employed

A range of instruments aim to train individual employees in certain skills and strengthen their position on the labour market. Others more specifically train individuals in skills that are (immediately) needed on the labour market to fill vacancies. Despite the flexibility and necessary focus on mitigating skill shortages in the short/medium term, the more structural element of training workers seems underemphasised. Instruments that combine elements of up/reskilling for skill shortages and recognition of prior acquired skills offer a more structured approach. As important as training of employees is, it is just as crucial that existing skills are recognised as such (for instance through certification), to prevent unnecessary training. Rather than setting an unrealistic and vague goal of 'opening up the vocational system', more direct instruments which offer a flexible way to certify one's skills and possible directions for further training may be more effective.

Instruments in which a combination of different practices was adopted were considered most innovative. The combination of skills certification and education is a relevant one; other innovative instruments, for instance, combined training with guidance and counselling towards areas of skill shortages.

Move to comprehensive skill mismatch strategies

This shows that EU Member States are slowly, but steadily, developing from a situation with a loose set of skill mismatch policies and instruments towards an overall skill matching strategy in which all stakeholders are involved, sometimes using innovative tools to get them aboard. Some case studies analysed are still at the 'fundamental' stage: here, public employment services (PES) and the vocational education and training (VET) system develop their own policies directed at the unemployed or students, respectively. Stakeholders such as employers (and employer organisations) are only involved in so far as they have to provide the jobs for the unemployed or students.

In many Member States, stakeholders are more directly involved from a skill matching perspective. In some there are also strategies that encompass several policy fields and/or sectors. The next stage is that of countrywide skill mismatch strategies, which deal with all aspects of skill mismatch policies: identification of

skill mismatches, upskilling the unemployed, increasing the responsiveness of the education system to skill mismatch problems and training workers. Some cases illustrate innovative ways to stimulate cooperation between partners, for example when letting the social partners decide which skills are needed in the future or when removing the administrative burden from employers through ICT support.

Need for more evidence and policy learning

The fundamental elements of skill mismatch policies may support many unemployed in getting a job, help students to make the right choices and enable workers to participate in training, helping them in their further careers. However, it is likely that a significant share of skill mismatch cannot be tackled this way. In the current situation of high unemployment, the emphasis of policy-makers might be on measures with a strong employment focus. Today's emphasis on quickly finding employment for young people may backfire in the near future, if they are not placed in properly matched jobs or in jobs that fail to make use of and develop their full potential.

In the medium to long term, all Member States will have to introduce effective policies and instruments tackling skill mismatch to avoid labour market bottlenecks. With the European Social Fund (ESF), European employment services (EURES), specific studies, and skill needs analyses, the European Commission and its agencies already support Member States in acquiring knowledge to target skill mismatch. This study complements that work by presenting an analysis of skill mismatch policy instruments. While there is scope for more work on policy effectiveness and efficiency, its findings already support policy learning. It can help Member States without a strong skill mismatch approach shape policies with a stronger focus on matching and pave the way for agendas that put skill matching centre stage.

CHAPTER 1.

Introduction

1.1. The skill mismatch challenge

Europe is currently struggling to overcome the biggest economic crisis in its recent history. The employment situation across the EU has worsened dramatically since 2007: employment levels have gone down; the chance for unemployed people to find a job has decreased in most Member States; long-term unemployment has increased for all groups, especially for young people and the lower qualified; young people neither in employment, education, nor training (NEET) rates are increasing. Structural unemployment on the European labour market has also increased since 2008 (for instance European Commission, 2012b).

Despite the growing number of people seeking jobs in Europe, some sectors and employers are simultaneously reporting shortages of certain skills (European Commission, 2010a; Eurofound, 2013). Demographic developments will cause these shortages to grow in the coming years. Alongside the challenges of the economic downturn, creating new jobs and reducing unemployment and social exclusion, the challenge of skill mismatch prevails.

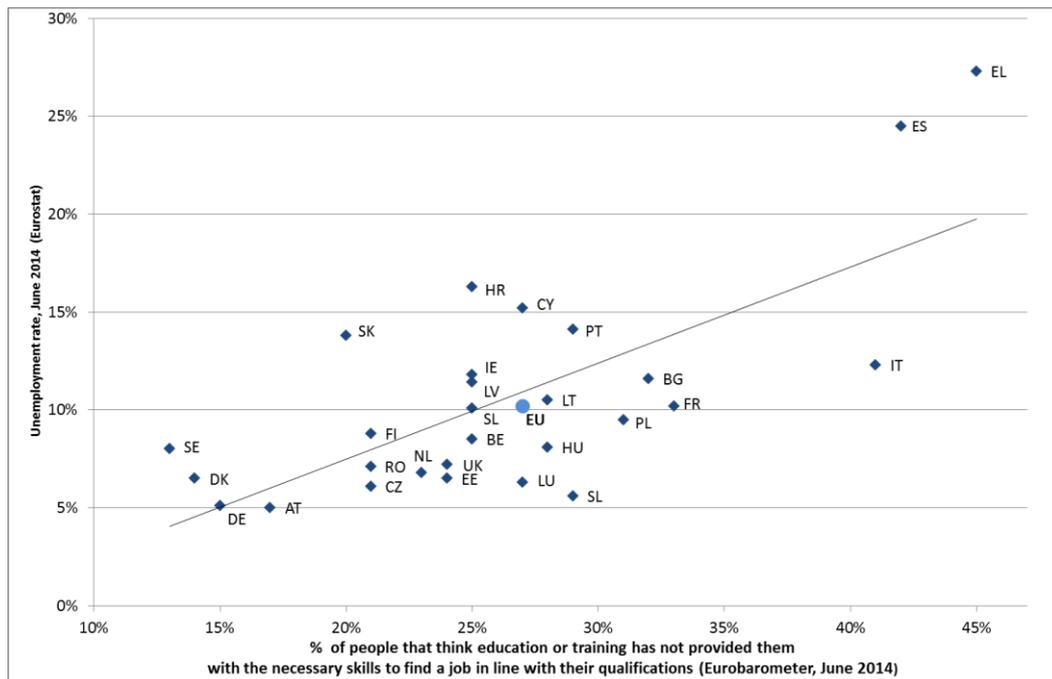
Data suggest a relationship between skill mismatch and unemployment levels across the EU. A recent Eurobarometer study mapped the subjective skill mismatch (the perception of citizens) in Europe. Citizens were asked to what extent their education and training provided them with the right skills. The results show considerable variation across different EU Member States; when plotted against 2014 unemployment figures by Eurostat, a positive trend can be observed (Figure 1).

People in countries with higher levels of unemployment are more negative about the labour market potential of skills obtained in education and training. Although it cannot be excluded that these negative perceptions could also be caused by the labour market situation (instead of the other way around), the data show a relationship between the two. This underlines the need for education and training (for students, but also training for the unemployed) to provide individuals with skills that are needed, today and tomorrow, by the labour market. To do so, policy-makers need to adopt a skill matching approach in the development of policy instruments.

Skill mismatch comes at a cost and also has non-monetary negative consequences for individuals, employers and society as a whole. Individuals

experience a direct loss of earnings but, indirectly and in the long run, may also lose self-confidence and job satisfaction. Employers face negative impacts on productivity and have to bear higher recruitment costs. This in turn may lead to lower innovation and competitiveness. Society as a whole has to bear the direct costs of unemployment benefits and public expenses for ALMP, but increasing structural unemployment may also have a negative impact on a country's long-term growth prospects (for an overview see Cedefop, 2010a).

Figure 1. **Subjective skill mismatch and unemployment rates, 2014**



NB: $r = .711^{**}$ ($p \leq 0.01$; without EL, ES, IT $r = .403^*$ ($p \leq 0.05$)).

Source: Eurostat and Eurobarometer data (Special Eurobarometer 417/Wave EB81.3).

1.2. Scope of the study

Despite the abundant research on skill mismatch in its various forms and aspects (both theoretical and empirical), little can be found about concrete practices and policies tackling skill mismatch. What policies and programmes are in place addressing skill shortages and how can they be characterised? How are skill mismatch and skill shortages identified for these programmes? Is it possible to identify common success factors of such programmes? These are questions which have not been in focus so far.

A reason for this might be that research has been more concerned with methodological issues (improving measurement and data) and general aspects of skill mismatch (modelling and analysing its persistence and its impact), or has

focused on identifying skill shortages and mismatch in certain sectors or occupations. Research on skill mismatch has been less concerned with analysis of the actions taken to reduce or prevent it. Evaluations of ALMP are an exception, particularly meta-evaluations, which seek to combine the results of a number of individual evaluations to discover working mechanisms across different contexts. However, such evaluations follow different rationales, do not focus on programmes tackling skill mismatch in particular, and rarely debate skill mismatch explicitly. They also generally use the amount of money spent as guiding principle, or focus on narrowly defined objectives and do not cover measures tackling skill mismatch coming from other policy areas, such as migration or education policy.

Comprehensive policies or strategies to tackle skill shortages and anticipated skill mismatch can be identified in some countries, such as comprehensive plans securing sufficient future workforce (workforce-offensive) in Germany or Ireland's national skills strategy (tomorrow's skills: towards a national skills strategy). However, as this report shows, the lack of such policies or strategies does not imply that there are no relevant policy instruments targeting skill mismatch; most actions taken to address skill mismatch are part of 'regular' labour market policies or come from other policy areas.

Against this background, the purpose of this study is to:

- (a) conduct a review of recent policies and practices that aim to mitigate skill mismatch in all EU Member States;
- (b) investigate a range of practices in a limited number of countries;
- (c) discuss their effectiveness;
- (d) reflect on their transferability to other countries, taking into account the institutional, policy and labour market context.

While mismatch policies can have several aims, this report focuses on policies and practices addressing or preventing unemployment. It showcases the potential of focusing on skill mismatch in measures to counter unemployment and aims to highlight promising policy practices.

1.3. Skill mismatch and policies addressing it

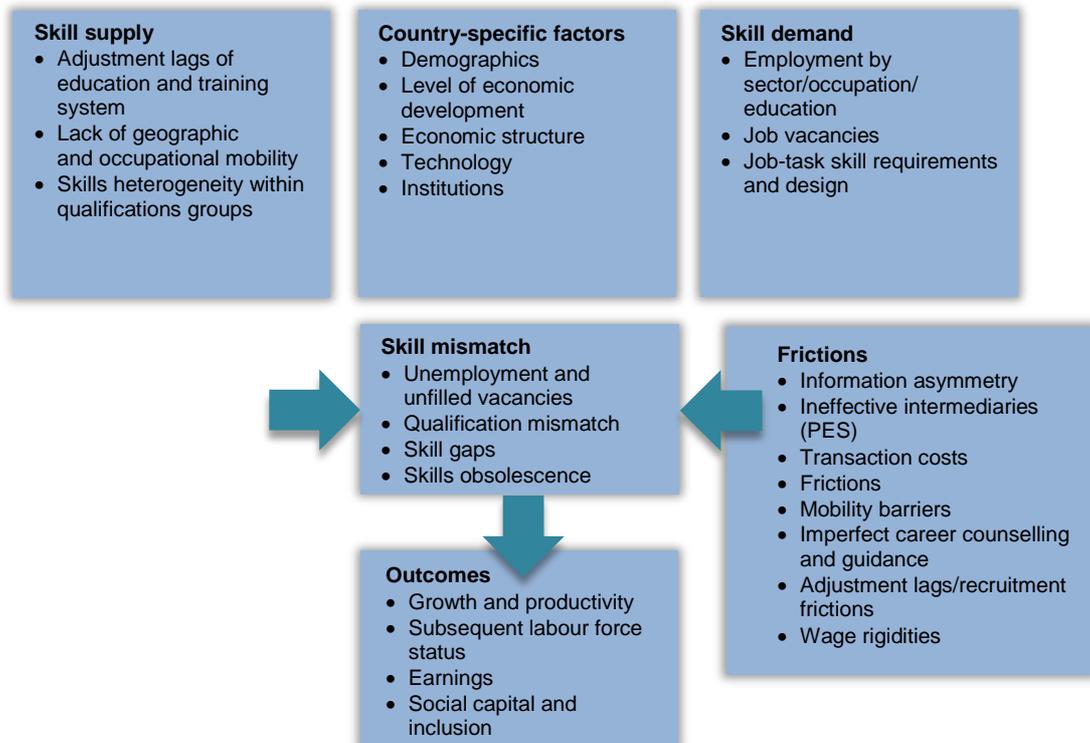
1.3.1. What is skill mismatch?

Skill mismatch is a particular outcome of the complex interplay between skill supply and demand within a market economy, both of which are constantly affected by adjustment lags and market failures and are shaped by the prevailing contextual conditions (demographics, technological progress, institutional settings) (European Commission, 2012b, p. 352).

Figure 2 illustrates this complex interplay and shows how skill supply and demand (and their underlying causes) each influence skill mismatch. Skill mismatch manifests itself primarily in a situation where unemployment coincides with unfilled vacancies due to a shortfall of suitably skilled workers. At the same time, skill obsolescence or skills gaps among employees can be another manifestation of a skill mismatch, either quantitative or qualitative in nature. Quantitative discrepancies are defined as the lack of sufficiently qualified school leavers or job seekers in a sector as a whole, or where there are not enough vacancies to make use of that supply. Qualitative discrepancies occur where there is both sufficient supply of labour and a sufficient number of vacancies, but where the demands and wishes of – potential – employees and employers regarding skills, job requirements, working conditions or work content diverge.

More country-specific factors such as demographics, the economic structure, and progressing technology cannot be ignored. Skill mismatch can also exist without imbalances between skill supply and demand, as a result of information asymmetries or other matching frictions on the labour market. Figure 2 shows the potential outcomes of skill mismatch, which may include growth and productivity losses, or consequences with regard to social capital and social inclusion.

Figure 2. **Components and dynamics of skill mismatch**



Source: European Commission, 2012b, p. 352.

1.3.2. Addressing skill mismatch

Policy instruments targeting skill mismatch must take this complex interplay of factors into account; analysis of policy instruments also needs to start from a framework within which skill mismatch challenges can be embedded. This enables assessment and comparison of possible solutions (policy measures and programmes). The framework used in this report considers three broad solution pathways to structure and characterise skill mismatch policy instruments across different Member States ⁽¹⁾:

- (a) targeting the unemployed to develop (unused) skill reserves. From a skill mismatch perspective, a distinction can be made between persons having difficulties entering the labour market, because they lack more generic professional skills, and unemployed people whose skills could be upgraded to the specific skills demands of hard-to-fill vacancies;
- (b) targeting the skills of groups in education and training, to be able to match their future skills better to (future) labour market needs. This solution includes the creation of new specific learning paths, campaigns stimulating people to choose educational paths in sectors with shortages, and structural improvement of the education to labour market transition;
- (c) targeting existing employees, to optimise their potential as well reduce the risk of them involuntarily leaving the labour market. Solutions may include the introduction of training and retraining programmes and providing better career perspectives for employees. Policies or measures on wage and working conditions are relevant, but will only be included in the framework if they relate to skill matching.

While the first solution pathway directly aims to reduce unemployment, the second and third options can be seen as policies to prevent it. Considering both types of policies implies that curative and preventive skill mismatch policies targeting unemployment are addressed in this report.

⁽¹⁾ A fourth solution could be improving the operational management of organisations. This is a way to alleviate labour market discrepancies in sectors with shortages by organisations working more efficiently and increasing the productivity of their employees, for example through the use of new technologies, a change of work organisation, or other types of innovation. Another option is to source labour from a country where the required skills are readily available. As these types of measures are mostly the responsibility of companies, while the study focuses on public policies, they are not examined in this study.

1.4. Method

In addition to the concepts introduced above, it is necessary to distinguish between macro level policies and concrete policy instruments (Table 1). While broad national policies are not the core focus of this study (which is on implementation level), they are important because they provide the context for the implementation of more specific interventions (or policy instruments).

In order to study national responses to skill mismatch, national experts in labour market and education reviewed national legislation and policy documents in each of the 28 Member States to obtain an overview of recently introduced policies targeting skill mismatch. This provided an inventory of national policy instruments specifically targeting skill mismatch. Only instruments having a relatively short- or medium-term horizon (two to five years) and implemented since 2007, were included. Experts were required to include at least one skill mismatch instrument targeting ^{the} unemployed, and one mitigating current or future skill shortages. The list of policy instruments selected by national experts was validated in an interview with at least one policy-maker in the respective Member State. Between two and five of the most innovative policy instruments targeting skill mismatch were collected in each country, resulting in a total of 129 instruments from the 28 Member States; 12 instruments did not meet the criteria and were excluded, leaving 117 instruments in the final inventory ⁽²⁾.

Table 1. **Policies versus instruments**

Policies, actions or programmes	Instruments, measures and projects
<p>A policy (action plan or programme) is the sum of all measures implemented to reach the goals of the policy initiative. A policy initiative usually follows particular goals and strategies and is often structured in programmes. A policy initiative can be part of one or more policy areas (such as social policy, education policy).</p>	<p>Instruments (or measures) are concrete policy interventions with a plan, a budget, a start, and an end date. There are different types of instruments (such as training programmes, subsidies).</p>

Source: Cedefop.

⁽²⁾ In addition to instruments targeting unemployment, the inventory also contains skills anticipation and labour market information instruments (15) and instruments aiming to support immigration to tackle skill shortages (4). Given the focus of this report on unemployment, these instruments are not discussed as stand-alone initiatives but skills anticipation and labour market information tools are described if they are part of instruments directly or indirectly targeting unemployment.

Allocating the instruments to the solution pathways identified earlier proved difficult, especially for instruments that focus on skills anticipation activities; these tend to target multiple policy objectives. Another problem was categorising funding schemes (such as training vouchers) addressing the employed as well as the unemployed. Many of these instruments addressing multiple target groups or several policy objectives contain innovative elements and deserve to be analysed in this report. To deal adequately with them, they were categorised based on their most important target group. An overview of all instruments included and their grouping is provided in Annex A.

From this inventory of skill mismatch instruments across the EU, 24 in 12 Member States were selected for further analysis. These case studies show in greater detail how the instruments work and what lessons can be learned from them. To ensure the inclusion of a wide range of different countries, geographic location and type of welfare system were used as selection criteria. To maximise the potential for learning, to be included as a case study, the initiative had to be:

- (a) new, both in terms of establishment date and innovativeness;
- (b) explicitly designed to address skill mismatch rather than broad policy measures;
- (c) targeted at an identified skill shortage with the aim of matching the skills of the unemployed, or those at risk of unemployment, to unfilled labour market needs.

For each case study, country experts conducted desk research, interviews with stakeholders (people initiating or implementing the instrument) and beneficiaries in spring 2014; they used standardised data collection protocols to ensure comparability among case studies. Desk research included the review of policy documents, project plan, annual reports/monitoring data, evaluation reports, and academic studies on the topic. Interviews with stakeholders targeted people responsible for developing and/or implementing the policy instrument, allowing a clear and detailed understanding of its objectives and approach. Beneficiaries were interviewed to be able to include information on the implementation of an instrument from the perspective of those who use it. A distinction can be made between beneficiaries (which can be companies, stakeholders, local governments) and final recipients (unemployed and employed people) ⁽³⁾. Where possible, each case study featured interviews with the most

⁽³⁾ The report contains quotes from anonymised beneficiaries. However, as the quotes presented throughout the report are translated into English, some may not be literal transcriptions of what have been said. Instead these have been slightly altered to meet linguistic standards. Care was taken to preserve the (spirit of the) content of the quotes.

relevant type of beneficiary. Throughout the report, the case studies are presented in text boxes.

The method used in this study enables structured collection and review of policy instruments targeting skill mismatch. The methodological choices that were made, however, also imply three main limitations.

First, given the scope of the mapping exercise, which focuses on policy instruments and only considers basic contextual information about skill mismatch strategies, it is not possible fully to compare different approaches to skill mismatch across national contexts. This also relates to the judgment of country experts in indicating the explicitness, directness, and innovativeness of policy instruments. These are judged within the national context and are not always fully comparable.

Second, the heterogeneity of approaches to target skill mismatch across the EU, evidenced by the large and varied inventory of policy instruments, comes with the analytical challenge to distinguish the more relevant cases from the less relevant ones and to classify them. The heterogeneity of instruments also limits the ability to compare effectively the working elements of each instrument. The study is not set up as a meta-evaluation, so the effectiveness of policy instruments is not compared in quantitative terms. As a result, conclusions cannot focus on the comparative effectiveness of policy instruments across different contexts but rather focus on lessons learned and innovative approaches.

A third limitation is coverage. The inventory of skill mismatch instruments cannot be comprehensive as the focus is on innovative and recent initiatives, meaning that other skill mismatch measures are not considered. The initiatives reported should be considered examples of policy measures in EU Member States. Another element that makes the inventory a collection of practices and not a comprehensive overview is that the focus is on national policies. While some countries have considerable decision-making power at regional level, skill mismatch measures below national level have not been systematically considered.

1.5. Structure of the report

The set-up of the rest of this report is as follows. Chapters 2 and 3 give an overview of skill mismatch policy instruments targeting unemployment. Chapter 2 focuses on measures for the unemployed, while Chapter 3 reports on initiatives that address skill mismatch to prevent unemployment. As these chapters only report on measures with a focus on skill mismatch, they do not give a comprehensive overview of all measures targeting unemployment in Europe.

Chapter 4 summarises the main lessons learned with respect to the working mechanisms of (successful) skill mismatch policies, innovative elements and transferability. Throughout the report, the policy-making perspective and the perspective of beneficiaries is considered.

The report has a strong focus on policy instruments and does not consider in depth the overall policy frameworks in Member States. The overall policy context and awareness of the importance of avoiding and addressing skill mismatch has a strong impact on the effectiveness of policy instruments. Important elements of the policy context are the availability of reliable labour market intelligence, good communication and cooperation between different labour market actors and stakeholders, and effective involvement of employers. These issues are further considered in Chapter 4.

CHAPTER 2.

Addressing skill mismatch among the unemployed

2.1. Introduction

When assessing policy instruments targeting the unemployed, it is important to distinguish between the primary objective of ALMP and skill mismatch policies. ALMP have the primary objective to help the unemployed find employment, and are generally also evaluated by the number of unemployed taking on (sustainable) jobs. The literature on the effectiveness of ALMP shows mixed results, in particular for the effects of training. Some evaluations point to an insignificant or even negative effect of training instruments for the unemployed on their employment situation in the short term (Card et al., 2010; Heyma and van der Werff, 2014). This is sometimes explained by a so-called locking-in effect, which refers to the phenomenon that individuals (at least temporarily) stop looking for employment when they engage in training. As a result, training may have a negative effect on short-term employment (de Koning and Peers, 2007). At the same time, some meta-evaluations indicate potential long-term benefits in training the unemployed. Card et al. (2010) found that despite the lack of short-term impact, training had a positive effect on employment on the longer term, although this positive effect was not found for youth. Van Ours and Boone (2009) did not find any effects of training instruments on the chance of finding employment, but they did find an effect on the chance of keeping employment. This longer-term effect is confirmed by Ohlsson and Storrie (2007), who stated that evaluations of training instruments should not only focus on whether the individual finds employment, but rather argue that the true value of training instruments lies in finding and creating a match that can serve as the foundation for sustainable employment in the long run.

These mixed findings and different interpretations of them show different perspectives from which labour market policies can be evaluated. The success of ALMP is often evaluated by measuring the share of employment achieved among participants, and not necessarily by the solution and/or prevention of skill mismatch, which is the main focus of this report. In this logic, it is considered a 'success' if a person finds employment below his/her level of qualification. If a different perspective on success is adopted a better understanding of ALMP is achieved: if the success of an instrument is assessed on the basis of its broader macro-effects on the labour market, potential deadweight or displacement effects

should be considered. Another approach would be to concentrate on the extent to which the policy instrument strengthens skills in the labour force, and is therefore more concerned with the way in which the ALMP is able to improve an individual's position on the labour market. From this perspective, displacement is not necessarily problematic, as long as the position on the labour market of the 'displaced person' is strong enough to find a new job. A skill shortage perspective adopts another criterion, evaluating a policy instrument based on whether shortages are filled with properly equipped individuals. From this viewpoint, potential deadweight effects (where an individual would have found a job with less training) are not a negative finding, because the shortage would persist if the individual is only trained to the minimum level required for employment.

Given the focus of this report, the policy instruments are presented and analysed with this diversity of perspectives in mind and do not only quantitatively assess whether an instrument leads individuals to employment. Chapter 2 discusses three types of policy targeting the unemployed: upgrading skills, guidance, and subsidised work schemes. As the initiatives presented are examples of national practices, the chapter cannot give a comprehensive overview. By considering the opinion of stakeholders and including the voice of people that use the instruments, however, the review can give a rich and meaningful insight into the working mechanisms of policy measures.

2.2. Upgrading skills of the unemployed

This section focuses on policies that aim to reduce skill mismatch by upgrading the skills of the unemployed; this requires that a relevant set of skills is offered to the individual. In addition to skill upgrading, some studies suggest additional positive training effects. Andersen (2008) concluded that the primary benefit of training is increasing self-esteem. Even though this may be true, this study will primarily concentrate on the extent to which skills upgrading of the unemployed is in line with labour market needs, and supports different target groups.

While this emphasises employer needs for skills, the instruments should also be approached from the perspective of the individual. Individual training needs can be highly personal; the success of skill matching through training may strongly depend on the group it targets. Individuals that can easily be (re)integrated in the labour market may only require targeted training focusing on a specific set of skills to match their skills to the needs of a local employer. Other groups, such as individuals with lower employability may have several disadvantages when looking for jobs and so have multiple and more complex

learning needs. They may require multiple interventions over a longer period of time, before their skills will match labour market needs.

The instruments identified in EU countries aiming to match skills by training the unemployed can be grouped into the following four types. Each is described in more detail below:

- (a) generic skills training for the unemployed; this includes instruments in which a public body provides training in skills and competences that are not specific to a particular occupation but covers a broader set of professional skills and competences supporting individual employability;
- (b) targeted training in specific skills for the unemployed; this includes instruments in which a public body provides training in skills and competences specific to a particular occupation. The training equips individuals with a set of skills in demand on the labour market;
- (c) targeted training for the unemployed towards specific skill shortages; Though related to the previous category, a separate section is dedicated to instruments that do not only provide training in specific skills, but also target skills that have been explicitly designated 'in demand' by employers;
- (d) training in firm-specific skills for the unemployed in/by companies; this includes instruments, hosted by PES, in which the unemployed are trained in skills and competences specific to a particular occupation, directly by companies in need of those skills. Both instruments targeting the general population and those with a specific focus on youth are presented for this type.

2.2.1. Generic skills training for the unemployed

Training to improve 'generic skills' is usually not designed to prepare for specific job openings; it is not commonly regarded as targeting skill mismatch. Instead, it is based on the assumption that higher skill levels lower the risk of becoming unemployed or improve the chance of finding a job. This is also a question of skill mismatch, though on a higher level of abstraction and in a more general sense. The idea is that such instruments prepare the unemployed with a wide variety of competences for the labour market by updating or gaining a set of key skills, such as numeracy, basic information technology skills, language skills, or even writing application letters and conducting job interviews.

Table 2. **Instruments providing general skills training for the unemployed**

<p>Key competences training (France)</p> <p>Aims at adapting adults to professional requirements, often remote from the labour market. It provides training in fundamental and transferable skills (to obtain a qualification, professional experience, a job), such as written comprehension and expression, basic mathematics, science and technologies, ability to speak English, software skills.</p>
<p>Get ready for work (UK-Scotland)</p> <p>Targets young people (often early school leavers) who are unable to make the transition to sustainable employment. The programme provides tailored guidance and support on generic and transferrable work skills which enables and encourages sustained employment, employment with training or further education. Among training modules that can be selected are managing stress at work, health and safety in the office, and making email work for you. An evaluation of the instrument indicated how crucial it can be for young adults to give them a period of reflection and space to 'grow up' (Smart Consultancy and Eddy Adams Consultants, 2005).</p>
<p>The education scheme (Denmark)</p> <p>Targets the long-term unemployed who are about to lose their unemployment benefits with training of maximum six months within a reference period of 12 months. The scheme aims to equip them with the skills necessary for successfully finding and sustaining a job that matches their skills. Individual training objectives are set in individual meetings hosted by the PES.</p>
<p>Labour market training measures (Estonia)</p> <p>Provided by the Estonian unemployment insurance fund, they provide occupational skills and competences for the unemployed seeking a solution to their long-term employment.</p>
<p>Labour market training (Finland)</p> <p>Aims to promote the availability of skilled labour. It improves the professional skills of unemployed adults or adults in danger of becoming unemployed to increase their possibilities of finding a job or retaining one. It also helps improve their capacities to become entrepreneurs. The benefit of these training programmes, often offered or organised by the PES, is that they specifically focus on further developing existing skills and competences. Innovative aspects of the programmes include self-motivated studies, the provision of tailored, workplace-oriented curricula and on the job training in line with individual and workplace needs. To improve training content, two nationwide web-based feedback systems for participants were introduced, which provide stakeholders with information on training effectiveness and success. This is innovative as, although ALMP are often criticised in terms of their labour market relevance, the unemployed generally do not have feedback opportunities.</p>

Learning with adults (Slovenia)

Developed to motivate young unemployed adults (early school leavers) to complete education and gain new skills. Other adults can also apply and are offered information and guidance about potential new learning paths.

Source: Cedefop.

Instruments under this heading (Table 2) can be approached from the perspective of the EU's recommendation on key competences for lifelong learning (R2006/962/EC), which defines a set of key competences to be adopted within the EU ⁽⁴⁾. Even though the instruments found in different Member States target such key skills and competences, Member States do not necessarily use the same 'key competences' or 'cross-curricular key competences' terminology. This is confirmed by a study by Gordon et al. (2009), who showed that most Member States started to implement similar concepts, albeit not always under similar names ⁽⁵⁾.

Skill matching instruments found in various Member States show that several PESs use training not only to improve the skills of disadvantaged groups, but for individuals that recently became unemployed during the crisis. Many of these instruments focus on updating skills required for applying for jobs, such as letter writing and conducting interviews.

A common characteristic of these sorts of instrument is that they seem particularly fit for groups considered to be at a 'larger distance from the labour market', such as vulnerable groups, the longer-term unemployed, or migrants. By providing guidance in more basic professional skills, these groups can be brought closer to the labour market. More specific skills and competences related to actual job openings may become then relevant. Such instruments are generally not directly linked to a certain set of defined skill shortages but to the overall

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- ⁽⁴⁾ This recommendation identifies eight key competences, necessary for personal fulfilment and development, social inclusion, active citizenship and employment:
- (a) communication in the mother tongue;
 - (b) communication in foreign languages;
 - (c) mathematical competence and basic competences in science and technology;
 - (d) digital competence;
 - (e) learning to learn;
 - (f) social and civic competences;
 - (g) sense of initiative and entrepreneurship;
 - (h) cultural awareness and expression.
- ⁽⁵⁾ Other terms are basic competences, core competences, core skills, key skills (Gordon et al., 2009).

mismatch between the skills of the longer-term unemployed and labour market needs.

Box 1. Hungary: the community public work programmes

The community public work programmes seek to connect work and practical training in order to eliminate employment disadvantages, increase job seeker qualification levels, improve their basic skills and build practical professional experience. The employment programmes offered are related to local community work, which can be either mandatory local public authority tasks or non-mandatory tasks with direct relevance to local communities, such as environmental, infrastructure or care jobs. The instrument specifically targets vulnerable groups, such as the permanently unemployed and physically handicapped. It also deals, for instance, with members of the Roma community searching for jobs.

People could also participate in a parallel programme, called 'I learn again' (financed by the ESF) which develop skills relevant to their field of temporary public work. Such training focuses on particular needs indicated by the county chambers of commerce and industry, thereby extending beyond the public realm. These were the primary actors in identifying the type of occupations that were in demand on the labour market, based on labour market surveys. The take-up rate of this supplementary training is, however, relatively low, compared to broader participation in the basic skills training and working component.

Key success factors:

- (a) provision of employment in disadvantaged regions;
- (b) combination with targeted training programme;
- (c) link to national policies and execution of project by local councils.

Key lessons:

- (a) involving local labour market stakeholders in skill needs identification;
- (b) importance of gaining professional skills through employment.

The community public work programmes in Hungary focus on employment opportunities that fall under the mandate of local governments and have direct relevance for the local community. They provide employment for a set time, between three and eight months. Most of the unemployed targeted by this instrument are lower-educated adults, for whom community work is sometimes their first professional experience. The instrument offers participants the opportunity to gain an understanding of work discipline, what starting work punctually means, and what it is like to cooperate with colleagues and follow their manager's instructions. Based on this experience, the ultimate goal of the instrument is to equip people with the basic skills necessary to sustain employment, rather than mere benefits. Parallel to temporary employment, a linked training programme, 'I learn again', was set up with ESF support. Learners

found the combination with work powerful as this provided a realistic glimpse into a certain vocation and the types of activities related to it. Stakeholders indicated that the combination between work and training is very useful as paid work helped participants stay motivated to continue learning.

'The dropout rate was really low, indicating the generally positive feeling towards the training ⁽⁶⁾.'

Some training programmes under the instrument included a vocational certificate for successful participants. Beneficiaries of the training indicated how being awarded the certificate greatly contributed to higher self-esteem. In contrast, beneficiaries enrolled in a programme not leading to a certificate indicated being disappointed for this reason, underlining the role that awarding certificates can play in raising the necessary self-esteem for gaining employment.

This instrument appears quite successful in terms of basic skills provision. Good results have also been achieved for employment, although some beneficiaries recognised that the instrument did not guarantee fixed employment. This is inherent to the instrument, as participating employers have to prove in their application for support that the new position is additional, resulting in an increase in headcount. Only a few beneficiaries – those that had the luck of working for an actual vacancy – were offered employment. However, beneficiaries that did not find employment after the programme still indicated satisfaction with the working experience gained and the fact that they were able to develop their professional skills.

'The fact that the work programme was connected to training, opened up the mind of participants also to consider new opportunities ⁽⁷⁾.'

This instrument is a clear example of training which may not create many sustainable jobs for participants, yet is relevant from a skill matching perspective. Improving skills through a real work situation seems to be superior to classroom training in many contexts. The instrument can be applied in regions or situations where open vacancies of private employers are scarce.

2.2.2. Targeted training in specific skills for the unemployed

A next group of instruments provides for upskilling the unemployed and is directly related to the skills required in particular occupations (Table 3). While long-term

⁽⁶⁾ Stakeholder interview conducted in the framework of the case study.

⁽⁷⁾ Stakeholder interview conducted in the framework of the case study.

policies to mitigate skill mismatch are essential, in the short term it is also necessary to combat current high unemployment levels with shorter-term measures that support matching. The success of these policies should be assessed based on the extent to which skills are matched to labour market needs, and not solely on whether they lead to employment. From the examples it becomes apparent that the key question facing policy-makers seeking to solve skill mismatch by means of public policy is how to ensure that skills training for the unemployed is in line with labour market needs.

Table 3. **Instruments offering training in specific skills to the unemployed**

<p>Training for the unemployed (Croatia)</p> <p>Provides adequate training programmes (lasting around six months) by the PES for unemployed and those at risk of becoming unemployed. 'Adequate' refers to inclusion of, for example, long-term unemployed persons in training programmes tailored to meet labour market needs. Labour market needs feed into PES' annual local training plans on the basis of:</p> <ul style="list-style-type: none"> (a) analysis of labour supply and demand; (b) expert opinions; (c) an employer survey; (d) development programmes implemented at county level. A crucial condition for the strong link between labour market analysis and training programmes is the historically close connection between the PES and training providers.
<p>Training vouchers for the unemployed (Latvia)</p> <p>Offered to beneficiaries, who can use them at selected education institutions, with whom the PES has a contract. Here, they can sign up for a training programme. Upon completion, the unemployed will receive a professional qualification or a professional development certificate, and will be put in contact with interested employers.</p>
<p>Local actions for vulnerable groups (Topeko) (Greece)</p> <p>Aim to mobilise local actors to create jobs and versatile and effective preparation for unemployed beneficiaries with varied aims: cover job positions in existing businesses; start a business that will benefit from the characteristics of their area; gain the qualifications to benefit from other investment programmes; or acquire skills that will meet real and identified needs of local businesses that will hire them. To promote the inclusion or return of vulnerable groups into the labour market, local PES connect their training programmes for vulnerable groups to local labour market needs through development partnerships (non-profit organisations in which public and private actors cooperate in the context of European cohesion funds).</p>

Springboard (Ireland)

Supports unemployed people returning to employment or self-employment by providing access to free, part-time upskilling and reskilling courses in higher education; it is specifically designed to meet current and future skill needs in Ireland. Springboard targets the unemployed at a higher education level and directly addresses high-unemployment rates resulting from reduced employment opportunities in shrinking sectors. The courses, which are offered by participating higher education institutions, link the need to build expertise in upcoming sectors (ICT, trade, finance and manufacturing) and to integrate those losing their jobs during the economic crisis. The skill needs assessment that informs the programme is based on research from the Irish expert group on future skill needs (EGFSN), in which employers are represented. With 40% of beneficiaries finding employment within six months of graduation, this direct link with labour market needs has proven successful (Springboard, 2013). At the same time, evaluation showed that Springboard would benefit from more personalised guidance, further tailoring training supply to individual demands.

Vocational education for adults offered by municipalities (Sweden)

Corresponds to the vocational programmes offered by upper secondary schools, allowing learners to follow a complete vocational programme or only parts. The programme targets adults without upper secondary education, as well as people who need a new route of vocational training. Skills anticipation analyses made by the employment service (*Arbetsförmedlingen*) and Statistics Sweden are used by municipalities and counties to support their work in designing the programmes *Yrkesvux* and *Komvux*.

Source: Cedefop.

A policy instrument in Slovakia offers training for the unemployed based on the outcome of a personalised skill assessment (Box 2). By providing individuals with an opportunity to complement their existing skills, the instrument aims to provide the unemployed with the means to achieve skills at a sufficient level to secure a sustainable job. The training is offered by the PES; even though such training does not lead to formally recognised qualifications, it provides (re)training in skills.

The instrument proved suitable to the Slovak context and, in particular, to the target group of those with low or obsolete skills/qualifications, who depend on PES in their job search and exploration of reskilling opportunities. Use of the instrument shows the need for effective cooperation between social partners in linking education and training with employer needs, particularly when targeting the unemployed. Employer involvement has proven a crucial success factor in harmonising training provision with the real needs and expectations of industry and agriculture in the regions.

Box 2. Slovakia: education and training for the labour market

For several years, projects have been developed to improve the labour market situation of the unemployed. Employers in Slovakia only have limited involvement in determining the needs for additional training. In response to this, and to identified shortcomings of a prior policy instrument supporting training for the unemployed, the Slovak Ministry of Labour, with support from the ESF, launched a revised training instrument between 2010 and 2013. This built on the results of the preceding project with similar objectives and mainly aimed to focus on improving the link with employers in assessing skill needs. To strengthen this link, the instrument was launched together with an internet guide for the labour market (also included as case study: Box 10).

Following a personalised skill assessment, conducted by initial guidance centres (operated by the regional PES), and making use of the methodology in the internet guide for the labour market (Box 10) upon registration, beneficiaries are guided towards targeted training addressing labour market needs, while taking account of their individual capacities and preferences.

The instrument offers its services mostly to the unemployed, but also targets employees who want to reskill themselves in a different field. Those unemployed registered with the PES can enrol in the programme while keeping their social security benefits.

Key success factors:

- (a) individual skill assessment and guidance by dedicated centres;
- (b) diversified approach to different target groups;
- (c) building on experience of previous project.

Key lessons:

- (a) intervention set up at local level with knowledge of specific local context;
- (b) successful employer involvement in skill matching initiatives.

Coordination of the instrument was at central level but the intervention was the responsibility of regional PES with their knowledge of local context, social partnership ties and sociocultural specificities. Cooperation between these different levels of governance was considered particularly successful. This did not only help the unemployed find the most relevant training, but also supported them in finding appropriate local job opportunities. Crucial to this were the intensive intake procedures, which included an extensive questionnaire, an assessment and a follow-up meeting. In this meeting, the PES selected the best possible option on a case-by-case basis. As one beneficiary put it:

'In my case, my advisor offered directly available courses and we were looking for something that would best suit both what interests me, and what is available around here [the region] where I can apply.'

Given the regional focus of each PES using the instrument, cooperation with employers was also regional, and resulted in regional differences depending on factors such as sector structure, the level of complexity of the industry, individual ties and the willingness and need of employer representatives to engage in public skill matching initiatives.

The participants in the training courses were positive about training focused on skills and competences with added value on the labour market. Such training was clearly preferred over more generic skills training, that was sometimes also included. The mixed feelings about these types of training are well expressed by one of the participants:

'I entered into a group with classes in office work and we have completed a course of communication and negotiation skills. I do not know if it was very useful for real work needs, but I certainly learned a few useful things that I can use in the interview with the employer: how to behave, how to talk, about what to talk, and how to ask for what interests me.'

Given the general nature of this instrument, no specifically interesting working mechanisms were observed that may be transferred to other contexts. However, this is mainly due to the fact that the characteristics of the initiative can be found in numerous other national instruments; it is generic enough for practically all of its elements to show significant levels of transferability.

Specific skills training for the unemployed was substantially reformed in Portugal, where, unlike in the Slovak instrument above, formal qualifications may be obtained. In the second semester of 2012, the shifting focus of the instrument followed the signing of a pact between the government and social partners. Before the pact, the unemployed were often merely registered in the PES to receive benefits, while they were not actively approached. Under the new approach, the PES and the Institute for Employment and Professional Training agreed to speed up the processes of diagnosis, referral and integration of the unemployed in targeted training actions, through which the needs of both the unemployed and of employers are taken into account (Box 3).

Box 3. Portugal: active life-qualified employment

Given the rise in unemployment rates registered in the late 2000s, and especially in 2009-10, the PES felt the need for greater focus on increasing employability and on combatting unemployment. This was done by providing the unemployed with the opportunity to learn new or develop existing skills, through modular training based on short training units complemented by on-the-job training.

Once the content of the training has been established, beneficiaries are referred to training providers. According to the profile of the unemployed, their interests and motivations, specific short training modules are selected and training groups are set up. The training modules selected must contribute to the acquisition or valorisation of the trainees' skills and make sure that these are relevant for the labour market. All training provided offers formal qualifications. The training modules can be combined, allowing an individual to create an individualised training programme, by complementing already completed modules with other training. The PES also strives to complement classroom training with on-the-job training. This combination was considered valuable by beneficiaries.

There are five types of training module:

- (a) specific technical training: acquisition of skills for a specific profession;
- (b) transversal technical training: acquisition of skills for different professions;
- (c) sociocultural training: acquisition of key skills that may contribute to an educational qualification (includes second language acquisition);
- (d) behavioural training: acquisition of soft skills in areas such as quality, health, safety and hygiene, and interpersonal relationships;
- (e) training in entrepreneurship: skills development mainly for self-employment.

Alternatively, for skills already acquired in previous employment or training, formally or informally, participants are invited to engage in a certification process, consisting of skills recognition, validation and certification. Upon completion, the beneficiary may be granted not only a professional qualification, but also an educational qualification. In any case, certification of skills – acquired or recognised – allows the unemployed person to demonstrate the skills and qualifications he/she possesses through a certified document to a future employer.

Key success factors:

- (a) short, domain-specific modular approach offering targeted training;
- (b) combination of training and recognition of prior learning (formal/informal);
- (c) combining learning with practical, on the job training.

Key lessons:

- (a) focus on the role of qualifications;
- (b) bring together recognition, validation and certification of skills, newly acquired or already present.

Thanks to the combination of training with recognition of prior learning, the 'active life' measure ensures that unemployed beneficiaries do not have to start training courses from scratch for skills they already possess. The instrument also shows the potential of personalised education and training measures. This is

important, particularly in light of the predominant logic held that access to the labour market was usually more associated with luck, chance and endeavour than with qualification and knowledge (Saint-Maurice, 2013); a long-standing characteristic of the Portuguese labour market has been that educational qualifications were treated with scepticism. Recent evaluation studies increasingly highlight quantitative achievements in terms of education and training and also indicate that youth and their families have started to internalise the value of education and training (e.g. Lisbon University Institute, 2011; National Agency for Qualification (Agência Nacional para a Qualificação), 2011). Despite the interesting and innovative character of this instrument in the Portuguese context, there is criticism from which clear lessons can be drawn. Beneficiaries interviewed for this report expressed doubts over the predominance of courses encouraging skills for setting up a business that were offered as part of the 'active life' instrument. Only a small percentage of beneficiaries will solve his/her unemployment situation through entrepreneurship and through business creation. While, it can give the final push for individuals already planning to start a company, for most others it is hardly more than 'interesting knowledge and experience', or as one of the interviewees puts it:

'I find it hard to believe that someone without an idea for a business will, suddenly, create such an idea just because of the training. It is even dangerous, this hysteria around entrepreneurship, that now we must all be entrepreneurs.'

However, a broader focus on entrepreneurial skills, beyond the mere creation of one's own business, could also be useful for those who will continue looking for a job as employees by inducing entrepreneurial attitudes.

Another relevant point is that, even though this instrument contributes to skill matching, the objective is to increase employment. At the beginning of this chapter the potential 'lock-in effects' for beneficiaries were discussed; these can impede the 'results' of a training instrument if the focus is only on creating access to employment. From a skill matching perspective, however, locking-in is not necessarily a problem, as a finished training programme should provide new skills and make way for new career opportunities, at least in the long run. This Portuguese instrument tries to minimise the risk of locking-in, by requiring that a learner discontinues the training if he/she finds employment in the meantime. The instrument thereby runs an opposite risk, which is problematic from a skill matching perspective; without achieving a qualification before starting employment, the sustainability of employment and future job mobility may be undermined.

Despite the criticism, this Portuguese instrument has elements that may be transferred to other contexts. Most important, the possibility of supplementing formal qualifications with certified skills gained through informal learning is relevant for contexts where a significant proportion of the unemployed has low qualifications. By opening up and encouraging processes of recognition, validation and certification of skills, this instrument contributes to more adequate use of existing or potential skills available in the workforce.

The key components here that are interesting for policy-makers and programme developers are the recognition of prior experience and the certification of skills acquired during the modular training. To date, PESs in most Member States have been reluctant to introduce such components in their training. However, due to the paradigm shift towards leaning outcomes and qualifications frameworks, broader rethinking across the EU can be observed. It is therefore, not surprising that countries which are forerunners in implementing qualifications frameworks and recognising prior learning, also make use of these instruments in recognising skills in their ALMP measures.

2.2.3. Training for the unemployed in specific skill shortages

The policy instruments presented so far all seek to equip the unemployed with skills addressing labour market needs. This section presents instruments that specifically provide skills for which shortages have been identified (Table 4).

By providing specialised training for this target group, these instruments seek to prepare individuals for hard-to-fill vacancies, opening up labour market segments for groups that would not be able to enrol in specialised courses without the programmes. They offer a direct and explicit approach to combating skill mismatch that incorporates both supply and demand side perspectives.

Among the instruments identified (Table 4), some are particularly tailored to local labour market needs, often targeting a specific local sector. A common element of these instruments is that the PES supports beneficiaries while collaborating closely with relevant economic sectors; such is the case in Spain and Northern Ireland.

Table 4. Instruments training the unemployed in specific skill shortages

<p>SAP certified development associate-ABAP with SAP Netweaver 7.31 (Spain)</p> <p>Offers training courses in SAP technology. As response to the industry demand for computer programmers with skills in the SAP programming language, local PES offices across Spain offer training to the unemployed to upgrade or obtain individual skills.</p>
<p>Integrated pathways to employment (Spain)</p> <p>Provide targeted training courses to the unemployed in Barcelona. The focus of the training programmes is on skills that are important for the socioeconomic development of Barcelona, such as new technologies and environmental skills.</p>
<p>Cloud academy (UK-Northern Ireland)</p> <p>Offers a 21 week training programme to provide the unemployed with the skills and experience required to take up new opportunities in the IT industry. Employers increasingly identify cloud computing as a critical area of growth in the ICT sector. While the PES funds the programme, the training itself is delivered by employers. Because of this close link between companies in need of staff with specific skills and the local PES, graduates can substantially increase their chances of finding employment.</p>
<p>Fit4Finance (Luxembourg)</p> <p>A pilot for the larger programme Fit4Job in Luxembourg. This pilot is aimed at people who had jobs in the financial sector who are monitored and invited to improve their employability. A diagnostic session is followed by specific training developed for the sector and through collaboration with professionals from the sector to ensure the requirement of the sector and the job seeker concerned are met.</p>
<p>Redundancy action scheme (UK-Wales)</p> <p>Offers support to increase skills and remove barriers to learning, or returning to work. To ensure that this training provides the best possible chance of finding new employment, employer and beneficiary are involved from the start of a programme. Both sides are supported to gain awareness of skills needed.</p>
<p>Training subsidy scheme for academic courses (TSSA) (Malta)</p> <p>Provides subsidies up to 75% of the costs for selected training courses for Maltese citizens over the age of 21; these may be young people or job seekers. The selection of these training courses is determined by whether there are skill shortages. In 2014, the two subject areas for the TSSA schemes were digital media (software development and/or gaming) and financial services. The courses taken must be recognised by the Maltese qualifications framework and be referenced to level 5 or higher.</p>

Source: Cedefop.

Collaboration between sectors, unions and the PES, also enables assessing the skills of individuals and subsequently determining how these skills can best be put to use, or where such skills are most wanted within the sector. This approach has been successful in the Luxembourg banking sector and its features inform the development of a similar approach to dealing with redundancies in construction and engineering. This highlights that knowledge gained through these types of experiences is vital, because it reveals the potentials and limits of the transferability of occupational skills. Through substantial retraining programmes, sometimes certain job-specific skills unexpectedly turn out to be transferrable to other jobs. Knowledge of the transferability of (alleged) job-specific skills, as well as of the effort it takes to retrain people skilled in one job to do another, is key, because it enables more efficient retraining. Therefore, it is important to collect, safeguard and share such knowledge in Europe.

A drawback of several of the identified measures is that they tend to be quite limited in number of beneficiaries. This type of training often requires that a learner already has a specific background, implying that it often cannot be expanded beyond a relatively small target group. By not presupposing prior experience and offering training in skills (in need) at different levels, some promising measures aim to avoid this disadvantage. In Wales, the training offered can build directly on an individual's existing skills and focus on types of skill that are immediately (or in the near future) relevant for the labour market. An initiative promoting employment in the care sector in Austria recruits individuals without requiring prior experience (Box 4).

The Austrian 'ways into nursing' instrument contributed to meeting its objective of integrating the unemployed into the sector: the dropout rates in this qualification programme are lower than in comparable programmes and employment rates are significantly higher after graduation. Participants were generally quite satisfied with the programme and their job situation and many were motivated to engage in further training after the programme. There was a substantial incentive to enter the programme as participants were guaranteed a job in the care sector after graduation. Intergenerational learning is stimulated through age-diverse training groups in which younger participants benefit from the experience of older ones. The instrument has become a vital recruiting tool for the nursing and home care labour market in Vienna. It is particularly useful that training is provided for a range of occupations in the sector, each with different skills required, which allows beneficiaries to enter training at their level and subsequently find employment that matches their skills.

Box 4. Austria: ways into nursing

The approach of this local instrument is to match better local demand in the health and elderly care sector in Vienna (Austria) to the pool of registered unemployed adults. It aims to satisfy growing demand in the care sector, by raising the attractiveness of employment and by bringing low-qualified unemployed into care and nursing.

This challenge is addressed by funding the qualification of unemployed adults suitable for and interested in the health and care sector, and by bridging institutional gaps between responsible stakeholders (PES, training and employers' organisations). The dedicated 'placement' foundation is the organisational framework for these efforts.

In 2009-11, around 1 750 people took part in training in care and social work; nearly three-quarters of them completed it successfully. The participants were of varying ages, ranging from individuals having recently entered the labour market to those already nearing pension age. A substantial employment effect was found for the specific skill training. Taking all participants and types of training into consideration, average employment amounted to 8.7 months per year (2012). In comparison, before receiving the training the beneficiaries worked 130 days less per year on average. The employment increase can be fully attributed to the training measures. After successful completion, the three-year effect (the employment effect in the three years following the training) is an additional 669 days in employment. Without successful training completion, the three-year employment effect is an additional 344 days in employment. Training and job satisfaction were high. Approximately one third of the group (especially younger people) had plans to participate in further training to become care assistants or even registered carers.

Key success factors:

- (a) multistep system at several qualification levels;
- (b) specified learning pathways;
- (c) job guarantee;
- (d) mix of different age groups.

Key lessons:

- (a) opening up new target groups (low qualified) for skill shortage sectors;
- (b) specified institutional learning pathways for PES clients.

An important success factor is that the training institutions provide substantial financial support, particularly in comparison with other continuous vocational education and training (CVET) instruments in and outside Austria. This is important given that the approach is currently being broadened to other sectors, such as hospitality (hotels and restaurants) and trade. The Austrian instrument was also found to be successful because the relevant institutions were working closely together with the municipality of Vienna. Both the institution that supported beneficiaries and the organisation providing training and representing employers were assigned to the same political unit in the

administration, to ensure the stability of these institutional links. As a result, diverging interests between stakeholders were scarce; if they occurred, they quickly dissolved at political level. Further, employer and employee interests have been aligned from the start. Another important success factor is that all participating actors benefit from the measure. The trained unemployed receive a qualification and a job guarantee, while future employers are supported through tailored personnel recruitment and training measures, as well as demand- and workplace-based training for future staff. This is not necessarily the case in other contexts. Problems can be expected in identifying the need for specific skills demand in a situation with diverging interest among employers and less definite occupational profiles. Such issues will have implications for the instrument's transferability.

2.2.4. Training in firm-specific skills for the unemployed in/by companies

Upskilling the unemployed to meet specific skill shortages can also take place through in-company training, which is discussed separately in this section. If such instruments are to be successful, it is necessary that employers do more than merely indicate their skill needs. Their active involvement is needed to equip individuals with the right skills, often in combination with an employer investment to create meaningful training, either financially or through human resources. The success of these instruments, therefore, depends largely on cooperation between the unemployed individual and the employer, but even more crucially between the PES and the employers. Such cooperation is also crucial to avoid that the trainees only develop purely firm-specific skills, rather than skills that can be used elsewhere or; an even better outcome is to receive certificates that demonstrate their skills. For effective in-company training of the unemployed, a context needs to be created in which the interests of both are taken into account.

The impact of the economic crisis is important. As this type of training requires employer investment, many programmes across the EU faced a reduction in the number of available positions when employment levels dropped. Despite this, Member States have developed policy instruments supporting in-company training to counter the effects of the economic crisis (Table 5).

After an overview of instruments offering in-company training for different groups of unemployed individuals, several instruments that specifically focus on young people are discussed. It is relevant to make this distinction, as the requirements set for employers by the PES are generally different for each target group. Employers are often relatively free in providing training to young persons who recently graduated; whether or not they are hired after the training is often not specified and left to the judgment of the employer. For the long-term

unemployed, however, stricter guidelines were found, for instance requiring employers to hire the trained individual for a period of time after the training.

Table 5. **Examples of instruments upskilling the unemployed by in-company training**

<p>Companies for job training (Belgium, Wallonia)</p> <p>Prepare young job seekers and students with general and technical training for a given profession. Through productive work at a company, coupled with individually tailored social and/or psychological support, students and young job seekers are trained in the necessary and relevant skills to prepare for their desired profession in a real work setting. This instrument strengthens the link between training and work.</p>
<p>The apprenticeship and craft jobs initiative (Italy)</p> <p>Aims at promoting the training and job insertion of around 20 000 young unemployed people in the traditional craft and manufacturing sector. This is done by:</p> <ul style="list-style-type: none"> (a) 16 480 apprenticeship contracts for hiring young unemployed; (b) creation of 134 workshops (<i>botteghe di mestiere</i>) for on-the-job training of the unemployed; (c) up to 1 000 firm transfers (<i>trasferimenti d'azienda</i>) with the purpose of transferring the heritage of skills from old entrepreneurs to young entrepreneurs; (d) 3 000 traineeships for NEETs living in the four convergence regions.
<p>Momentum (Ireland)</p> <p>Consists of a number of projects aimed at improving the employability of the long-term unemployed. Participants receive training in areas with recognised skill shortages where existing vacancies have been identified. The projects include an element of on-the job training in the form of work experience modules as well as development of skills required to obtain and retain employment. The initiative funds the provision of free education and training projects to allow 6 500 who have been unemployed for 12 months or longer to gain skills and to access work opportunities in identified growing sectors. Momentum is an initiative supported by public funding, delivered in partnership with both public and private education and training providers that work closely with local employers. The instrument includes specific projects targeting individuals younger than 25, but is primarily for the wider target group of longer-term unemployed. Its focus on sectors with current or future shortage shows how instruments for the unemployed can be used to mitigate skill shortages in certain sectors or occupations.</p>
<p>JobBridge, the national internship scheme (Ireland)</p> <p>A government initiative designed to offer job seekers who receive a job seekers allowance/job seekers benefit/one parent family payment/disability allowance or signing for social insurance contribution credits for at least three months (78 days) the opportunity to enhance their current skills and develop new ones. Individual internship positions last six or nine months. While the individuals can continue to receive social benefits,</p>

employers are requested to pay each an additional €50 per week. A total of 22 138 placements have started since launch of the scheme in July 2011, evidencing its popularity. The instrument itself does not define skill needs: this is left to the employers, who are asked to advertise positions on a dedicated website. It is assumed that employer responsibility for the internships leads to an offer of relevant positions and therefore, contributes to skills development in line with labour market needs.

Placement foundation – ways into nursing (Austria)

Brings together (by funding) unemployed persons and companies willing to educate them and, in consequence, receive financial support. The project involves the development and implementation of individualised (re)integration processes by offering a broad package of supportive measures. These include career guidance, various training measures, active job search support and work experience programmes. In general, the placement foundation places unemployed people with appropriate qualifications into available jobs. Training can involve an apprenticeship programme. If a company volunteers to participate, it can make a final selection from candidates. At that stage, a training plan is prepared, including training provided by external training providers as well as theoretical and practical training in the company. After this, participants in the project get an employment contract.

Source: Cedefop.

The instrument introduced in Belgium (Flanders) clearly shows the dilemma of balancing the different interests in skill matching policies when directly involving employers. As the longer-term unemployed were sometimes part of the 'regular' and sometimes of the 'curative' measure, employers often had negative perceptions about the individuals in the 'curative' variant, and were not always inclined to participate; they perceived the 'curative' variant as a 'last resort' for these individuals. Employers were hesitant as the curative variant also includes the requirement to offer the individual employment for at least the duration of the training. This shows how a dedicated approach to more difficult target groups within an existing instrument may not always yield the desired results.

In Finland an innovative approach within national labour market and social policy creates employment and education opportunities through a so-called intermediary labour market (Box 6).

Box 5. Belgium (Flanders): curative individual training in enterprise

The 'individual training in enterprise' (*Individuele Beroepsopleiding*) has been a central active labour market instrument in Flanders for a long time. It consists of an individual assessment by the PES of the skill-gap of the unemployed, which is the basis for a training plan drawn up in collaboration with a prospective employer. Subsequently, a training/working programme is offered, which may last up to six months.

Employers are generally aware of the instrument and, if they hire a candidate eligible for it, they approach the PES to start the assessment and develop the training plan. Part of the instrument is an obligation for employers to hire the candidate at least for the duration of the training. The instrument compensates the employer with a so-called 'productivity-contribution', which lowers wage costs while giving the beneficiary valuable professional experience in the company.

In 2009, in response to the economic crisis, the instrument was also used for a curative training in enterprise, particularly targeted towards vulnerable groups that were unemployed for at least a year (younger than 25), or two years (older than 25). In this 'curative' version of the instrument the role of the PES is more prominent to ensure the training (which can be extended to one year) is tailored to individual needs. It is now the PES which actively approaches companies to find places for the long-term unemployed.

Key success factors:

- (a) minimum period of employment for beneficiaries;
- (b) individual assessment linked to training plan;
- (c) combination of training by employer and PES.

Key lessons:

- (a) encouraging role of employers by using incentives;
- (b) bringing together recognition, skill assessment and subsequent training plan.

It was considered particularly successful that the intervention included all three steps; a supported job to start from, a suitable education track, and subsequent support in finding a 'normal job'. Stakeholders and beneficiaries indicated that the step from the intermediate labour market to normal labour markets was difficult for many people and therefore required additional support in the form of individual counselling. The results (e.g. in healthcare 30% found 'regular' employment directly after the intervention, and an additional 31% in the first six months after) indicate that the role of public employers cannot be underestimated. In Finland many of the positions sought and counselled for are public jobs, and therefore, increase the scope for local government to take action.

Box 6. **Finland: project *Välke***

Välke was a locally organised project in the Tampere region. It was created to find solutions to help people find a permanent job. The rationale for the project was the persistent high unemployment rate in the Tampere region. The *Välke* project was a collaborative effort of the city of Tampere and the Tampere unemployment office. It was originally planned to run from 2008 to 2012, but thanks to its success, the unemployment office was still involved until end 2014.

The approach was to combine different unemployment measures in a new way to better support the long-term unemployed. The key idea is to provide learning at work, thereby aiming to bring together the needs of individuals and the possible employers. This is done by a tailored 'service package' including a supported job (on the intermediate labour market), an education track related to that job and individual career coaching. All these services were combined to ensure effectiveness. The counsellors that assisted the individuals were aware of local skill needs, and were specifically instructed to investigate how the skills of unemployed persons could be improved to meet the needs of the local labour market.

At the core of the services is the local unemployment office providing the unemployed with a supported job and a suitable education track. Once the job was found, the education coordinator helped the person find a training provider and a suitable training course.

Key success factors:

- (a) combined tailored 'service package' including a supported job, education and individual coaching;
- (b) focus on skill needs of local labour market.

Key lessons:

- (a) three step approach: from supported job, to education, to a 'normal' job;
- (b) role of public employers in the project;
- (c) taking specific needs of employers seriously.

Other key success factors are a tailored approach to supporting the long-term unemployed by bundling multiple support instruments in one package and taking into account diverse employer needs (small and larger companies, public and private). The municipality (an important and large employer) played an important role, but local PES officials also provided support to smaller enterprises in the region by taking care of the documentation to apply for ESF funding. This shows that by taking the needs of stakeholders into account (particularly, small enterprises with little capacity to deal with ESF application and reporting requirements), the impact of the instrument can be amplified.

Internship schemes offer another way to contribute to upgrading individuals' skills. Internship programmes often target young graduates who do not yet have professional experience but sometimes these schemes are open to broader target groups. While the last part of this section focuses on schemes that target

young people specifically, a number of instruments for broader target groups will be discussed first. In Ireland, for instance, a national internship programme dedicated to the unemployed was created to upgrade professional skills, without providing an age limit or education minimum. It focuses on job seekers who are receiving social benefits for at least three months and it offers them the opportunity to improve current skills and develop new ones. Through this programme, individuals have the chance to get closer to the labour market and explore employment options in a new sector, without the difficulties of a demanding recruitment process.

Internship programmes are also a key approach in Portugal (Box 7), which currently faces alarmingly high levels of (youth) unemployment. Substantial reforms were introduced in national internship programmes in response to the unemployment situation. These reforms brought a number of existing instruments for young people and the unemployed together into one. As part of the operationalisation of a plan in line with the European recommendation on a youth guarantee, the PES aimed to make available labour market activation and integration measures for young people to avoid long-term unemployment. However, the instrument is not limited to young people, and extends to unemployed disadvantaged groups.

Similar to other in-company training or internship programmes, the focus of the Portuguese approach is also to bring the unemployed closer to the labour market by developing a set of relevant skills in a professional environment. A crucial element for this instrument is the shared funding made available by the PES: without a clear financial incentive to employers to participate, in the current economic climate, enterprises would not be likely to offer large numbers of internships. At the same time, the success of the instrument also depends largely on the motivation of candidates, especially now that the instrument has been opened up for beneficiaries older than 30, as expressed by a company representative:

'The person must prove him/herself, otherwise we will not want him/her to stay in the company, not even if we do not have to pay anything from his/her salary.'

Box 7. Portugal: employment internships

Employment internships aim at supporting the transition of the unemployed (youth and others) into employment, complementing their existing skills through training and practical experience at the workplace. They aim at improving the qualifications and skills of unemployed young people, as well as of those unemployed in a situation of particular vulnerability, regardless of age, to promote their employability and support transition between the qualification system and the labour market.

Beneficiaries are entitled to a monthly grant during the 12-month traineeships, which is covered up to 80% (percentage depending on the beneficiary's qualification level) by the PES. The complement is paid by the employer. There are various ways in which the match between individuals and employers can be organised: the applying company has to make an application for support under the instrument, which can be done through the PES; the advertisement of the position by the PES to which eligible candidates may apply; or through an advertisement from the company. Internships can be offered by private bodies (for profit or not-for-profit), local, regional or metropolitan authorities, private companies and companies from the State business sector. The PES does not limit applications to specific sectors or jobs.

Key success factors:

- (a) shared funding by PES of wages to support labour market integration;
- (b) integration in wider scheme of social benefits;
- (c) long internships of 12 months.

Key lessons:

- (a) short, standard time of handling applications by authority necessary;
- (b) importance of building skills through work experience;
- (c) through integration of different benefits, support transition to 'normal' employment with same company after internship.

A factor that contributed substantially to the long-term effectiveness of the measure is that enterprises benefiting from the support were also entitled to receive compensation under another programme to hire the young recruits, once the internship ended. As interns remained registered with the PES throughout the duration of the internship, enterprises were entitled to the same benefits as when recruiting an unemployed individual. Even though the net result for the labour market may be the same, the outcome in terms of skill matching is much more favourable. Some employers, however, indicated that, in the 2013 round, application processing by the PES often required too much time and varied substantially. This led to problems, both for companies involved and future interns, as they would not know when their internship applications would be approved. Although it is recognised that some variability in processing time is unavoidable, too much uncertainty makes planning very difficult.

The instrument was popular; between June and December 2013 it supported nearly 36 000 internships. Nearly 70% of the interns were in employment nine

months after completing the internship, around 45% in the same company and roughly 24% in other companies. As almost two out of three beneficiaries had higher education (64%) and two out of seven (28%) had upper secondary education, the instrument did not reach out as much to vulnerable groups as it aimed to do at the outset (Costa Dias and Varejão, 2012).

Interviews with interns evidenced that they gained a set of skills that they did not, or not yet fully, possess, which can only be obtained through work experience. A company hosting 50 to 60 internships interviewed for this case study indicated its satisfaction with the instrument: the share of those staying in the company as regular employees after the traineeship was very high, except in only in two or three instances. The share of funding is usually 80% while companies only contribute the remaining 20%; when transferring the instrument to other contexts it may not be possible to keep the same funding arrangements. Another issue that potentially limits direct transferability is the 12 month duration of the internships. Depending on the national context, this may need to be reduced.

In-company training instruments as a means to upgrade skills of the unemployed are found in several Member States. Particularly in the face of the high youth unemployment and the policy developments under the European youth guarantee, a range of other instruments provide in-company training in the form of apprenticeships or more loosely defined training engagements supporting companies to hire young unemployed (Table 6).

These instruments, which each provide some type of incentive for employers to hire and train young individuals, aim to equip young people with practical training and working experience to increase their chances on the labour market. Instruments exist both for individuals with lower educational attainment (see the Estonian or Italian example), while other Member States have specific measures for higher educated unemployed individuals. This diversity of approaches should be seen from the perspective of varying challenges for young persons in each Member State. In some Member States more higher education graduates enter the labour market than the labour market requires, while shortages exist in occupations which need more specific vocational skills. Other Member States face different challenges. Flexible policies are needed for youth, taking the specific needs of this diverse target group into account, seeking to bridge the gaps between the skills they have and labour market needs. Such variation in requirements shows the importance of tailored – yet targeted – policy instruments that concentrate on the specific challenges that face young people when entering the labour market.

Table 6. Instruments with in-company training targeting unemployed youth

<p>Career start (Bulgaria)</p> <p>Addresses the gap between the world of education and that of work. It aids the transition between education and employment by providing an opportunity to gain work experience. The programme targets unemployed university graduates aged up to 29 without work experience who are registered at the labour offices. They are given the opportunity to gain experience in public administration (i.e. national institutions, regional and local administrations) for nine months. The Minister for Labour and Social Policy sets annual quota for the job placements.</p>
<p>Work practice (internship) schemes (Estonia)</p> <p>Help improve the skills and competences of unemployed young people to help them find stable employment. This programme is well suited to reducing skill mismatch by allowing employers to train potential employees in line with specific company needs, and to provide youth with a first period of work experience.</p>
<p>The apprenticeship and craft jobs initiative (Italy)</p> <p>Aims at promoting the training and job insertion of around 20 000 young unemployed people in the traditional craft and manufacturing sector. The instrument consists of apprenticeship contracts, crafts workshops, and targeted traineeships for young people not in education or training. Additional efforts focus on promoting and strengthening cooperation between public and private actors in the labour market.</p>
<p>The scheme for job placement and training of tertiary education graduates (Cyprus)</p> <p>Provides practical on-the-job experience in a company for maximum 12 months to highly qualified young people to integrate them into entry-level management positions. The instrument contributes to enterprise competitiveness as it encourages the employment of young qualified persons who will later become key staff members.</p>
<p>Pre-employment contract and work experience (Luxembourg)</p> <p>Provides practical training and work experience to young people at a company to prepare them for the labour market. This instrument is built on an existing programme introducing pre-employment contracts, and focuses on practical work experience. The pre-employment contracts may last between 6 and 24 months; at the end, trainees obtain a work certificate as proof of their experience. A designated person in the company assists and guides the young person. Participants are paid between 120 and 150% of the minimum wage depending on their qualifications.</p>
<p>Training and apprenticeship contract (Spain)</p> <p>Targets young people aged between 16 and 25 (temporarily the upper age limit is extended to 30 as long as the unemployment rate stays over 15%). The training is either given at a PES training centre or at the workplace if the company has the necessary facilities and personnel. Work carried out by trainees at the company must be related to the training activities.</p>

Source: Cedefop.

2.3. Career guidance for the unemployed

By informing and guiding job seekers in the direction that links their skill profiles to labour market demand, PES – and their policies – play an important role in skill matching. Meta-evaluations (de Koning and Peers, 2007) indicate that career guidance is generally one of the more successful employment policies (also Heyma and Van der Werff, 2014), so it is no surprise to find many career guidance instruments for the unemployed across the different Member States (Table 7). While providing guidance is a relatively traditional way of supporting the unemployed, in recent years innovative approaches have been developed to tailor it better to individual needs. There is a trend toward competence-based and learning-outcomes-oriented approaches, to more personalised or individualised guidance, and to more effective and user friendly ICT applications.

Substantial progress towards skill matching can be achieved through innovative instruments that pay attention to the skill potential of an individual and the skill needs of the (local) economy. When effective, such targeted assistance may also directly alleviate high pressure on sectors facing current or future skill shortages.

‘Competence-based matching’ in Flanders illustrates how a public authority can support matching the skills of individuals with vacancies (Box 8). It assists the unemployed, or individuals in the process of reorienting their professional life, in identifying possibilities that link to their unique profile of professional skills. When individuals create their user profile and indicate their professional experience, the web application automatically lists the skills linked to previously held positions (as defined by the Flemish Social and Economic Council (SERV)), and allows other skills to be added or removed. Linking the profile to the vacancy database, the application produces a list of potential employment opportunities that mostly match the individual’s skills and an overview of targeted training options. Given the key role of the Flemish PES in education and training for the unemployed (as compared to PES in other Member States), using this instrument helps target skills training for unemployed to exactly those skills in demand by the labour market. The instrument appears successful: many vacancies and registered jobseekers are registered on the website, and there is a growing interest in joining the project among private providers of vacancy databases.

Table 7. **Instruments supporting guidance for the unemployed**

<p>Individualised guidance FOREM (Belgium-Wallonia)</p> <p>Offers guidance for the unemployed by an individual counsellor. Working with this counsellor, the unemployed person decides which type of training is necessary for his/her desired profession. FOREM (Walloon PES) offers training, labour market analysis, job services and information. This ensures that job seekers receive thorough orientation on the labour market and personalised help in their job search as well as training to find the most suitable employment given their (improved) skill set.</p>
<p>National mobility centres (the Netherlands)</p> <p>Public-private collaborations with a regional or sectoral focus. They were originally established to help employees at risk of unemployment find a different job but, over the years, their service provision has shifted more towards assisting the unemployed to find employment using their local labour market knowledge. Given its history, these centres have close ties with employers, which is beneficial for the services it provides.</p>
<p>Partnership action for continuing employment (PACE) (United Kingdom-Scotland)</p> <p>Ensures that local public sector agencies respond to potential and proposed large-scale redundancies as quickly and effectively as possible. The partnership helps to prevent unemployment, but also ensures that those laid off as a result of the crisis can retain or improve their skills. National and local response teams were set up to provide tailored help and support and to identify training solutions where appropriate.</p>
<p>House of orientation (guidance centre) (Luxembourg)</p> <p>Guides young people in their search for employment by assisting with the school-to-work transition. It brings together staff from different organisations and includes guidance counsellors and socio-professional personnel. The combination of these two types of staff is essential for success. Individuals get personal support through training, employment, or until an occupational solution has been found. Where, for some individuals, the counsellor would concentrate on remedying the lack of important skills, for others the focus could be finding the right opportunities for employment. There are several houses of orientation, each with their own specific focus, including youths specifically, those wishing to study at university, or those who are new in the country.</p>

Source: Cedefop.

Box 8. Belgium (Flanders): competence-based matching

In cooperation with the main social stakeholders, the Flemish PES (VDAB) launched 'competence-based matching' under the competence-alliance in 2010. The vision was to set up a more precise process to match the skills of the unemployed to labour market needs. The main visible output of the instrument is a web application with the primary function of a vacancy database.

However, most interesting is the operating mode of the web application. The SERV developed a skills database, which included a precise list of skill needs for most occupations in Flanders. The matching tool requests jobseekers to indicate their skills profile: a personalised suggestion is made based on previous work experience – again linked to the SERV occupation database – and education background. The application links this to the skills requested for a certain vacancy. This is unique as it goes beyond qualifications (either formal or informal), and aims at matching the skills of an unemployed individual with those required for a vacancy.

Website users receive a matching-score in relation to an existing vacancy, in contrast to previous matching approaches based on keywords and the like, which only showed complete matches. Because of this, vacancies which do not fully match the individual profile also show up, along with suggestions of possible trajectories for personal development. The philosophy of the tool is that vacancies can be relevant for a person who already has half or more of the required competences.

Key success factors:

- (a) usability and simplicity for end user;
- (b) practical application of skill matching approach, developed in collaboration with labour market stakeholders;
- (c) possible link with private vacancy databases.

Key lessons:

- (a) include skills approach in job search, job applications and identification of training needs;
- (b) combine training provision with a skill matching approach;
- (c) provide intuitive and simple-to-understand tools to ensure that end users will work with them.

It could be asked whether the skill matching component on the website is used as much as the PES itself. Some may use the tool the same way as any other vacancy database, to look for jobs in the region, without paying too much attention to the skills element. Caution is also advised if assuming that employers suddenly change their recruitment behaviour and completely focus on skills. When employers have vacancies, it is often much easier to 'reproduce' an old vacancy text rather than to sit down and precisely define the exact combination of skills needed. Companies indeed indicated that it was quite challenging to change the recruitment routine towards 'competence-based' thinking. However, a preliminary analysis by the PES of the content of the vacancies uploaded by

employers shows that they do not copy the set of default skills; many seem to make a deliberate choice for the sets of skills requested.

A success factor for this instrument is the focus on skills; this only became possible through collaboration between social partners who delivered the input for the occupation profiles with the skills required for the matching and supported the development of the system. It also shows how skills, instead of formal qualifications, can be the central building block of a matching tool for individuals looking for work and further education or training. The system also provides opportunities to increase European mobility among the unemployed, as its skills profiles link to the international standard classification of occupations (ISCO) (and in the future also European classification of skills/competences, qualifications and occupations (ESCO)) standards. Theoretically, it opens up the possibility that sectors facing shortages in skills in Flanders can provide employment to jobseekers with the right skills outside Belgium.

An online tool was developed in Slovakia to assist jobseekers in finding employment that fits their individual skill profile (Box 9). It is similar in many respects to the Flemish 'competence-based matching' and also provides a skill matching mechanism. Similar to the tool used in Flanders, there are some concerns that end users may not be using the full functionality of the instrument as it requires a relatively active attitude towards job search. The relevance of the instrument may be low for particular vulnerable groups and additional personalised career guidance by the PES may be required.

Box 9. Slovakia: online guide to the labour market

The internet guide to the labour market (IGLM) is an online database and an interactive user-oriented tool that provides skill diagnosis and skill matching services to user groups through a combination of several interrelated functionalities. The elementary approach is based on creating multi-aspect connections between individual skill profiles, generic descriptions of occupations, and specific descriptions of jobs offered by employers.

The ultimate objective of the matching tool is to bring job seekers and employers together, based on a skill profile matching that needed as closely as possible. It is shaped by the methodology of the IGLM as well as the national register of occupations (and, in the future, the national register of qualifications). The database also includes data from other (commercial) databases of job postings, after processes the information in line with the methodology, and represents the largest national repository for job search.

A key feature of this instrument is that it actively seeks to encourage job seekers and employers to contribute to the skill matching and to maximise the potential of the skill/competence-based approach in job search processes. Another important element is that it is not developed in isolation but in connection with other policy measures and mechanisms, including the national register of occupations, and so allows for further developments in the future.

Key success factors:

- (a) online offer as part of comprehensive policy approach;
- (b) integration and combination of multiple data parameters;
- (c) skill/competence-based approach.

Key lessons:

- (a) methodology for a skill matching mechanism between job seekers and employers;
- (b) online access to offers embedded in a comprehensive policy approach.

This was also confirmed by end users interviewed as part of this study; most needed help from counsellors at the information and guidance centres to build up their profile. One user said:

'Honestly, I was a bit lost in the system. It's pretty complicated. For every job there is a lot of information. A lot of good information, for instance, it tells you the average wage for a job. But in general, I think the system has too much information.'

The involvement of social partners in the development of this tool (primarily employers, but also labour unions and other stakeholders) was not just an advantageous factor but a condition *sine qua non* as they play a key role in defining the occupational profiles in terms of qualifications, skills and competences required. Apart from that, the instrument is a success because it is

in line with broader skill policies, such as the development of the Slovak national register of occupations and the national register of qualifications.

In contrast to the Slovak and Flemish instruments, which predominantly focus on finding the right job (based on skills), a web portal in the Czech Republic concentrates on providing information to plan short-term education or training targeted at finding employment (Box 10). It serves as a quick guide to finding the right additional CVET qualification for vacancies and has been developed in response to the dynamics of skills demand that traditional initial education and training systems cannot sufficiently address. The combination of skill shortages, increased labour market dynamics, and accelerated development and practical application of new technologies and production methods, inspired the development of this instrument.

To make the portal a success, employers (employers' associations and/or market leading businesses and enterprises) were substantially involved through sector councils and asked for input for the portal. Involving employers contributed to ensuring support from employers for the instrument and the particular type of short 'vocational qualification' and has resulted in a web-portal with relevant information. This is important, as some stakeholders still have doubts about the concept of partial qualification, which has only recently been introduced. For that reason its name was changed from partial qualification to 'vocational qualification' in 2012.

The portal appears quite effective in achieving its objectives. Users (such as people seeking to be requalified and structured career builders) are predominantly positive with particular praise for the portal's helpfulness in simplifying the complex system of the national framework of qualifications in a user-friendly and intuitive way. Portal users confirmed that effective self-assessment of skills helped them to gain a new qualification by directing them to adequate courses and helping them to find 'vocational qualification' examination and certification opportunities. The new qualification also enabled successful job search.

In addition to such ICT tools, which prove helpful for many end users, Member States also continue to develop their more 'traditional' support services. In the Netherlands, mobility centres – sectoral collaborations between employers and authorities – help the unemployed explore whether working in a certain sector (often those sectors with current or future shortages) would be an option. Scotland set up a PACE in response to the effects of the economic crisis, through which it ensures that local public sector agencies respond to potential and proposed large scale redundancies as quickly and effectively as possible.

Box 10. Czech Republic: 'education and work' web portal ⁽⁸⁾

The web portal was established as part of the reform of education and training policies. The rationale for the reform was to strengthen the development of relevant skills and competences in the education sector and to ensure that individuals are better able to discover, validate and further develop outcomes of prior learning. The instrument seeks to provide different stakeholders with online access to an overview of newly introduced short vocational education programmes ('vocational qualification' (VQ), formally called partial qualifications, Box 19) in combination with current vacancies. Users are guided through a matching process to these vacancies and – where necessary – made aware of the steps needed to gaining and use a VQ. The approach is based on four sequential steps:

- (a) defining an individual skill shortage/mismatch;
- (b) finding an adequate training course;
- (c) gaining a corresponding VQ;
- (d) finding a job offer where a VQ is required.

The tool links existing vacancy databases to information on training courses, providers, and generic occupation overviews. It intends to create practical individual pathways to benefit from the possibilities of the national qualifications framework. Through user self-assessment, using the skill descriptions found in the vocational qualifications, and by suggesting possibilities for gaining a vocational qualification that is purely skill/competence-based and matched to labour market needs, the instrument matches skills with jobs (and the other way around).

In April 2014, the portal had around 10 000 registered users who were provided with around 20 000 job offerings linked to almost 800 generic professions, 2 000 training courses and about 500 vocational qualification exams.

Key success factors:

- (a) involvement of employers in the design of the instrument;
- (b) developed in combination with another relevant instrument: 'vocational qualification';
- (c) integration of complex information into an easy-to-use system.

Key lessons:

- (a) online 'easy access' portal for individuals to look for skill matching with training and employers;
- (b) online access to offers embedded in the wider context of the national qualifications framework.

Career guidance proves particularly valuable as a means to support young people with limited or no labour market experience. Effective assistance for this group is important, to help them discover what type of job fits their personal skills. Often, however, such instruments are not designed to mitigate (future) skill mismatch, and often only indirectly include a focus on skills. Positive examples

⁽⁸⁾ Please note that 'vocational qualification' is discussed as a case study on its own (Section 4.3).

that address this concern are the Luxembourg house of orientation and the Slovenian 'early identification of key competences' initiative. While the Slovenian pilot mapped individual skills of young unemployed (Box 11), a promising practice at local level, there was not sufficient interest from the Regional Development Agency or from the Ministry of Labour, to mainstream the approach. The project was formally supported by the PES, but users, particularly employers, were critical about the PES' relatively passive role; there were difficulties in finding people to participate in the programme because young people did not really trust the PES. They indicated that this was probably due the relatively low regular demands of PES on the unemployed (only submit a limited number of job applications per month), while this particular instrument demanded much more from people benefitting from it.

Box 11. Slovenia: early identification of key competences

With financial support from the former community initiative EQUAL, the Centre for Knowledge Promotion (CPZ), a local organisation, developed ways to focus the employment service's attention more to individuals' interests; this allowed them to make more effective use of their competences in the labour market. The local initiative was a pilot which could be further developed to be used by PES in other regions.

The CPZ supported individuals by identifying their key competences and, accordingly, organising training for them to improve the skill and competences requiring further development. A unique feature was the introduction of a competence assessment and development model for young unemployed. The approach built on earlier assessment procedures developed by CPZ and complemented the assessment of formal and non-formal education and knowledge, skills and competences by assessing those developed through informal learning. The CPZ model enabled a more accurate process of identification; assessment made it possible to obtain a much more comprehensive picture of competences and skills than was previously the case.

The model allowed effective identification of key competences of unemployed young adults and was subsequently linked to a targeted skills development programme. The training offer aimed to bridge individual capacities and skills and labour market needs. Among the training courses offered were sales specialist training, accountancy training, German and English language courses, computer courses, and training to prepare for the European computer driving licence (ECDL) exam.

Key success factors:

- (a) community approach to stimulate motivation of individuals;
- (b) linking individual capacities to skills in demand;
- (c) assessment of formal and informal skills and competences.

Key lessons:

- (a) using self-administered questionnaires to define skills and competences;
- (b) unlocking the potential of a group approach to motivate young persons.

A positive feature of this instrument was that it followed up on individual skill assessment, surrounding young adults with a motivating community and a busy programme designed to help them (re)gain self-confidence. Even sporting facilities were provided, along with social and psychological counselling. This multifaceted approach promoted skill and competence development among young adults in an effective learning environment that also contributed to forming personality. One beneficiary reported:

'When looking for a job you can lose your motivation, especially if it takes a long time and you have a lot of applications and negative answers or no answers at all behind you. In a programme like this, which was pretty intensive (20 activities per week were required) you are somehow forced to be more active.'

Every participant entered a personalised programme to identify their key competences, and subsequently followed up with concrete activities using a learner-centred approach, such as group sessions in which *résumés* and/or cover letters were written together. All interviewed participants appreciated this approach. The measure supported participants to search more actively for jobs and encouraged them to seek more job interviews. One participant said:

'Higher activity brings more job interviews and, even if you are not selected for a job, an interview is an excellent opportunity to gain experience to be able to prepare for the next interviews more easily and better. As a result, I went to my final job interview completely relaxed and unconcerned and I answered all the questions with ease and self-confidence.'

In short, the measure contributed primarily to the self-awareness of participants, and helped them map their personal strengths and weaknesses for employment.

2.4. Subsidised work

Subsidising employment provides employers with financial incentives to familiarise themselves with (and sometimes further develop) the skills of individuals that would otherwise not be hired. As such, instruments in this category have the potential to overcome lack of information transparency between employers and prospective employees, and can contribute to the skills development of individuals. A key element of these instruments is compensating employers for (possible) productivity loss. Some subsidised work programmes identified have a narrow focus on short-term employment, while others are set up to provide a job in which the person involved can gain professional skills. Most of these programmes are evaluated in terms of employment achieved, and not on

ensuring skill matches. This section presents and analyses instruments in terms of their potential in matching the skills of unemployed to those considered relevant by the labour market (Table 8).

Table 8. **Instruments supporting subsidised work**

Subsidised employment for vulnerable groups (Latvia)

Facilitates creating sustainable and long-term work places for the unemployed with lower productivity level, and practical training to develop and preserve their skills and competences. The instrument includes training or workplace adaptation for persons with special needs and, where necessary, the involvement of different experts, such as assistants, and/or sign language interpreters (for people with hearing disorders). The instrument also includes targeted support for on-the-job training; evaluation shows substantial employability increases. Of particular interest is that the subsidy targets sectors in which skill shortages are identified or expected. This is particularly relevant for Latvia, which, due demographic developments and high emigration, has to increase the workforce to support economic growth.

Job bank pilot (Finland)

Offers methods of finding employment within what is termed the active labour market, for partially disabled and long-term unemployed people. It does so by pooling the unemployed in a so-called 'job bank', with which job seekers enter into an employment relationship. This job bank subsequently recruits the workers to enterprises and organisations. While not working, people in the job bank can participate in education or training. Any unemployed person can register with a job bank.

Subsidy scheme for attracting people in the labour market through flexible forms of employment (Cyprus)

Aims to ease employment of economically inactive and unemployed persons who have difficulties entering and remaining in the labour market (those who cannot work full-time, often women) without the option of some form of flexible arrangement. In a country that is not accustomed to flexible working hours, it is necessary to create awareness about the legal possibility to grant flexible working arrangements, and create appropriate incentives. The scheme was launched in May 2010. Through the scheme, participating businesses are subsidised with 65% of the labour cost of those employed (salary and employer social insurance contributions) for a 12 month period. Employees are reimbursed their commuting costs. The instrument ensures that skill potential in the workforce is used to its full extent, thereby reducing skill shortages. The responsible authority for the implementation of the scheme is the Cyprus Productivity Centre and the explicit goal of the instrument was to strengthen the competitiveness of participating companies. By December 2012 more than 500 applications had been received from companies and more than 1 600 applications from individuals seeking employment; 300 employment contracts were signed.

First-employment bonus for young unemployed (Romania)

Provides young people with a sum equal to their employment benefit if they get into employment prior to termination of their unemployment benefit period. Graduates at the age of 16 or over are eligible for a first-employment bonus equal to the amount of the social reference indicator (RON 500) under the condition of gaining full-time employment for a period of 12 months or more.

Young person's guarantee: routes into work (United Kingdom)

Helps prepare job seekers fill identified vacancies that have a GBP 1 000 recruitment subsidy attached to them, with full-time training for up to eight weeks supported by a training allowance available as part of the package. The instrument does not specifically focus on lower or higher educated target groups, but is designed to support training for actual or imminent vacancies in one of the 14 nationally agreed priority sectors. The instrument is primarily focused on skills demand (employer-led), but to address the potentially wide range of needs of the young participants and their relative inexperience effectively it offers an individualised training package.

Jobs with a future (France)

Fosters employment and training of young people remote from the labour market, by upgrading the skills of undereducated young people. Its contracts are concentrated in sectors confronted with persistent skill shortages (such as health, social care, green technologies). Employers that apply for the subsidy are required to provide adequate training that results in the acquisition of professional certificates. The programme is limited to employers in sectors that face current or future shortages, and seeks to equip vulnerable groups with skills in demand. To support those trained under this programme, employers are required to offer an employment contract to the individual after the subsidy expires.

Apprenticeship schemes for unemployed (Lithuania)

Target the unemployed by providing State-subsidised temporary employment, in which occupational skills and competences needed in the workplace can be developed.

Source: Cedefop.

It is possible to distinguish generally between measures that promote the employment of:

- (a) short-term unemployed;
- (b) youth;
- (c) vulnerable groups (including long-term unemployed, disadvantaged groups, migrants).

While the OECD does not specifically include instruments for vulnerable groups and youth in its definition of subsidised employment, from a skill perspective it is relevant to compare the approach of employment subsidies for

these different groups (OECD, 2014). Existing academic research and (meta-) evaluations generally see potentially beneficial employment effects in supported employment programmes, though not necessarily when only targeting groups that are short-term employed (see for instance Gerfin et al., 2005; de Koning and Peers, 2007).

Policy instruments have been introduced across the EU that seek to increase the employment possibilities of unemployed vulnerable groups. There are provisions in many different policy contexts to support employers that hire individuals with lower productivity levels or special needs, often with ESF support. Many of these instruments are beyond the scope of this study, as the skill matching element is often lacking. Individuals targeted do not always have the skills, or the capacity to gain the skills, appreciated by the labour market, and the subsidy merely serves as a compensation for productivity loss. However, there are two instruments that emphasise the role of skills and the match between skill supply and demand: subsidised employment for vulnerable groups (Latvia) and the subsidy scheme for attracting people in the labour market through flexible forms of employment (Cyprus).

Instruments for the two other target groups were also identified and their contribution to reducing skill mismatch, rather than just increasing employment, will be discussed. It seems, at least from the instruments reported, that subsidised work instruments that were introduced in different Member States to counter the effects of the economic crisis of short-term unemployed have a stronger focus on skill matching than instruments targeting specific vulnerable groups. While existing evaluations shed doubts about the effectiveness of such attempts, given the number of new jobs created in the short term, the cases studied in this report show that some instruments have the potential to contribute substantially to mitigating future shortages in certain sectors. Instruments targeting the young unemployed deserve particular attention.

The variety of instruments found evidences the many forms that subsidised employment can take. Instruments mentioned in other sections of this report also include some form of subsidised employment, although they are coupled with training schemes or upskilling targets, or offer subsidised internships for people still in education. Although instruments discussed here may have a secondary characteristic that also fits with other types, their focus is on subsidised work.

2.4.1. Short-term unemployed

In Denmark an instrument was introduced combining subsidised work for the unemployed with skills development of employees (Box 12). Through a 'job rotation' scheme, Danish employers have the opportunity to train their employees, while temporarily providing employment of those open jobs to

unemployed. Similar 'job-rotation schemes' have been in place across the EU. The Danish scheme illustrates potential success and fail factors of such instruments.

Box 12. Denmark: job rotation

The 'job rotation' scheme is a relatively old instrument (introduced in 1994) established to address high unemployment and to counter the unwillingness of companies to invest in upgrading their employees' skills. During periods of high unemployment, companies are generally more inclined to hire new employees instead of upgrading the skills of their existing workforce. The 'job rotation' scheme was adapted in 2007 to take changed labour market realities into account: the government wanted to refocus the scheme to create employment for the unemployed. As part of the negotiations between labour market stakeholders in 2006, a new and less complicated scheme was developed and agreed within the so called welfare agreement (*Velfærdsaftalen*).

The basic idea is to fund companies that enable them to offer their employees reskilling and training opportunities. During their absence, their workplaces are made available for unemployed persons with the aim to strengthen their practical experience and their connections to the labour market. Both public and private companies can apply for funding from the job centre to finance the training participation of skilled or unskilled workers. In order to receive funding a company is obliged to employ an unemployed person and pay the same salary as the employee who is trained. The substitute must have received unemployment benefits for the last three months or longer. The newly employed worker will have the same benefits and obligations in the work place as the employee and will be employed for the same number of hours as the employee who is being trained. This form of employment is limited to maximum one year. The trained employee will receive a normal salary while taking classes. The company receives an amount equal to 160% of the unemployment insurance benefit which depends on the education level of the employee.

Key success factors:

- (a) double upskilling effect (for employed and unemployed);
- (b) in-company training for unemployed;
- (c) financial backing for employers.

Key lessons:

- (a) combination of unemployment and skill shortage policy;
- (b) linking training and networking activities.

The key feature of the approach is that local job centres take up the role of local link to match companies and the unemployed and cooperate with education institutions to have information about the opportunities they offer. Through their intermediary role, they seek to provide the means for employees with basic skills to grow, while providing the unemployed with the possibility to develop

professional skills in employment. Stakeholders involved in the scheme are all convinced that it offers good chances for upskilling the workforce and supporting the unemployed. For the latter, the scheme is considered successful because the type of work the instrument offers is 'a real job', as one person benefiting from the scheme put it, and helps build a professional network. For employers, the scheme provides the benefit of developing the skills of their workforce for a relatively small investment without productivity loss (as the position is filled).

The targets are the short-term unemployed capable of working full time. Despite positive remarks from participants, recent take-up of the scheme has been low and not many employers are involved. In the 2007 reform of the scheme, it was proposed to increase the compensation paid to employers. While the results of this increase are still to be evaluated, stakeholders indicate that this is likely to have a positive effect. A 2008 evaluation indicated that an important reason for the low take-up is that job centres focus on creating the shortest route possible to the labour market for the unemployed. Given that the 'job rotation' scheme involves a relatively complex exchange of job positions, they do not use it much ⁽⁹⁾. A potential way to improve the scheme is to include a learning element for the unemployed hired by the companies. Currently, the scheme only foresees providing work, and thereby professional skills, but beneficiaries would also benefit from targeted training or apprenticeship to develop their skills.

Job centres go to great lengths to ensure that they have a good match for the company and this benefits both sides. One employer indicated that:

'[His] reason for using the 'job rotation' scheme, besides a social responsibility aspect and the economic incentive, is that it is a way of securing the necessary labour and competences for [his] company in the future. What separates the 'job rotation' schemes from other labour market initiatives aimed at increasing employment is the greater amount of flexibility for the company and the higher level of competences of the temporary employees compared to, for example, getting an employee in a flex-job or in job training.'

When transferring this approach to other contexts, it is necessary to create the right incentives for companies to participate in cooperation with the job centres. This instrument shows that it works best for the short-term unemployed that have the capacity to start full-time work. Other instruments may be used to target more disadvantaged groups, but they must ensure the right incentives for employers. It should also be taken into account that in some Member States, like Denmark, national culture may be more conducive to public-private cooperation.

⁽⁹⁾ The expenditure on 'job rotation' programmes accounts for only 0.1% of the ALMP budget in Europe.

This implies that in other Member States even more attention should be given to developing and implementing appropriate incentives for employers, to convince them to participate.

2.4.2. Young people

Literature shows that employment subsidies for young persons or short-term unemployed do not necessarily have a positive effect on sustainable employment. However, when measures include skills development targeting labour market demands, they can be very relevant in times of economic crisis, when the number of short-term unemployed increases. Appropriate action should be taken to prevent lack of working experience and skills development leading to long-term unemployment.

In the Netherlands, an initiative developed at Tilburg University to help young people gain professional experience through subsidising first-time employment was quickly embraced by a large number of municipalities (Box 13). The 'starting grant' focuses on developing professional experience in the workplace but also includes a training element in some municipalities. The primary goal of the instrument is to help young unemployed graduates pass the first 'hurdle' of employment after finishing their education by offering them a means to obtain professional experience.

During the crisis, graduates experienced problems trying to enter the labour market, due to lack of professional experience. The instrument aims to take away this hurdle, by offering financial support to employers to hire young graduates. Graduates are given the opportunity to work for six months in a company, to gain working experience and professional skills. Especially relevant from the perspective of skill mismatch is that, before employment, beneficiaries indicate what core competences they want to develop during the six months. Subsequently, they can base their job-search activities on these competences and discuss with the employer how they are to be developed. Even though this training in certain competences is included, the interviews for this study indicate that employers engage in such skills development to varying degrees. While some see this as a crucial element, others predominantly see the value of offering professional experience. In some contexts, as in the case of the city of Rotterdam, municipalities decided to implement the instrument without including a training budget, in order to focus the instrument fully on gaining professional experience.

Box 13. The Netherlands: starting grant

Rising unemployment among young people encouraged local governments to develop a measure to help them find employment. The instrument was initially developed by Tilburg University, and later adopted by many municipalities, who wanted to prevent a 'lost generation' on the labour market, as no work experience early on in the career is often a drag on future career development. The core problem that the initiators defined was not so much the lack of potential job positions, but rather the perceived hiring and training costs of graduates in businesses, particularly in smaller businesses.

The instrument offers financing to employers, supporting them to hire young graduates. Graduates are given the opportunity to work in a company for six months to gain work experience and professional skills. The instrument is centrally managed by the 'starting grant service organisation', which has an online application that allows municipalities to choose different policy priorities. This allows municipalities to tailor the instrument to their specific needs and local conditions, even though it is centrally run by one organisation for the entire country. By bringing graduates directly in contact with employers, the instrument aims to add professional experience to young people's CVs and help them find sustainable employment.

Key success factors:

- (a) develop professional experience with a focus on selected core skills;
- (b) support local employers with an efficient service organisation providing fast and low-cost registration of prospective workers;
- (c) online application includes vacancy search function for individuals.

Key lessons:

- (a) improving working experience at early stage for youth;
- (b) meeting the interests of participants, employers and young graduates;
- (c) communication to the right target group crucial for success.

This instrument has been very successful in meeting the needs of the most important stakeholders: municipalities, young people and employers. It is the competence of local governments (municipalities) to decide whether or not to implement this instrument, which is run by a national private central service organisation. Through their automated web application, municipalities are supported to engage effectively, efficiently, and very quickly the target population (employers and young people). Applications do not have to go through the municipal bureaucracy, but will be processed automatically and a registration can be confirmed within a few hours. This is crucial both to keep the graduates engaged and to maintain the support of the local employers, who often indicate that it is not financial costs but cumbersome bureaucratic procedures that are the reasons for not cooperating in subsidised employment projects.

The instrument does not target vulnerable groups, and assumes active interest on the part of the participant, or as someone applying it put it:

'It is important to take into account that this instrument targets a completely different group than most other social policy. It targets enthusiastic young people that are expected to follow up on their choices themselves.'

Stakeholders also indicate that, without the central service organisation, municipalities would most likely take days, if not weeks, to process the application; it would also mean an additional administrative burden for employers. Further support can be given at local level. For example, to meet the demands of local small employers, Rotterdam introduced a payroll system, giving employers the choice to outsource all financial administration related to the instrument. This particularly helps micro and small enterprises, without in-house financial administration, to participate. Employer support for the instrument helped ensure that many local vacancies can be found on its website: young people have a substantial choice and preventing skill mismatch is aided.

In Romania, a different approach was developed to subsidise employment for young people. Instead of subsidising employers, young people are entitled to a sum equal to their employment benefit if they get into employment prior to the termination of their unemployment benefit period. This gives them a clear incentive to put themselves in the picture with potential employers. However, this instrument only contributes to skill matching indirectly, and it may even be questioned whether it would not provide the wrong incentives to the young unemployed. Instead of promoting the right match, promoting any match in a situation of economic stagnation may result in higher levels of displacement, causing the unemployed to apply for jobs below their level of education. This creates the risk that the most vulnerable groups necessarily have to compete with higher qualified individuals and become long-term unemployed.

CHAPTER 3.

Addressing skill mismatch to prevent unemployment

3.1. Introduction

Policy instruments introducing ways to match and develop skills with the goal of mitigating current or future skill mismatches do not only target individuals without employment, but also people in education and training and the employed. This chapter looks at policy instruments that aim to prevent unemployment by addressing skill mismatch, either by targeting people in education and training or in employment. As is the case throughout this report, only instruments with an explicit focus on skill mismatch are considered.

Programmes or strategies combatting skill mismatch by targeting groups in education or training that complement existing education policies can prove quite successful. Such measures, taken to focus educational qualifications and programmes on labour-market-relevant skills and competences can be crucial in improving the employability of young graduates. Skill mismatch among the employed workforce is also a substantial problem that warrants specific policy instruments (Cedefop, 2012a; Cedefop, 2012c). This chapter confirms the prominent position of training measures in initiatives combating skill mismatch among the employed. Training is often considered as the main answer to the shift on the European labour market towards skills-intensive activities (European Commission, 2011b). The chapter also considers guidance and counselling initiatives.

The examples presented in this chapter are a selection of national initiatives and cannot provide a comprehensive overview of all EU skill mismatch policy measures taken to prevent unemployment. Reflecting on impact and the difference they can make to people's lives, they show however, the added value of active mismatch policies.

3.2. Targeting people in education or training

The focus of this section is on policies targeting skill mismatches on the labour market and not on broader education policies *per se*. A clear link to the labour market is required for policies to be included. Policies directed at incremental changes to the regular VET system (as in Cedefop, 2013) are not considered, even though they may contribute to reduction of future skill mismatch.

The instruments presented in this section all have in common that they provide new or additional learning opportunities for those pursuing education or training. The policies selected, however, are diverse in terms of their target group (including adults, students, early school leavers), the qualification level they address (international standard classification of education (ISCED) 3 to 6) and the approach they use to provide new opportunities (extending existing programmes, introducing completely new types of education, establishing new type of providers, introducing new learning locations). Instruments reported include the implementation of dual systems in Hungary and Poland and new apprenticeship programmes in the UK; a programme for early school leavers in Estonia; the provision of higher education programmes in Malta and new higher education degrees in the Netherlands; and a programme directed at prolonging vocational training, also in the Netherlands. Although most instruments do not, or only in a moderate way, explicitly refer to skill mismatch in their objectives, most directly address skill mismatch in the sense that they explicitly target increasing supply of competent workforce in areas with current or future shortages. The instruments in this section are grouped under two major subheadings:

- (a) new education and training provision for students or graduates;
- (b) matching skills provided in curricula and qualifications with labour market needs.

3.2.1. Providing relevant skills through new education or training provision

Instruments that seek to provide skills needed through new education or training provision for individuals generally show a clear focus on content. However, the main common characteristic which makes the instruments collected here relevant for skill mismatch, and distinguishes them from more general education and training system policies and measures, is that they respond to a specific labour market need (Table 9). It is important to be aware that the instruments presented here do not give a comprehensive overview of recent education and training policy developments. The study did not collect information on all national instruments and the ones presented here only illustrate some of the measures that focus on meeting labour market needs.

Identifying these needs is, for instance, the core task of the Maltese research project, linking industrial needs and VET to optimise human capital. In this, sectoral research groups concentrate on 10 different growth sectors with continued demand for qualified workforce. The results of each research group feeds into potential changes in existing training and education programmes and implementation of new training programmes, particularly in VET. Another Maltese instrument, the higher education courses to address skill mismatches in Gozo takes a more regional focus.

Table 9. **Instruments providing skills through new training provisions in education**

<p>Apprenticeship courses (Portugal)</p> <p>Provide schemes in which training young people (up to 24 years old) is shared between the training institution and the company. These courses finish with the award of a professional qualification. The types of occupations eligible for the schemes are determined annually, based on skill needs identified at local and national level.</p>
<p>A 2011 law on VET for the introduction of the dual system (Hungary)</p> <p>Provided the legal basis for its introduction. This dual system mainly ensures that the proportion of practical training in the new three-year programmes (previously four years) is significantly higher, while that of vocational theoretical education, and particularly general education, is lower. The new dual initial VET system allows students to start vocational training right after completion of the eighth grade of primary school, while the previous four-year programme started with education with a more general focus.</p>
<p>Vocational education in the guild crafts (Poland)</p> <p>Was reaffirmed: craft businesses provide vocational training for young workers as part of their business activities. The overall vocational programme consists of a practical part, organised in a craft business, and a theoretical part, organised in a vocational school of continuing education courses.</p>
<p>Linking industrial needs and VET to optimise human capital (Malta)</p> <p>Aims to identify the specific skill needs and current gaps in 10 different sectors (pharmaceuticals and chemicals, financial services, ICT, furniture, printing, infrastructure, food, beverages, maritime and plastics and tourism sectors). As a follow-up, training and education programmes are adapted according to the findings of the sectoral research groups. While more specific identification of needs is organised by sector, other instruments may take a more regional approach.</p>
<p>Higher education courses to address skill mismatches in Gozo (Malta)</p> <p>Address local skill shortages. The instrument provides higher level education (national qualifications framework levels 5 and 6) to the unemployed, underemployed and to those people who wish to develop their skills, particularly in high growth areas: ICT, financial services and tourism which are not part of the regular curriculum on the island of Gozo. The underlying objectives of the project are to address the general structural disadvantage of Gozo – the separate smaller island in the State of Malta – in terms of lack of education offers and limited labour market chances and to improve labour mobility between Malta and Gozo. The instrument achieves this by offering training in skills that are in need both on Gozo, and on the main island of Malta.</p>

Modern apprenticeships (United Kingdom-Scotland)

Enable apprentices to combine learning and working according to a 'modern apprenticeship' framework. These modern apprenticeships are offered at four different levels of the Scottish vocational qualifications framework. Each level is mapped to the Scottish credit and qualifications framework and is accredited by the Scottish qualifications authority accreditation. The levels include intermediate 2 or credit level at standard grade, higher/advanced higher level, first degree level and master level.

The training-employment scheme for early school leavers (France)

Includes training activities and employment offers for early school leavers who did not attain a secondary school degree. Organised around 360 platforms following and supporting dropouts, it tries to consider major labour market shifts and provides training in favour of growing sectors and their skills demands.

The vocational reintegration programme for early school leavers (Estonia)

Aims to reintegrate early from the vocational system into education. The instrument is mainly a course programme which, for example, provides additional study places in the VET schools for the target group.

Source: Cedefop.

A traditional, and currently intensively discussed, form of education and training is relevant when assessing instruments that seek to provide skills in need to individuals in education and training: apprenticeship. Dual systems generally share the approach of providing practical training within companies, on the one hand, and theoretical lessons at schools on the other. In the recent past, apprenticeship schemes have been praised as an effective approach to high unemployment due to comparably low unemployment rates among participants in these schemes (see for instance European Commission, 2012a; Rauner and Smith, 2010). At the same time, simply copying successful apprenticeship systems in Member States that do not have such provisions is not recommended. For successful implementation, thorough understanding of the national tradition in education, the labour market structure, and industrial relations is crucial.

Among the instruments presented are two referring to apprenticeship schemes: apprenticeship courses in Portugal provide a professional qualification based on dual education, focused on skills which have been identified as (future) skill shortage. Modern apprenticeships in Scotland provide a clear labour market orientation, by linking the apprenticeships to the Scottish credit and qualifications framework. As a result, the skills learned and those required by the labour market can be better understood.

Box 14. The Netherlands: school ex programme

The 'school ex' programme targeted students in their last year of vocational education and encouraged them to consider continuing for an additional year and gain a higher qualification, with the goal of increasing their labour market position ('school extension'). The objective was that 10 000 students at risk of labour market problems would participate in the 'school extension'. When continuing education is not an option, students are supported in registering with regional cooperation of the PES with employers (*Werkpleinen*), to help them find employment or support their participation in a process towards employment, possibly through internships or apprenticeships ('school exit').

To reach the target group, the instrument provided financial support to schools enabling their staff to approach all students in the final year of upper secondary VET (*middelbaar beroepsonderwijs*) (MBO) to help them plan their future career paths. In the meetings, teachers and students discuss the choice between the two options ('school extension' and 'school exit') to come to an informed decision. As teachers and student counsellors conducting the conversations have knowledge of the regional labour market in their field they are able to give meaningful advice to students about their local labour market chances and possible barriers they may face.

The anticipated outcome of the instrument is better links between VET at different qualification levels and raised awareness of the importance of skills. Stakeholders agree that the aims are met: in 2009 about 12 000 students chose another year of education, followed by another 13 500 in 2010 (Panteia, 2011b, p.89). Another study indicates that of all students approached in 2009, 12% stayed in school to obtain a higher qualification as a result of efforts by the school (Meng, 2010). In 2010, this percentage rose to 16%.

Key success factors:

- (a) raise awareness among students on the labour market relevance of the level and content of VET qualification;
- (b) combination of short-term reduction of pressure on labour market (keeping students in school) and raising the qualification level;
- (c) targeted support by PES when leaving school.

Key lessons:

- (a) awareness of labour market opportunities crucial;
- (b) important role for teacher to provide first step into employment;
- (c) provide schools with financial incentives to implement policy instrument.

The Dutch 'school ex' programme seeks to encourage students at risk of labour market problems after graduation to continue their vocational studies with an additional year towards a higher qualification (Box 14). The idea is to motivate students to gain a vocational qualification in the same field one level higher than the one they were initially graduating in. The instrument aimed to respond to shrinking labour market demand for graduates (particularly for lower levels of VET) combined with increasing displacement of graduates with lower VET

qualifications by graduates with higher qualifications due to the adverse economic situation.

The programme is unique in the sense that it seeks to raise students' awareness of their future labour market position. In addition to networks with local employers created by VET teaching staff, schools received financial incentives to compensate the time teachers have to spend in interviews with students. The open communication with students in these interviews and the time taken for individual advice, are perceived as successful elements. The interviews are generally conducted by specialised teachers who are familiar with the local labour market in their field (through their network with local employers and/or previous experience practising the profession); this means they contribute to better awareness of students' labour market position. This is crucial information for students from a skill matching perspective.

The instrument specifically targets the problem of adjusting individual career planning to skills demanded by the labour market, creating incentives for schools to encourage students to think about their position. The programme is also an interesting short-term instrument as it encourages raising the qualification level while reducing pressure on the labour market, keeping individuals at school rather than letting them become unemployed. Even though the scheme included the option of 'school exit' for those where the teacher conducting the interview was sufficiently confident that the student would find employment, the emphasis was on the 'school extension' side of the instrument. Implementing (parts of) this instrument in other contexts requires the education system to include higher vocational degrees that can be acquired by adding one extra year. But even without such flexibility, the instrument provides an interesting example of how schools can be encouraged to increase student awareness of the labour market relevance of their skills.

Other instruments providing (additional) skills to individuals in education concentrate on those that experienced problems in their education or other target groups. This is, for example, the case for the vocational reintegration programme of early school leavers *Kutse* in Estonia, in which additional study places in VET schools for early school leavers. The training-employment scheme for early school leavers in France offers school dropouts training adjusted to the labour market needs via networks of local public and private actors (such as enterprises, information centres, schools) organised around 360 platforms following and supporting dropouts. In these instruments the focus lies less on meeting skill needs in certain sectors or regions. Instead, the objective is to make the best possible use of skills of those that left education or training early and to upgrade them where possible.

3.2.2. Matching curricula and qualifications skills with labour market needs

This section moves away from specific training provisions aiming to reduce skill mismatch and presents policy instruments that more structurally target adapting curricula and qualifications to labour market needs. In doing so, it does not consider ‘regular’ updates of curricula and qualifications to bring them in line with labour market demands (‘business as usual’). Instead, this section only includes instruments that adapt education or training provision explicitly to target existing or future skill mismatch. Instruments of this type can be characterised as more comprehensive and sustainable than the ones discussed above, but also require substantial adaptations at organisational and institutional level (Table 10).

Table 10. **Instruments seeking to match skills provided in curricula and qualifications with labour market needs**

<p>The introduction of an associate degree (the Netherlands)</p> <p>Provides the option for VET students to acquire specific technical skills at a higher educational level while remaining in a learning environment that allows for practical application of skills.</p>
<p>Occupational qualification standards (Estonia)</p> <p>Introduced a standardised process to improve the design of curricula and training programmes and to ease the comprehensive assessment of competences. The efficiency of Estonian company recruitment and vocational guidance and counselling for young people improved as a result. The standards also facilitated international comparison of qualifications provided in Estonia.</p>
<p>Skills plus, also named ‘valuing all skills for the labour market’ (Malta)</p> <p>Aims to establish occupational standards for nine key sectors. They will provide a frame of reference for VET and education institutions when developing their programmes. The standards should aid formal certification, also of informal work and experience. The ultimate objective is to strengthen the quality and relevance of qualifications to avoid skill mismatch.</p>
<p>Curriculum teams (Luxembourg)</p> <p>Teams associated to a specific (group of) profession(s). By developing and adapting education programmes, the teams ensure consistency between the aims of training schools and the needs of professions. In addition, guidelines for the professions are developed and training modules evaluated.</p>
<p>The development of core curricula as a key element of VET modernisation (Poland)</p> <p>Focuses on improving the link between the VET system and the labour market. Its methodology helps creating and updating core curricula at regional and local level, depending on the programmes offered by regional VET institutions.</p>

Source: Cedefop.

A first group of instruments seek to combat skill mismatch by introducing new (pathways to) qualifications. An example is the 'introduction of the associate degree' in the Netherlands. This directly targets skill mismatch by providing for certified qualification at a level between secondary VET and higher VET, linking vocational education with higher education. Almost all students in the new programmes follow a dual learning pathway, but it is also possible to enrol in a training programme unrelated to current occupation. The instrument is relevant for skill mismatch as it opens up opportunities to acquire a qualification for the skills developed while working. The programmes on offer have immediate labour market relevance, as education providers offering the qualification have to prove this aspect. The introduction of occupational qualification standards in Estonia also seeks to integrate immediate labour market needs better in training programmes and can be put in the same category. The Maltese 'skills plus' initiative focuses on establishing and recognising the skills required in a number of sectors, defining newly occupational standards which may be used as a frame of reference by VET providers.

A second group of instruments focuses on adapting curricula to target existing skill mismatch. The 'development of core curricula' in Poland adapts the curricula of VET programmes to ensure their continued labour market relevance. Curriculum teams, used in Luxembourg, are another innovative way to secure an orientation on labour market realities in curricula. Here, sector-specific teams evaluate and revise existing curricula and then choose the most appropriate elements to be used as core curriculum for the sector, while the other curricula follow. The teams develop detailed guidelines and the process takes place both at national and regional level. The direct contribution of employers to curriculum development is an effective way to ensure that the graduates have labour-market-relevant skills.

The 'assured skills' programme (United Kingdom-Northern Ireland) is difficult to classify, as it includes new training provisions while also matching curricula closer to labour market needs (Box 15). 'Assured skills' includes training of lecturing staff and the design of new qualifications to support local businesses, as well as tailored training for the unemployed and recruitment of workers to support the activities of new inward investors. The idea of supporting investors by subsidising and supporting training is unique, as it specifically seeks to improve the demand for skills, instead of merely raising supply. By providing the skills needed by potential investors to establish new business, this instrument seeks to raise the demand for skills in which it offers training.

Box 15. The United Kingdom (Northern Ireland): assured skills

'Assured skills' was initiated prior to the economic crisis; the immediate impetus was the need to supply skills for the high-growth sectors in Northern Ireland. The instrument focuses on investment-intensive sectors – digital industry, IT, engineering and financial services – where skill shortages have had an inflationary effect on salaries. This problem was connected with the challenge to attract foreign direct investment (FDI) to the country.

Two main approaches exist in addressing skill mismatch: FDI and capacity building. In the first, the instrument engages directly with a company considering investing in Northern Ireland. Their skills demands are addressed either by pre-employment training or by in-company training. Occasionally, the two responsible government departments also create packages of support measures to encourage investment by employers already present in NI. The second approach is based on capacity building when there are shortages in particular skills. The programme supports training for those still in university who are looking to upskill, as well as to graduates that want to reskill.

'Assured skills' relies on the early involvement of the private sector in designing and delivering the programme. Employers take part in the design and redesign of the structure of the courses, on a year-to-year basis in the case of capacity building. This has been especially important since course relevance changes quickly with rapid developments, such as in the IT sector.

To date, 22 'assured skills' FDI projects have been completed supporting 2 586 jobs⁽¹⁰⁾. The capacity building activity has provided upskilling training opportunities for over 400 individuals in software testing, cloud computing and data analytics. The 'assured skills' programme is a pilot started in August 2010 planned to run until March 2015.

Key success factors:

- (a) tailor-made training approach for foreign companies;
- (b) early involvement of the private sector in designing and delivering training;
- (c) well-defined skills demand;
- (f) fast communication channels in a confined area;
- (d) public institution as broker/mediator between differing stakeholder interests.

Key lessons:

- (a) combining domestic skills development with the demand of foreign companies;
- (b) flexible provision of training.

In the 'assured skills' initiative, training provision is led by either the specific demand of foreign companies considering investment in the country or by a specific request for skills in a particular sector. The foreign investment part is of specific interest for this study, as it is the only example of a policy that links

⁽¹⁰⁾ See <http://www.delni.gov.uk/es/index/successthroughskills/skills-and-training-programmes-2/assuredskills/assured-skills-info.htm> [accessed 1.7.2015]

domestic skills development (the supply-side) with skills demand from foreign companies. The direct connection and allowing companies to set very detailed parameters for the recruitment process strengthens their ownership of the instrument and builds commitment and trust ⁽¹¹⁾. The partnership between government departments, as well as between the government and private sector, is one of the core features of this instrument.

While the foreign investment strand of the instrument relates to the education sector only in more general terms, the second strand (capacity building for a specific sector) directly targets university students and graduates and tries to make them ready for the skills required in growing economic sectors. Targeted training courses designed by employers address their needs. One employer in IT noted:

'They have involved companies in redefining the structure of the course of the academy every year so that it has remained relevant. [This is] particularly important in the IT industry because we need to change so quickly [...] within the market here that year on year [training programmes] need to evolve.'

In addition to including employers, the administrative responsibility of one organisation for both higher education and further education is also a success factor. Broad public support based on the different stakeholders supporting the initiative and good press feedback were also important. Another important factor that contributed to the success of this instrument is the small size of Northern Ireland (both in terms of territory and population). Business, government and academia can communicate and come together relatively easily and local government is able to get involved in initiatives. At the same time, the population of 1.8 million implies that the pool of people to work in key sectors and public services is limited.

An important lesson from this programme is that skills problems have to be well defined to be addressed. The skill shortages identified and recognised by stakeholders have been helpful in defining the scope of the programme. A major transferable element is the focus of the programme: explicitly targeting people who have graduated in areas where job openings are no longer available. This can only be done successfully if the training programme is immediately relevant to labour market needs. One beneficiary who left his previous job noted that:

⁽¹¹⁾ Also see the instrument 'employer ownership' (United Kingdom-England) in Section 4.3 of this study. It seems that, especially in countries with a more liberal welfare system, there is a need to encourage the participation of employers in training and counselling activities.

'I think it was a bit of a risk for me to leave a job that was full-time and with excellent benefits. The opportunity of the academy, and especially of the placement, that was what made me want to go and study, so that was the motivation for me. I wanted to impress, because I knew there would be an opportunity of employment at the end.'

Additionally, close monitoring of FDI, local company performance and overall labour market dynamics seems to be transferable to other contexts. Another innovative element of the 'assured skills' initiative in Northern Ireland that could inspire innovative approaches elsewhere is to embed education and training measures in schemes that seek to develop skills demand by attracting new potential investment.

3.3. Improving the skills of the employed

Training for employees is a crucial mechanism through which enterprises and individuals can remain competitive. Providing financial incentives to employers to offer or fund training is a common approach to encourage up- or reskilling of employees. Financial incentives may also be granted to employees, as in the form of training vouchers, grants and individual learning accounts to support training participation. Such instruments are popular throughout Europe, as is evident from Cedefop's database on financing adult learning in EU Member states (Cedefop, no date, b) ⁽¹²⁾. Given the wide attention paid to individual incentives in other studies (e.g. Cedefop, 2009b; Schuetze, 2007; K apflinger et al., 2013) this section only includes instruments explicitly focusing on reducing mismatch, with either a particular innovative element or which are part of a broader innovative strategy.

This section identifies two main types of instrument that support training employees. A first type focuses on improving the supply of skills and mainly targets employees in need of updating or improving their skills to remain competitive on the labour market. These instruments help increase job security by equipping employees with relevant skills. A second type focuses on meeting a particular skills demand by training employees in skills needed on the labour market. Instruments belonging to this type do not focus on job security *per se*, but on expanding job mobility, by training developing skills for which shortages exist. Even though the two types are not mutually exclusive, they have different focus.

⁽¹²⁾ Not including Croatia. At the time of conducting the fieldwork, Croatia was not yet a member of the EU. While drafting this report in the second half of 2014, Croatia was not yet included in the database.

The first focuses on the individual in terms of securing better job security and/or a more competitive labour market position. The second type focuses on achieving macro-level impact by targeting skill shortages and/or improving job mobility.

Instruments discussed vary in the target groups addressed (consider the difference between employees that face a high risk of unemployment and employees that do not) and, consequently, the incentives proposed to make the instrument work. The overarching issue remains; to what extent a policy instrument can contribute to keeping the skills of the workforce up to date, and how it can mitigate current or future shortages most effectively.

3.3.1. Training employees to improve existing skills

Training instruments that focus primarily on strengthening employee job security are discussed in Table 11. These instruments can be either skills-specific (and therefore, often sector-specific) or refer to more generic skills, for instance when they encourage updating skills in the use of certain ICT applications. They make employees more responsive to particular skills demands from their employers and may prevent them from becoming unemployed by avoiding skill obsolescence.

Table 11. Instruments supporting training of employees to improve their skills

<p>Continuous vocational training for workers (Romania)</p> <p>A broad upskilling instrument funded by the ESF (sectoral operational programme human resources development, Axes 2 and 3). The target groups (workers in employment and students) and the skills targeted were comprehensive and helped address recent technological, economic developments.</p>
<p>Personal training accounts (France)</p> <p>Enable individuals to accumulate training credits from labour market entry onwards. The account is entirely transferable from one occupation to another and remains in place when changing or losing one's job.</p>
<p>Apprenticeships for adults (Austria)</p> <p>Open up a funded pathway for adults in the Austrian apprenticeship system, usually only occupied by young people. Companies receive financial support for providing training places for adult apprentices who are recruited out of the pool of existing employees, as well as unemployed persons. The instrument is part of a more comprehensive programme fighting the lack of skilled workers.</p>
<p>The ICT skills conversion programme (Ireland)</p> <p>A reskilling programme delivered by higher education providers in partnership with industry which provides higher diploma ICT courses to graduates from other skills areas.</p>

The one year programme gives them the opportunity to upskill or reskill in core computing/programming, software and data analysis.

Energy training for builders (Croatia)

A scientific study on skills in the Croatian construction sector. The analysis provided the basis for a 'national roadmap' towards a training and education system for building workers in energy efficiency and renewable energy sources.

The sun project (Spain)

A sector-specific upskilling instrument for electricians in the construction sector. The aim is to support them in becoming solar entrepreneurs by providing them with training courses that include technical design and orientation of solar panels, plus administrative procedures. The ESF-supported project can be seen as a direct answer to the difficult Spanish construction sector situation resulting from the economic crisis.

Sectoral practical training centres (Lithuania)

Provide practical training to develop work process-based competences needed in different sectoral occupations. It also targets employees, students of higher education and the unemployed. The centres are innovative in the sense of providing modern technical infrastructure and an up-to-date practical training environment to the initial VET system.

The two interrelated instruments, transitional employment agency and transitional company (Germany)

Aim to place existing employees threatened by unemployment in a different company and to provide them with services such as competence assessment, career advice, job-search and interview-training to support them in making the transition. The instruments arrange either a direct placement in a new company (transitional agency) or a tripartite contract between employer, employee and a provider of a transitional company (an organisation where workers can be employed and upskilled between two employment contracts).

Source: Cedefop.

Upskilling a substantial share of the working population can contribute to raising the skills of individuals who were engaged in low-skilled occupations and now face substantial changes in job and skills profiles. Continuous vocational training for workers (Romania) upgrades the skills of individuals in lower-skilled occupations and incorporates recent technological developments to increase the adaptability of the workforce. With over 350 000 beneficiaries being reached, according to ESF reporting, the instrument has a relatively large take-up. An example of a similar measure providing the means to develop the skills to remain

relevant and competitive on the labour market is the 'step one ahead' programme in Hungary (Box 16).

Box 16. Hungary: step one ahead

'Step one ahead' gives uneducated or undereducated individuals in occupations requiring low skills the opportunity to raise their skill level through training for specific occupations. The purpose of such training is to attain stable employment, where possible in fields where skill shortages exist. Responding to regional skill shortages was possible through partnerships between stakeholders responsible for implementation (PES, chambers of commerce and training organisations).

The instrument combined completing elementary and/or secondary school studies, leading to a school certificate, with learning for a vocational qualification: this mixes upskilling in general skills with vocational skills training. By responding to labour market needs, the instrument concentrated on so-called 'missing vocations' such as electrician, plumber and carpenter, for which shortages exist or are foreseen in the near future. A key element of the approach was to use active labour market tools instead of direct financial aid. Training combined practical training and theoretical learning, tailored to individual capacities. Stakeholders attribute the low dropout rate (around 5%) to this personalised approach.

Between 2006 and 2008 (phase I) 'step one ahead' reached around 20 100 individuals (19 000 in phase II). Around 60% held jobs matching their skills after completing training.

Key success factors:

- (a) combination of school studies with a vocational qualification;
- (b) clear identification of skill shortages;
- (c) compatibility with further studies;
- (d) engagement of training providers in developing the programme;
- (e) labour market studies as a basis.

Key lessons:

- (a) provision of active labour market tools instead of direct financial aid;
- (b) focus on local labour market and local possibilities.

'Step one ahead' targets low-skilled individuals and tries to raise their skill level through training in line with labour market demands. In comparison to approaches in Europe, this approach is not particularly innovative but is exemplary of many comparable instruments elsewhere in the EU. Many such instruments have been launched either on a regional or on a sectoral basis, especially in countries in eastern and south-eastern Europe. Aiming to catch up with skills demand in fast changing economies, they tend to target large groups.

In the 'step one ahead' initiative, training was designed based on local labour market studies which identified shortage occupations. Compensation for participants based on the minimum wage and low complexity in terms of

programme administration motivated participants and helped reduce the risk of dropout. So did high quality teaching and individual mentoring:

'Our trainer was a well-educated, experienced person who taught us in a very entertaining way, gave a lot of practical examples referring to each part of the training. This helped us learners a lot to learn for the final exam!'

Implementation of the instrument followed thorough planning and preparation with relevant stakeholders, such as accredited training enterprises, but also with employers in each specific region, particularly in tripartite local platforms. The demand for a higher-skilled workforce was a strong motivation to participate. It is an example of upskilling a large and often difficult target group (low-skilled workers) in a difficult context (high unemployment rates, structural regional weaknesses) with relatively positive results in terms of dropout and skills relevance.

Another important mechanism to strengthen someone's position on the labour market is the validation of skills, either after completing additional training, or by recognising prior learning. Having prior learning through work experience certified can contribute significantly to someone's position in a firm; recognition of skills gained through informal training or professional experience provides employers with relevant information about current skills and potential of their employees. In the Czech Republic, a new qualification was introduced, which may be obtained by employees by following courses or passing an exam, enabling them to formalise prior learning (Box 17).

'Vocational qualification' fits in with the other instruments in this section because of its focus on improving the labour market position of employees. It is slightly different in its approach to skills, which it defines primarily based on the qualification structure in place (and associated learning outcomes) and is therefore, based on legislation. While legal adaptations might be a follow-up or an accompanying measure of the other instruments discussed here, adapting the relevant law was the starting point in this case. The instrument is important for the Czech workforce as it has opened up new pathways for gaining and proving relevant skills on a large scale (90 000 individuals have already used it). The top-down approach of the project (introducing a new qualification through legislation) channels labour market demands expressed by important labour market actors and backed by surveys. Participants indicated that it was valuable to have certain skills formalised in a qualification:

'Well, [a VQ] is just important. Without a paper you're nothing, you got nothing to show. Nobody cares that you can do something, if you don't hold a certificate, you won't be given the chance to show what you can do.'

Box 17. The Czech Republic: vocational qualification

The overall objective of 'vocational qualification' is to provide citizens with a qualification by having their non-formally acquired skills and competences assessed and certified to improve their chances on the labour market. This became necessary because the system of initial VET in Czech Republic could not sufficiently adapt to the dynamics of labour market demand for skills, leading to a lack of technically and/or vocationally skilled workers.

The phrase 'vocational qualification' in this context does not refer to any vocational qualification in general, but to a partial qualification which is gained through a system of recognition and certification of the outcomes of further learning in a competence-based manner. The qualification can stand alone as a certification of vocational competence for a specific job or a specific set of work activities; several vocational qualifications related in terms of sector or vocation can be clustered together.

The role of the vocational qualification in the system of recognition of certain learning outcomes can be defined as that of an elementary systemic unit through which the competence-based and labour-market-driven matching of skills is realised. Partial vocational qualifications are neither comprehensive qualifications simply split into pieces nor mere components of larger wholes decomposed; they are newly defined units that may (or may not) cluster into larger ones.

While the target number of vocational qualifications in the Czech education system is 1 200, currently around 580 are fully done and provided; another 300 are in the process of approval. Around 90 000 citizens received this type of certification up to February 2014. A supporting funding scheme providing incentives to obtain such a vocational qualification explains the relatively large uptake of the instrument.

Key success factors:

- (a) recognition of non-formal learning;
- (b) flexibility towards labour market requirements;
- (c) new classification system for (partial) qualifications.

Key lessons:

- (a) top-down approach (legislation) corresponding with basic labour market demand;
- (b) consideration of traditional perceptions of qualifications.

Even though the programme also includes training courses and an examination, the ability to obtain a certificate for skills they already had was the main reason for the beneficiaries interviewed to take part in the programme:

'I chose the 'vocational qualification' because of the trade certificate. At the seminar, they said that without taking the examination, the time spent on the course would not be worth it. We just had to go for the exam.'

The main problem observed in early implementation of the 'vocational qualification' was a widely held scepticism among the population and employers about a new and unknown qualification (see also the related instrument in Box 11). Because the 'vocational qualification' is essentially a 'partial qualification' (which is in line with its modular approach), it challenged the conventional understanding of a qualification. The top-down introduction of the new qualification was therefore, not immediately embraced by stakeholders, who had to be convinced of its relevance.

However, when viewed from a European perspective, the instrument contains several relevant and transferable elements for countries that also have relatively rigid education structures, without a clear role for non-formal learning. In such a context, top-down implementation of new types of (partial) qualifications similar to the Czech one seems highly transferable. However, if this occurs, initial scepticism of relevant stakeholders needs to be properly addressed by involving them at an early stage to build commitment.

In addition to instruments strengthening the skills of employees in a generic way, several instruments help to improve skills in particular sectors to improve labour market position. The 'sun project' in Spain and 'energy training for construction workers' in Croatia provide training courses to construction workers, with a focus on sustainable energy. The one-year full-time ICT skills conversion programme in Ireland delivers skills in core computing/programming, software and data analysis while sectoral practical training centres in Lithuania equip employees with skills related to occupations within their sector. These instruments all provide training to employees that come on top of the skills they obtained while working in their sector, so giving participants the means to strengthen their position in their company and on the labour market.

'Apprenticeships for adults' (Austria) aims to strengthen professional skills of employees at risk by opening up learning possibilities for adults in the Austrian dual education system. The apprenticeship scheme is strongly company-based, and supports employers providing training positions not only to traditional apprentices, but also to their own employees who lack certain skills. Although the approach is innovative, it is currently too early to assess to what extent the instrument contributed to raising the skills of the workforce in skills needed by employers.

Some training offers are innovative, combining multiple approaches that may include counselling or elements of career guidance. Training instruments

complemented with personal and structural support make training efforts more fruitful. This is especially relevant for target groups not used to regular skills development, which are targeted by the German instruments ‘transitional employment agency’ and ‘transitional company’ and the Finnish ‘door to learning’ initiative.

Box 18. Finland: door to learning

The ‘door to learning’ initiative groups 48 different activities in lifelong learning and labour market mobility. It was created to improve the educational guidance provided by the Finnish PES and private training providers for employed and unemployed individuals. ‘Door to learning’ coordinated all efforts in this field and served as central coordination point. It also transferred the outcomes of research projects into activities and coordinated a parallel evaluation process focusing on collaboration between actors.

Joint projects, workshops and coaching to make the existing training offer more comprehensive and accessible, fostered networking among different training and education providers. Networking activities were conducted with relevant regional actors (particularly secondary level VET providers) and led to developing regional guidance strategies.

A range of initiatives beyond networking included establishment of new locations for guidance services. The counsellors assigned to these centres received specific training to help them in giving comprehensive education advice, including all learning options and pathways. Additional services included mobile counselling buses and phone and online services.

Key success factors:

- (a) combination of networking and closer cooperation among education and training providers and encouragement of potential learners;
- (b) offer the means to update skills in line with rapidly changing skill needs;
- (c) instrument was introduced before the economic crisis, and therefore had time to mature before it was needed the most.

Key lessons:

- (a) need to broaden information on training supply offered by multiple education and training providers;
- (b) importance of physical contact and providing face-to-face information.

The Finnish ‘door to learning’ helps the country deal with severe changes in its economy (Box 18). It works on both on the supply side of education and training (by fostering information and networking among providers) and on the demand side (by encouraging potential learners to seek information and advice). This was achieved by creating contact points for potential learners at education providers, where a range of information was made available, as well as information buses and mobile contact points. Cooperation between these

providers was supported by organising workshops and continuing professional development for the training providers' counselling and training experts and by involving coaches specialised in networking.

'Before, if a learner had special support needs, we were simply not able to fully meet these needs, and that was that. These days, clients have more outspoken ideas about their educational trajectory, and therefore the need for personal assistance increased. To follow this trend it is very important to cooperate with other institutions, and the network provided the backbone to do so.'

The networking approach is especially useful in contexts with a fragmented market of competing further education providers. The Finnish experience shows that personal contact and networking of trainers and counsellors supports cooperation and brings providers closer in working towards a common goal. The timing of the instrument is striking; while it was implemented before the economic crisis, it proved particularly useful after 2008 when demand for broader development of skills became obvious and cooperation crucial. This instrument offers the means to update skills in line with rapidly changing skill needs in a formerly prospering and skills-intensive economy. Many elements of 'door to learning' can be transferred to other contexts, as long as these are viewed as complementary to the core task of building up a transparent and trustworthy adult education system.

3.3.2. Training employees in specific skill shortages

A second group of training instruments targets employees more specifically to address skill shortages. These instruments do not directly improve job security, but train individuals in sectors with job shortages so that they can be mobile (Table 12). Focusing on current or future skill shortages by targeting training on the skills employers need is crucial for ensuring competitive economies.

Two instruments in this category involve the VET sector in upskilling employees with skills particularly needed on the labour market. One in Malta, provides basic and advanced training in various skills related to aviation maintenance. It seeks to combine the objective of addressing skill shortages with improving the employability of employees in the sector. In the UK (Scotland), the government encourages young engineering graduates that just started working to gain additional skills in renewable energy. The government foresees skill shortages in this field in the near future and seeks to avoid them by training graduates with insufficient skills.

Table 12. Instruments supporting the training of employees in skill shortages

<p>Addressing skill mismatches in the aviation maintenance industry (Malta)</p> <p>An instrument delivering training on different educational levels with the aim to deliver highly skilled workers. It has been set up to improve the programme portfolio of Malta's main training organisation, Malta College of Arts, Science and Technology. The programme provides training in aircraft maintenance, avionics systems, aircraft structures and composites.</p>
<p>The energy challenge fund (UK-Scotland)</p> <p>Responds to the lack of skills identified in the Scottish energy sector which cannot be covered by graduates from the education system: it is related to the government's energy skills investment plan. The fund enables new entrants to Scotland's energy sector to acquire the qualifications necessary for working in renewables, oil and gas, subsea and micro-renewables.</p>
<p>The skilled labour grant (Austria)</p> <p>Addresses skill shortages on the basis of a comprehensive list of shortage occupations. If workers or the unemployed with low or middle level qualifications complete a training programme directed at one of these occupations they receive financial support for up to three years. The instrument is part of a policy package addressing the lack of skilled workers.</p>
<p>Strategic transformation support (Belgium-Flanders), formerly known as strategic support for investment and education</p> <p>A funding scheme helping small and medium-sized enterprises (SMEs) further develop their human resources. The instrument is not sector-specific but it includes proof of a specific lack of skills as funding criterion. The overall goal is upgrading the staff of Flemish SMEs to stay competitive on international markets.</p>
<p>Skillnets (Ireland)</p> <p>Acts as an enterprise-led support body dedicated to promoting and facilitating enterprise training and workplace and workforce learning. It funds over 60 training networks (2013) in a wide range of sectors and regions across the country. In addition to the main aim of upskilling employees, the instrument has expanded by also incorporating training for job seekers.</p>

Source: Cedefop.

Instead of targeting one specific sector or set of skills, the skilled labour grant in Austria focuses on a range of defined shortage occupations (such as specialised workers in health care or child care) and makes funding available to support training programmes for employees. The grant supports employees, often at risk of unemployment and/or with skills not matched to their current job,

in participating in extra-occupational training, but only for skills required in shortage occupations.

Several other policy instruments also adopt this wider focus on multiple sectors facing skill shortages. Some do not target employees directly but adopt an indirect approach by supporting employers in organising training of employees in skill shortages. Instruments limited to funding schemes may seem to be of a less experimental and innovative nature but some innovative elements can be found that are worth studying. ‘Strategic transformation support’ in Flanders (Belgium), which provides SMEs with financial means to train their staff requires employers to prove the skill shortage they will address with the funding. This follows the same logic and similar focus on skills in need as the Austrian example. Another example is Skillnets in Ireland, which helps Irish employers, supported by the government, form skill networks to determine sectoral skill needs and organise employee training accordingly. To keep the skills learned relevant for working in the entire sector, skill needs assessment and training efforts both take place at sectoral level (the skills training is provided by the network of companies), implying that the value of training goes beyond the company where the person works. Over 60 such training networks are currently supported in Ireland. Another example of a strong employer influence in employee training is ‘employer ownership of skills’ in England, which aims to overcome the misalignment between public training and private skill needs, and seeks to join forces in providing training for skills that have been defined as shortages by employers (Box 19).

Despite the competitive application process, the initiative encouraged cooperation between employers which, in turn, contributed to its effectiveness. Participating employers adopted a shared vision towards the skills gap problem, and cooperated in consortia to submit joint applications. The initiative also featured specific events to aid exchange of practice to support smaller companies without capacity to engage in an extensive project. However, some employers were better prepared for the application process than others due to previous participation in similar initiatives, leading to self-selection. This illustrates the need to keep administrative requirements for funding at a minimum and to organise implementation as ‘user-friendly’ as possible.

Box 19. The United Kingdom (England): employer ownership of skills

When analysing skill mismatch in the UK, a general finding is misalignment between the public training system and the skills demanded by the private sector (UKCES, 2011). As a result, employers have had limited interaction with training programmes offered by the public system. 'Employer ownership of skills' aimed to give a more central role to employers in the design and (shared) funding of vocational training. The core element of the instrument was dividing work between public actors (providing part of the funding, the legal framework and the broad policy direction) and private actors (providing the content and funding).

To participate, interested employers had to take part in a competitive application process. In addition to making suggestions for training design and the extent of their contribution to funding, bidders had to demonstrate an identified skills gap and propose ways to address it, providing compelling and evidence-based arguments to demonstrate the suitability of their approach and the insufficiency of existing instruments, as well as a reasonable cost structure for their plan.

The approach builds on previous initiatives with a similar logic in terms of employer participation and ownership, such as the growth innovation fund and the employer investment fund. UKCES, the initiator of the policy and responsible for its management and implementation, is an industry-led organisation providing strategic leadership on skills and employment issues in the UK. Within the Ministry of Business Innovation and Skills, the Skills Funding Agency is the executive agency which funds further education in England.

The instrument also featured incentives for companies to focus beyond the workforce in their region, and target other groups including unemployed young people or disengaged students that were (at risk of becoming) early school leavers.

Key success factors:

- (a) ownership based on employers' contribution to design and funding;
- (b) competitive application procedure;
- (c) clear identification of skill shortage;
- (d) requirement of proof of insufficiency of existing tools;
- (e) community orientation.

Key lessons:

- (a) successful public-private partnership in training delivery;
- (b) importance to bridge cultural and language divides between policy-makers and businesses;
- (c) strategic value of promoting cooperation between companies;
- (d) evaluation of an optimal degree of joint financing.

The central innovative element of 'employer ownership of skills' was to overcome the gap between skills required by employers and those offered by the training system through more employer involvement. As one representative of a consortium of employers put it:

'[It] is the fundamental underpinning principle, [that] we understand the industry, we have influence over the industry, and we can use this understanding and influence to design programmes.'

Bearing this in mind, the instrument appears more relevant for countries where cooperation between public and private actors – particularly employers – is limited (Mediterranean Europe or new Member States) rather than in countries where employer participation in education and training is better embedded in education (as in Austria, Germany, the Netherlands, or Scandinavian countries). Whatever the specific context, this instrument shows the value of boosting employer ownership in relation to skill shortages; this helps both in a context of high employer involvement and where the instrument can start bringing actors together.

A crucial bottleneck is employer shared funding. The share of funding for each company depended on a 'reasonable suggestion' made by companies themselves. However, in reality, employer contributions seem too small to engender real commitment of the single companies.

The 'initiative for skilled workforce, eastern Germany' (Box 20) is similar to the UK example in several respects. It is also a scheme that funds employers through a competitive application process. Cooperation agreements between different employers are favoured, as they are considered more effective in contributing to the overall aim of the instruments: reducing skill shortages through effective training. Competition between (consortia of) employers should be seen as a driver to boost innovative approaches. While innovativeness in the UK example is inherent in the design of the instrument (engaging private employers in public training provided skills in demanded), the German instrument requires applicants to make innovativeness a core element in their proposal.

To boost the skills development of the workforce at regional level, the 'initiative for skilled workforce, eastern Germany', asked companies to form project consortia. The members of the 10 partnerships awarded a project were not direct competitors at local level, because no more than one project per region was selected. Restricting direct competition in this manner enabled open and honest exchange of experience between members of the 10 partnerships. Beyond that, the personal engagement of leading local stakeholders (such as mayors) and the willingness of local chambers of commerce to contribute to a coherent regional skills formation process are also success factors. To keep the 75 networks that applied but were not awarded a project on-board, they were invited to participate in the events.

Box 20. Germany: initiative for skilled workforce, eastern Germany

SMEs in eastern Germany were confronted with several challenges in securing a skilled workforce: rising qualification requirements, decline in the working population, emigration, and low participation in the dual apprenticeship system. The objective of the initiative was the long-term development of skilled workforce using a top-down approach initiated at federal level.

The main idea was to fund projects for evaluation of measures to secure a skilled workforce in sectors with an increasing demand for skilled workers. A total of 10 out of 85 applications were chosen to be funded. The budget for each of the 10 was EUR 100 000. Implemented between 2010 and 2012, the duration was around one and a half years.

The projects were developed bottom-up at local level by existing regional stakeholder networks: the collaborative development and application process can be seen as a core element. The themes of the funded projects were very different in nature and covered a several fields: examples include motor mentoring (new female professionals and young managers for the future of the automotive sector in Thuringia) and the transnational network for securing a skilled workforce for promising activities in a region close to the Polish border (Frankfurt/Oder, Eisenhüttenstadt).

Events like conferences and workshops with a multitude of stakeholders (social partners, chambers, education and training institutions) helped promote innovative approaches in securing skills in the respective regions. A central coordination point, called the *Transferstelle* moderated development processes, coordinated activities, supported the organisation of events and secured links between relevant stakeholders. At local level, representatives of communities played an important role as change agents.

The workforce initiative was not restricted to particular sectors or groups of people. In addition to the outcomes of the projects, which have to be assessed, the collection of ideas aimed at securing a skilled workforce was an important outcome: 85 network-based approaches were collected through the application process.

Key success factors:

- (a) cooperative relationship between participating companies;
- (b) inclusion of representatives of different communities;
- (c) ensuring participation and input from companies that were not granted a project.

Key lessons:

- (a) building network structures at local level;
- (b) bottom-up approach for local skill mismatch instruments;
- (c) considering local needs in skill supply.

This initiative helped uncover several innovative elements in the projects awarded. But the significant element of the instrument is the way innovation, in terms of the supply of skills, was supported: by free competition of ideas from corresponding regional actors which led to fruitful interaction among all

participants (even with those not awarded). This exchange of good practices has the potential to create spill over effects. While the effectiveness of the different policy instruments targeting skill mismatch in the projects has not been assessed, those benefiting from the measures almost exclusively reported positive effects and opportunities for policy learning:

'The modularisation of educational programmes for industrial engineers is being transferred to be used as reference in Sachsen and Brandenburg; three other enterprises have already adopted this in their programme.'

These spill overs relate to the many ideas collected as part of the application process that gave impulses for initiatives outside this instrument, as well as new cooperation between different types of local stakeholder. Several VET providers and companies continued their cooperation after the projects ended. Some of the results achieved within the funded projects are highly transferable to other contexts or sectors, such as the successful local implementation of a dual system apprenticeship scheme for the new profession 'production technologist'.

3.4. Guidance and counselling

The importance of guidance and counselling for learning, employment and career development has been recognised all over Europe (see, for instance, Cedefop, 2009a). Although it is a cornerstone of national skills strategies and an indispensable aspect of skill matching, the discourse on guidance and counselling is only loosely connected to skill mismatch. The primary aim, to support individuals in making themselves aware of their aptitudes and talents and providing them with a wide range of occupation and education opportunities, often clashes with an actual lack of job availability at (local) labour markets and the idea of directing them to a restricted number of occupational fields or sectors with job opportunities. Thanks to new technologies and methods, more frequently updated labour market information of better quality has become available over the last two decades, but many counsellors are reluctant to use it. As a result, and because of the increasing availability and use of the internet in recent years, 'self-service systems' for education and career guidance have become more popular.

While Chapter 2 contains an overview of guidance for the unemployed, this section focuses on education and career guidance, which can be defined as giving information and advice offered to young people and adults in terms of their choice of pathways in and through education and work (Cedefop, no date a). The large number of career guidance instruments (Table 13) and the fact that these

come from different contexts (labour market, education), addressing different levels (school, university) and different target groups, confirm their relevance for skill matching policies.

Table 13. **Instruments providing career guidance in education and work**

<p>Career guidance in general and vocational education (Latvia)</p> <p>An information tool on the overall labour market situation and the requirements of skills and competences in different occupational fields. Career guidance services include matching individual capacities and intentions to regional labour market realities. The instrument encourages informed and rational decisions by students when they choose their further educational pathways and professional careers.</p>
<p>Centres of innovative craftsmanship (the Netherlands) (for VET schools) and centres of expertise (in universities of applied sciences)</p> <p>Support cooperation between the private sector and the education sector to link education better to the labour market. Each centre cooperates with local labour market stakeholders.</p>
<p>The career guidance system (Estonia) in general and vocational schools</p> <p>Developed on the basis of good practice examples from all over Europe. Career information and counselling is provided in regional centres, supported by ICT applications. Cooperation and information exchange between institutions dealing with education, training, youth work and the labour market is strengthened.</p>
<p>The employment service early intervention activities (Croatia)</p> <p>Aim to prevent young people from leaving school early by providing career guidance. This guidance is planned on a yearly basis and uses the results of the survey on vocational intentions of primary and secondary school students of the Croatian employment service. Using survey results enables counselling targeted to individual needs while taking into account regional labour market needs and national trends in vocational intentions. Guidance also includes support on health issues, learning disabilities and behavioural disorders.</p>
<p>The modernisation of vocational education in the Małopolska region (Poland)</p> <p>Aims to strengthen cooperation between schools and enterprises (as in the form of organising internships for young people), while at the same time monitoring regional labour market developments. To achieve this, a strategy prepared by the regional government focuses on providing comprehensive support to vocational education in the region using human capital management methods.</p>

The Ministry of Education and Sport survey (Slovenia)

Analysed the number of applications, students and graduates at higher education institutions and linked them to long-term national labour market projections. The rationale for conducting the study was the weak link between labour market developments in higher education provision. Its results led to changes in access policies in higher education institutions.

The open system of vocational information and consulting AIKOS (Lithuania)

An open online information portal providing information on qualifications, VET and higher education programmes as well as on the providers of these programmes. The main target groups for the system are students and young people looking for information on which they base educational and professional decisions.

Vocational information points at secondary (general education) schools (Lithuania)

Help teachers and specialists provide vocational guidance to pupils and graduates supporting them in choosing future career and further education pathways. This aims to aid access to information of this kind.

Source: Cedefop.

Early leavers appear to be the group most targeted by guidance instruments. Using its survey on vocational intentions of primary and secondary school students, the Croatian employment service early intervention activities provides labour market orientation to prevent early leaving. Besides early leavers, some instruments also target pupils and students. The MoESS survey on labour market needs and 'career guidance in tertiary education' (both in Slovenia) support higher education students. Vocational information points in Lithuania offer professional career guidance for secondary school students and graduates delivered by specially trained teachers and vocational specialists.

In recent years, due to education-to-labour-market transition problems experienced by graduates at all levels (including higher education), there has been a trend of establishing career centres at education institutions. The career guidance centre at the University of Ljubljana (Box 21) illustrates this development, but similar examples could be found in various Member States across Europe ⁽¹³⁾. Although the centre was established at local level, it has also had a strong impact on national policies and practices in making tertiary education more responsive to labour market demand and to changes in skill needs.

⁽¹³⁾ The centre was developed following visits to other universities in Europe, such as Cambridge, Cracow, Klagenfurt and Vienna, having already used the same kind of instrument.

Box 21. Slovenia: career guidance in tertiary education

The career guidance centre at the University of Ljubljana aims to provide support services for students and graduates to ease career planning in line with labour market needs. The centre helps them connect with employers and establish effective social networks. Partnerships with secondary schools support study decisions by pupils prior to joining university.

Professional career counsellors offer several services: individual and group counselling, psychological tests, workshops in preparing effective CVs and motivation letters, developing career plans, and modelling/simulating job interviews. An innovative way of connecting students with employers is 'speed-dating'. The approach, valued by all concerned, allows students to test themselves in practical situations and receive direct feedback from employers.

Faculty-based desks offer support from faculty advisers and counsellors to students planning their career pathways and help integrate faculty-related recommendations and information.

Key success factors:

- (a) professional individual career guidance;
- (b) crossing educational system boundaries (higher education-secondary schools);
- (c) innovative networking methods including direct employer feedback.

Key lessons:

- (a) integration of relevant internal and external stakeholders in a career guidance system;
- (b) direct pathways to match employers with students and graduates.

The centre combines counselling expertise (psychological, methodical) with a practical way to connect students and graduates with employers, opening up direct feedback opportunities. It has also established good connections with secondary schools in and around Ljubljana and provides career orientation to help learners prepare for their university studies. This makes the instrument a comprehensive example of career guidance focused on skill matching covering different education levels.

A crucial success factor in this kind of instrument is commitment of external stakeholders. Relevant parties in this case were the Slovenian Chamber of Commerce, the Slovenian Human Resources Association, Public Fund of Scholarship, and human resource management and important companies. The support of internal stakeholders, such as the various faculties and the student union of the university, has also contributed to success. As one of the initiators pointed out, this is not always straightforward in academic cultures:

'Initially, academics looked down on the instrument, but this changed and most faculties consider the centre as something beneficial now, both professors and students' association participate in our programmes.'

The centres of innovative craftsmanship (for VET) and centres of expertise (for universities of applied sciences) in the Netherlands follow a similar approach, bringing students in education closer to employers. The centres adjust their services to the specific mix of companies present in the region. They combine entrepreneurial knowledge of companies in the network and bring students in contact with local employers. Centres of innovative craftsmanship approach motivated VET students (EQF levels 3/4) to work on their assignments in a technologically innovative setting at participating local employers. They also provide students with additional skills demanded by employers in particular sectors. In this, the instrument could also be classified under Section 3.2, with instruments that develop particular skills among students to address skill mismatch.

The combined approach makes this instrument interesting: while it primarily seeks to raise interest among students to pursue a career in a particular sector, it also aims to focus teaching on skill shortages. The transferability of the instrument depends on the structure of the national education system. In principle however, public/private partnerships to focus education programmes more on labour market needs, which also bring employers in contact with students, could be established in many (vocational) education and training systems.

Career centres at single education institutions have to be distinguished from more provider-independent centres of career guidance, usually addressing a wider and more heterogeneous group of beneficiaries. Such centres also offer broader services and outreach strategies. From a skills matching perspective, there is a fundamental difference between provider-dependent and provider-independent centres of career guidance ⁽¹⁴⁾. While provider-dependent career services may have the advantage in the terms of better knowing their clients, and therefore being able to tailor their services better to individual needs, they can also be seen to increase labour market competition while prioritising their own clientele. A more moderating role towards skill mismatch can be assumed for provider-independent career guidance. An example is VEU centres in Denmark

⁽¹⁴⁾ There is discussion over what can be counted as provider-independent. Career guidance is also very often provided by interested organisations (unions, chambers of commerce). In this context we refer to provider-independent if the service is provided independently from a particular education provider.

which do not address students or graduates, but employees and employers. The reason for establishing the VEU centres was that many SMEs were unaware of the different options for upgrading the skills of their employees through courses provided through the labour market education (AMU).

Box 22. Denmark: VEU centres

The main idea of the VEU centres, started in 2010, is that companies and employees can approach one contact point when searching for information on lifelong learning and further education ('one way in' method). The 13 VEU centres in Denmark link education institutions in different regions with one education institution per region assigned as host institution. Host institutions are in charge of coordination between education institutions and career guidance counsellors. VEU centres provide counselling to companies and employees within their region and inform the beneficiaries on what the centre and the AMU (labour market) courses have to offer. For employees, the main focus is on labour market relevance of support. VEU centres offer compensation for lost salary for AMU courses, which target unskilled and skilled workers and consist of both theoretical and practical lessons (full-time or part-time).

Contracts with education institutions are signed for four-year periods. In the first period the centres could define the goals and objectives by themselves to create a sense of ownership; in the second the same goals were set for all centres to ease comprehensive evaluation and comparison of their results.

Within the first two years, the VEU centres signed contracts with 16 186 SMEs to evaluate their need for education and competences. A total of 4 696 SMEs have agreed to equip their employees with better qualifications.

Key success factors:

- (a) central contact point for upskilling for all labour market stakeholders;
- (b) combination of training offers and outreach work;
- (c) activities centrally coordinated by one regional host institution.

Key lessons:

- (a) 'one way in' approach for all labour market stakeholders;
- (b) common targets for multiple regional contact points;
- (c) building on existing structures of training provision.

The main focus of the approach of the VEU centres is on networking and interlinking existing structures, rather than developing new offers. The establishment of networks of counsellors or counselling institutions can be observed in many countries, often project-based and ESF-supported. This instrument shows that it is a substantial advantage to address target groups (be it employees, or employers) at one central place. From a governance perspective it is important that these networks strike a balance between decentralised and centralised management; this ensures that the education institutions feel

ownership of the initiative, while it also keeps decision-making centralised where necessary. The centralised role of the ministry in the approach contributed to its success, allowing potential conflicts between education institutions to be avoided or relatively easily mediated.

Beneficiaries of the VEU centres have different viewpoints on their impact. Some consider the centres efficient and flexible (with a four- to five-week period from first contact to the first courses and with results beneficial to companies); others reported mismatch between the competences trained and those needed by employers. One client indicated that he was satisfied but also said that he did not see the added value of the centres over looking for jobs and contacting education providers directly.

The instrument is relatively sustainable as it is incorporated in law. The important role of social partners in the initiative and in establishing the centres further contributes to its sustainability. Their involvement generates motivation and acceptance from both employer and employee organisations, and is therefore less likely to be criticised by either party.

A similar focus on interlinking existing structures can be seen in the Modernisation of vocational education in Małopolska region initiative (Poland). Rather than setting up career guidance centres it establishes direct connections between schools and enterprises, for instance by organising internships for students. This approach, where the labour market orientation of the education system of a whole region is put to the test, seems most appropriate for the situation in the Małopolska region.

The examples presented illustrate the provider-dependent approach, covering specific education institutions ('career guidance in tertiary education' in Slovenia) and the independent approach, covering whole regions (VEU centres in Denmark, modernisation of vocational education in the Małopolska region in Poland), focused on establishment of new organisation structures and, less so, on methodology or didactic issues (how career guidance should be conducted). In contrast, the development of the career guidance system in Estonia also shows innovative elements in methodology, in spite of being general in its approach. ICT applications are seen as an option to deliver basic career guidance to larger groups. Its use appears to have disadvantages as well as advantages compared to more traditional approaches. While the lack of personal counselling and exchange can be regarded a disadvantage, the more structured and clearly arranged way of presenting a range of education and career pathways or interactive offers of skills assessment can be seen as a strength of online guidance.

The open system of vocational information and consulting AIKOS, in Lithuania, is a good example of a well-structured online supply of information that

gives an overview of qualifications, available VET and higher education study programmes, as well as providers of these programmes. Career guidance in general and vocational education in Latvia exemplifies even better the opportunities of online offers, as it includes the possibility to match individual capacities and intentions with regional labour market needs.

From a skills matching perspective, the difference between using self-service systems or personal guidance and counselling is as fundamental as the one between provider-dependent and provider-independent guidance. There is the risk that the inevitably subjective factor of personal guidance may increase information asymmetries, but non-guided self-selection of occupational and labour market information by individuals also bears a substantial risk of increasing skill mismatch. These instruments show that a combination of both approaches, in which counsellors assist individuals to use online systems, is likely to become a new standard. Independent of the more theoretical questions which would lead into debate about the autonomy of citizens, the major question from a skill matching perspective is how good the quality of labour market information is, and how that information is provided to individuals. Career guidance is inevitably tightly connected to labour market analyses and career guidance instruments discussed show these strong connections, which result in a strong labour market orientation of guidance offers. However, there are differences in how this can be implemented. In the few cases reported here, techniques for ensuring guidance with a labour market orientation range from integrating labour market research to including employers in the career guidance process (see for instance 'speed-dating' at the University of Ljubljana).

CHAPTER 4.

Lessons and options for policy-makers

4.1. Introduction

This report presents many different policy instruments targeting skill mismatch with a focus on reducing or preventing unemployment, but the inventory is not complete as it does not consider all policy measures currently in force: only the most recent and more innovative policy instruments have been selected. Despite the fact that the study only considers a sample of those available, the large number of instruments identified, and particularly their range and different nature, has proven a challenge for a thorough comparative analysis. Nevertheless, there are lessons to be learned. The aim of this chapter is to bring together these lessons learned and to provide advice for policy-makers and practitioners when reflecting on skill matching measures or when introducing instruments to combat skill mismatch.

The chapter follows the structure of the report. Section 4.2 presents the main lessons learned for mismatch policies targeting the unemployed and insights from mismatch policies aimed at preventing unemployment. Section 4.3 presents the lessons learned from skill mismatch policy instruments targeting the education system. The focus in Section 4.4 is on training for the employed. Section 4.5 reflects on the importance of the overall policy framework. First, it deals with the presence or absence of a national skill mismatch strategy and then it discusses ways to involve the various stakeholders in these strategies and the individual instruments.

The line of reasoning for presenting this synthesis is that in each of these sections three ‘pillars’ of policies and instruments are introduced, guiding the structure of each section:

- (a) a first pillar comprises policy messages and examples of cases that offer more or less conventional logic that is more widespread across the EU. We term these ‘fundamentals’;
- (b) a second pillar refers to ‘policies that work’, examples of policies which seem to have a wider applicability or cross-over among many of the instruments collected;
- (c) a third pillar describes ‘innovative approaches’, and concerns, examples of policies that this study has revealed as highly interesting cases, but may only be observed in a few or even one instance.

In Section 4.6 we summarise the conclusions and policy recommendations.

4.2. Lessons of skill mismatch policies for the unemployed

This section draws lessons from skill mismatch policy instruments introduced in EU Member States that target the unemployed. The three types of instrument distinguished are upskilling, guidance and subsidised work.

4.2.1. Lessons for upskilling the unemployed

Most instruments in this category can be categorised as ALMP. However, this report looked beyond the short-term employment objective of ALMP measures and instead adopted a skill mismatch perspective. This perspective implies that the two main objectives of such policies are:

- (a) providing an unemployed person with new or updated skills to improve his/her position sustainably on the labour market. At the macro level, the impact is strengthening the labour force ⁽¹⁵⁾;
- (b) providing employers with new employees who have the competences to fulfil hard-to-fill vacancies or fill in newly created jobs. At the macro level the impact is on strengthening the business sector and reducing incentives for companies to move operations to other regions or countries.

In the assessment of various policy instruments in this area, the first objective seems to be generally in place. However, the second objective was encountered less frequently as an integral part of policy instruments ⁽¹⁶⁾. The analysis of most ALMP-related instruments shows that the skills element is often subordinated to getting somebody into employment. While it is essentially a positive outcome if a beneficiary finds employment, adopting a skill mismatch perspective requires asking additional questions: not every job match also constitutes a skill match. The Portuguese instrument ‘active life’, for instance, provides beneficiaries with very short training blocks, which beneficiaries

⁽¹⁵⁾ The Finnish tailored approach to labour market training shows that, after two months of participation in the training, 54% of those who completed it were employed, while 81% estimated themselves that the instrument was good or excellent for their position on the labour market.

⁽¹⁶⁾ Looking at ALMP from the skill mismatch perspective means that factors like deadweight and displacement are less important for assessing the effects of the interventions than with ALMP in general. If both or either of the objectives mentioned is met, it does not matter that somebody should have got a job without the intervention. At the same time, there is no case of displacement when the second objective (hard-to-fill vacancies or new jobs) is being reached. At the macro level, displacement may actually be considered beneficial, as it could increase the total number of persons with a job.

consider useful. However, at the same time, the training is abruptly stopped if the beneficiaries find employment, a practice that may be counterproductive to sustained employment in the long run.

Training instruments addressing the unemployed could be categorised according to the type of skills they provide and the extent to which they reply to actual or future skill shortages. First, there are instruments providing general training and basic skills to the unemployed without directing them to a particular stock of job openings. A different category of instruments provides targeted training for the unemployed, addressing shortages in particular sectors or occupations ⁽¹⁷⁾. Training provided by companies and jointly sponsored by the PES are another type of instrument addressing the unemployed. Despite the different working mechanisms, approaches and target groups (among the overall group of unemployed, such as long-term unemployed, youth) the instruments in this category show some interesting common characteristics and allow for identifying success factors, as described below.

4.2.2. The importance of work-based learning and practical work

A more or less fundamental element of the diverse instruments joining ALMP with skill mismatch strategies is work-based learning. It is a key component of training for the unemployed by companies. The strength of work-based learning components in skill mismatch instruments seems to originate from the fact that various challenges are addressed at once. Even practical work without an explicit learning element may provide unemployed persons with new skills, contributing to the objective of supporting someone towards sustainable employment. An example of such an instrument is the ‘community public work programme’ in Hungary, which aims at improving basic skills, particularly improving work attitudes, by prioritising practical work experience.

Another important working mechanism was highlighted in several instruments with an ‘internship’ element. In the JobBridge scheme (Ireland) and the employment internships (Portugal), employers and interns get the chance to learn to know each other without taking much risk.

From the perspective of beneficiaries, an important element of the job-rotation scheme (Denmark) was how they were challenged in a professional environment. Beneficiaries were able better estimate their own skills by being introduced into such an environment. This is underlined by the fact that participants reported that the potential of working in ‘a real job’ was encouraging. Whether this concerns an actual workplace in a private company or a position on

⁽¹⁷⁾ In both cases subsidising jobs may be part of the instrument.

the intermediate labour market (as in the Finnish project *Välke*) or community work (Hungary) appears to make little difference. The opinions of participants in *Välke* indicate that the challenge to move from subsidised work or intermediate labour markets to regular employment should not be underestimated. This is the reason for providing assistance to the application process in this case (and also in the Belgian ‘companies for job-training’ instrument).

From the perspective of employers, the possibility to gauge people’s skills and test their working attitudes, without the constraints of an employment contract, is also valued. Not having to pay a (full) salary may already compensate for the fact that employees can leave the company and find employment elsewhere, despite the efforts invested.

Several instruments in this study were specifically directed at unemployed youth. With youth unemployment levels projected to remain high, especially in the southern and eastern Member States of the EU, supporting entry into the labour market of young people by (additional) workplace experience continues to be necessary. Most of the instruments studied focus on in-company training for higher-educated young people. Many graduates have difficulties finding a job as workplace experience is often lacking in the curricula. For these, in-company training seems to strengthen their labour market position. It is important to keep in mind, however, that such instruments run the risk that one type of skill mismatch (graduates from higher education lacking work experience) is displaced by another type (inadequate use of educational qualifications and skills): experience should be gained in jobs which fit their education background.

Important success factors identified among instruments are acknowledgment of the workplace as an important place for learning or retraining the unemployed, using tailored and flexible on-the-job training programmes to reintegrate the unemployed, and ensuring that training curricula are workplace-oriented. The impact of these success factors may be strengthened by giving beneficiaries the option to indicate their preferred core skills to focus on (as is the case in the Dutch ‘starting grant’ instrument).

4.2.3. Combining ALMP with features of education systems

Increasingly, features traditionally associated with education systems have started infiltrating the various approaches taken in ALMP. This is important, as communication on policy level between education systems and employment is not yet optimal (also Section 4.5), despite the fact that, in many countries, the education system and PES-sponsored training are communicate, often forming part of one skill formation system.

Successful integration is clearly demonstrated by the Portuguese programme ‘active life-qualified employment’, where both recognition of prior

skills and certification of achieved learning outcomes form part of the ALMP instrument. These elements are welcomed by programme users and, if they became standard features of training provided by PES, they could bring education and employment closer together in the long run. A more competence-based approach of both the VET system (competence-directed training) and the PES (such as registering the competences of unemployed job seekers) could also strengthen the links between ALMP and education.

4.2.4. Linking skill needs to training

It is not surprising that governments, both at central and local level, are looking at training the unemployed from a cost-effectiveness perspective. Training should be targeted to identified skill needs, and help somebody (back) to sustainable employment as fast as possible, to minimise spending on unemployment benefits. While many of the anticipation systems operate at national level, the development of training and matching takes place at local/regional and sectoral levels. Successfully linking different levels can be achieved by using a mixed method approach, and including stakeholders in interpreting the results and designing the training measures, as is the case in 'training for the unemployed' in Croatia. The success of the Finnish project *Välke* is that, even though national law describes the framework for labour market training, regions implement it and can take more specific needs into account when organising the training.

4.2.5. 'Tailored generic skills' is not an oxymoron

The analysis of training instruments for the unemployed focused on general or basic skills shows that generic or basic skills should not be equated to skills not tailored to individuals. For many unemployed, the main obstacle to employment is not specific training but insufficient generic skills. The 'French key competences training' is a good example of unemployment policies that adopt a broad skill perspective: its beneficiaries are not oriented towards specific types of jobs affected by skill shortages. It tackles skill shortages in a horizontal way, by providing beneficiaries with a set of skills needed in most jobs, as suggested by the key competences defined by the European Commission, but subsequently tailored to individual needs. Focusing on the unemployed at some distance from the labour market, the instrument is designed to tailor to the type of job that the individual is looking for. The training in basic and transferable skills merges different types of skills development (such as literacy training, personal pedagogy and introductory courses on using the internet) into one instrument, which is determined on the basis of personal preferences.

This instrument is designed to contribute to obtaining a qualification, professional experience, or even a job. A specific type among such generic

training is that supporting entrepreneurial skills. It is relevant here to recall the warning from Italy (and its firm transfers) not to train too many unemployed in entrepreneurial skills in the absence of alternative jobs; not everyone can, or is willing to, become a successful entrepreneur.

Skill matching instruments providing training to beneficiaries in more general skills and competences are similar across different Member States. However, differences can be found in the funding provisions, which need to be carefully considered when implementing such an instrument. Some Member States prefer voucher systems over supply-side subsidies for training providers. With these systems the PES effectively provides (training-) demand-side subsidies. It offers individuals the opportunity to choose the training which best fits their personal skill needs. Romania has a system of supply-side subsidising for generic skill training, offering free training to the unemployed. Latvia, in contrast, subsidises the demand side, by making vouchers available to the unemployed, which can be used to pay for specific training, sometimes hosted by the PES and sometimes by private training providers. Despite this potential difference in approach, policy evaluation in Estonia (where the two systems coexist) indicates that both the freely offered training and voucher-based training had a statistically significant positive impact on employment and income of participants (Estonian unemployment insurance fund, 2011).

4.2.6. Instruments for the unemployed and at risk of becoming unemployed

Several instruments combine support to unemployed and those at risk of becoming unemployed. Examples are the Dutch mobility centres, the Croatian instrument ‘training for the unemployed’, and ‘competence-based matching’ in Belgium (Flanders). On the one hand it is necessary to provide guidance or training as early as possible to persons at risk of losing their jobs; on the other hand, mixing unemployed with people still in employment in training programmes has the additional beneficial effect that this can further aid integration into working life.

4.2.7. Effective integration of new ICT tools

ICT is not only relevant as a component of skill training; it is also an innovative element of some of the instruments examined. This is especially the case with those offering career guidance to the unemployed. Examples are the ‘online guide to the labour market’ in Slovakia, the ‘competence-based matching’ tool in Belgium/Flanders, and the ‘education and work’ web portal in the Czech Republic. Such instruments have demonstrated the potential of using modern ICT tools to make available labour market information in a user-friendly way to a

large number of users. Use of such ICT tools should always be accompanied by an approach to mitigate the risk that potential beneficiaries without the necessary digital competences or access to digital technologies are left behind. It is especially important to include these groups, as these are often the most vulnerable groups on the labour market that would benefit the most from intervention. Effective integration of these new ICT tools with existing PES services and face-to-face counselling is crucial to reach the population that would benefit most from this type of approaches.

4.2.8. Helping people get a job and skill mismatch strategies

Often supported by the ESF, for many years EU Member States have introduced ALMP targeting the reintegration of the unemployed into the labour market. States have identified skill shortages not only in the framework of EU policies but also for their own strategies combatting unemployment, They have increasingly adopted the perspective that there has to be a well-defined link between skill needs anticipation and ALMP, so that the unemployed can find sustainable employment.

There are several ways to improve the skills of the unemployed. Work-based experience from making workplace learning part of the training or temporarily subsidising jobs is a long-standing practice to support the unemployed. More recently, it is becoming clear that there is not always a need to train in skills specifically needed in the labour market, but that training in generic skills may be sufficient and that gaining workplace experience can help at all education levels. Voucher systems help because the unemployed person may know best which skills are lacking. Getting beneficiaries, employers or the unemployed, more generally involved in defining skill shortages, can be beneficial. New ICT tools will help the unemployed find the right job; some innovative ICT tools which support the matching process might support job seekers and employers at the same time. Using instruments from the education sector in training for the unemployed (recognition of achieved learning, competence-directed training) may also strengthen active labour market measures.

Table 14. **Lessons from instruments targeting the unemployed**

Fundamental	Policies that work	Innovative instruments
<p>Skill mismatch (analysis) is a factor informing policies and instruments in ALMP.</p> <p>Workplace learning is part of training instruments aimed at combatting skill mismatch.</p> <p>Subsidised jobs are a way of letting the unemployed get work experience which may improve their skills.</p>	<p>There is a well-defined link between skill needs anticipation and skill mismatch policies and instruments.</p> <p>Training in tailored generic skills to help solve skill mismatch (because, for some, lacking generic skills are the reason why they do not get a job).</p> <p>Workplace experience in addition to theoretical studies for highly educated graduates (because such experience is needed in available jobs).</p> <p>ICT tools for career guidance providing job seekers with information about labour market perspectives in a user-friendly way.</p> <p>Voucher systems to help the unemployed find the right training which gives them the right skills to apply for jobs.</p>	<p>Employers are involved in defining curricula and learning outcomes and help decide in which skills the unemployed are being trained.</p> <p>Beneficiaries of active labour market measures decide for which competences they want to be trained, indicating what they seem to lack to get a job.</p> <p>ICT tools for matching; job seekers fill out the competences they possess and employers the competences they need.</p> <p>A strong link of ALMP to education, e.g. certification of achieved learning and competence-directed training.</p>

Source: Cedefop.

4.3. Lessons for education and training

This section gives an overview of the main insights emerging from skill mismatch policy instruments focused on preventing unemployment. It considers instruments targeting (initial) education and guidance and counselling instruments for the employed.

Education can solve quantitative skill mismatch discrepancies by training students for jobs with skill shortages or, just as important, training them to

replace workers who are retiring (and so preventing skill shortages). But it also has a function in countering qualitative discrepancies: by providing training in latest developments in skills demanded on the labour market. To prevent and reduce quantitative and qualitative discrepancies, the education sector has to be in touch with labour market developments.

Initial vocational education systems differ in the way they organise this feedback between education and the labour market (Cedefop, 2013). Some systems, for instance those based on a coordinated feedback model, are well suited to react to labour market changes, but even these can be affected by unforeseen or immediate skill mismatches which cannot be adequately addressed by the system. For these situations either ad hoc solutions in terms of additional provisions, such as the ‘school extension’ programme in the Netherlands, are sought, or solutions reforming the system through the swift introduction of new curricula or standards or by making curricula and/or standards more flexible. Examples of both approaches described here have in common that the gap between skills already provided and those demanded by the labour market are extensively explored. Labour market surveys or the direct involvement of employers in the design of training can be seen as evidence of this. It is also a precondition for apprenticeship programmes selected for this study: the success of training provisions under the umbrella of an apprenticeship scheme seems to depend on whether they are established in growing sectors (or sectors with many retiring workers) with specific skills demands that are explored in advance.

4.3.1. Education and career guidance

The education sector should not only keep in touch with the labour market, but also transfer information to (potential) students. While the primary aim of career guidance and counselling may often not be to reduce skill mismatch, from this point of view providing information and guidance on labour market opportunities is an important component of any strategy. The examples in this review are numerous and differ in terms of target groups addressed, policy context (education or employment) and level (local, regional, national). However, from a skill mismatch perspective, two more dimensions turned out to be crucial:

- (a) the dependence (or not) of guidance on particular providers;
- (b) the shift from traditional (personal) guidance to self-service tools.

4.3.2. Networks and one-stop shops

Apart from a general increase in labour market-oriented guidance, which helps meet skill mismatch challenges, two additional trends were observed in the cases reported. One is a trend to networking and combining existing resources for

guidance and counselling, with the aim to establish one-stop-shops for clients. Growing marketisation and autonomy of education providers also leads to an increase of provider-specific career centres, relieving pressure on provider-independent guidance and increasing labour market competition in favour of own client(s).

These developments imply several challenges. For networking initiatives there is the question of governance, particularly in the balance between decentralised and centralised management. From initial problems with the Danish VEU centres, it is seen that a central institution (in this case the ministry) had to steer the process to avoid conflicts between educational institutions on the question of which should act as host. In the case of provider-specific career centres, the crucial element was to get the main external stakeholders (chamber of commerce, large companies) on board; merely combining the interests of internal stakeholders (faculties, student union) is not sufficient to achieve results.

Several instruments are transferable to other contexts and countries. The career centre at the University of Ljubljana is the result of international cooperation and has been developed from the experience of other countries. The VEU centres may not be copied in their entirety, because Danish adult vocational training is unique. However, the central element of networking with the aim to establishing one-stop-shops could be successful in many contexts. It should not be ignored that both initial funding and subsequent shared funding is necessary to keep such a network sustainable.

4.3.3. Self-service tools

In career guidance for the unemployed there is a growth in self-service tools using ICT applications. Such tools, if they are based on good quality labour market information, can also be used to provide basic forms of career guidance for larger numbers of users; they show information in a structured and clearly arranged way. Next to the labour market information, they could also provide an overview of qualifications, VET and higher education study programmes, as well as the providers of these programmes. While the subjectivity of personal guidance may increase information asymmetries, the personal approach has clear advantages as it enables open exchange of views between the student and the counsellor. Using ICT tools combined with the personal approach provided by counsellors combines the best of both worlds and appears to be becoming the standard.

4.3.4. Raising student awareness

The career guidance present in the 'school ex' programme in the Netherlands is unique in the sense that it contributes to raising awareness among graduates that

an additional qualification level will help them to secure a good labour market position. Schools receive financial incentive to compensate for the time teachers have to spend in individual interviews with students. Clear communication with students and the time taken for individual advice are perceived as successful elements of this instrument. It ensures better skill provision by adding another year of education and raising awareness of the importance of skills.

4.3.5. Combatting early school leaving

In several countries strategies against early leaving from education and training also have a skill matching component. In addition to individual interviews with students, teaching staff in the Netherlands must build networks with local employers to identify appropriate professions for early leavers and graduates; this enables teachers to provide students with current information about the local labour market in interviews. Informing students about the labour market is also a key component in the Croatian early leaving prevention strategy. The PES counsels students about their chances on the labour market at individual (the student), regional (labour market needs) and national levels (trends in professions).

4.3.6. Mediating stakeholders and control over the supply chain

In the ‘assured skills’ programme in Northern Ireland, the skills demand of employers is accommodated by involving them in the design of the training (capacity building strand) and by looking at skill mismatches from the perspective of attracting foreign companies to invest in the country. However, it has to be considered that such intensive involvement can only be accomplished through central body coordination, otherwise foreign company skills demand cannot be channelled into training offers. What makes the programme so interesting is that it induces skills demand (by attracting foreign investments) while at the same time it serves skills demand with interventions in education and training. In this way there is – at least moderate – control over the whole process, while usually instruments are either targeted to create jobs and find positions (for the unemployed or workers threatened with unemployment) or to increase the supply of workers (in the case of skill shortages).

The Dutch centres for innovative craftsmanship and centres of excellence also aim to involve employers in both the detection of skill shortages and the way schools accommodate missing skills and competences in organising education and apprenticeships. They are also involved in adapting curricula to regional labour market needs. This goes far beyond the typical involvement of labour market stakeholders in training programmes.

4.3.7. Curriculum teams

When considering curriculum reforms and the implementation of new occupational or qualification standards, it is crucial to adjust them to the skills demand of the (future) labour market. One approach is the establishment of curriculum teams in Luxembourg, which consists of representatives of employers and education institutions. The instrument can be considered a new form of a social partnership which is also a reality in many other Member States. Successful elements are consideration of non-formal and informal learning as well as attention to permeability between different sectors of the education system.

4.3.8. Career guidance/education and social partners combatting skill mismatch

The main contribution of the education system to combatting skill shortages is to guide the students to professions where skills are needed and to reform qualification standards and to adapt curricula in cooperation with employers (or their representatives). An effective connection is required between the labour market (and its skill shortages) and the choices made by students. This may be achieved by encouraging more direct contact between schools and students and social partners; this means not only offering students self-service systems but also accompanying them with personal counselling. Approaches to reducing early leaving may also be linked with skill shortages, for instance by redirecting early leavers to training with a good labour market perspective. To incorporate skills demands, schools should (try to) get direct feedback from the business environment, for instance through networks, and adapt the training offer they provide to the local/regional labour market needs. Increasingly, employers have secured their role in the education system, although it remains limited in Mediterranean countries and newer Member States. Some innovations were identified in this inventory: one-stop shop career centres, networking by individual teachers instead of schools, and interviews between teachers and students aimed at preventing early leaving. With the innovative 'assured skills' programme, even when attracting foreign companies there was immediate attention from the education sector to their skill needs.

Table 15. **Lessons from instruments targeting education and training**

Fundamental	Policies that work	Innovative instruments
<p>Self-service systems for student career guidance, where they can find information about job perspectives.</p> <p>Adapting curricula and qualification standards with social partner involvement.</p>	<p>Combinations of self-service systems and personal counselling.</p> <p>Attention to early-school-leaver-related skill mismatch, e.g. through personal guidance leading them to training with a good job perspective.</p> <p>Direct feedback of the business environment to the education system.</p> <p>Networking of schools which combine their efforts in defining a training offer which serves the local/regional labour market.</p>	<p>Combining existing resources for student guidance and counselling in one-stop shop career centres.</p> <p>Networking by individual teachers with their business environment so that they know in which skills their students should be trained.</p> <p>Individual interviews of teachers with students to prevent early leaving.</p> <p>Considering skill shortages when attracting foreign companies, e.g. by asking them which skills they need when they are exploring the potential to invest in the country.</p>

Source: Cedefop.

4.4. **Lessons from skill mismatch policies training the employed**

Supply and demand factors cause skill mismatch and require more attention to training workers. This often concerns competences directly related to processes within companies and does not necessarily target the more structural skill needs of employees. For several reasons it is not easy to stimulate this type of training.

Responsibility for training workers is commonly positioned somewhere between the ministries of labour and education; in some cases it shifts from one ministry to the other. While an important responsibility lies with the business sector, it is difficult for most employers and employees to see the relevance of a structural (re)training strategy, especially sectors often seem not to be very well organised; it may not be straightforward which sector should pay if employees are retrained towards a different sector. Employers are often led by short-term

incentives; if a company is not running well, it may not be able to pay for training. If companies are running well and money could be available, often the focus is on keeping employees directly engaged in production to reap the benefits of doing well.

Many examples were identified of training programmes in sectors with skill shortages. When there are actual skill shortages, it is easier to encourage parties, and especially employers, to invest in worker training but even then it seems that cooperation between several stakeholders is essential to get things going. In most cases additional (financial) incentives are effective encouragement.

Instruments directed at worker training may focus on several levels of intervention, from a micro or individual level to a comprehensive intervention at macro level. Instruments may address single employees (mostly independent of their current employers), target entire companies (management and owners), or may be directed at the implementation of (sector-specific or non-specific) networks of companies and other actors. Instruments with an organisational and structural perspective show stronger focus on skill mismatch policies. They are of a more strategic and comprehensive nature and seem to feature more long-term and deeper changes with regard to skills development. For instruments which address employers, it is interesting to observe how the balance between competition (for State funding) and cooperation between employers has been dealt with.

4.4.1. Organising employee training in skill shortages

Like instruments with a focus on the unemployed and those in education, instruments targeting employees can also be grouped in training in more generic skills, specific or targeted sets of skills, or training in skills for which a current or future skill shortage has been identified. The first group of training instruments is crucial to ensure a competitive workforce, and was discussed with the 'step one ahead' instrument in Hungary. Such instruments are fundamental in their attempts to catch up with skills demand in a fast-changing economy. While such instruments are generally not the most innovative, they are crucial in strengthening someone's position on the labour market. These instruments are central in preventing a mismatch between someone's skills and skill demands in his/her occupation, in the short term, or sometimes in the longer term.

Initiatives to help train employees to ensure relevance of their skills in the longer term within certain sectoral occupations may focus on increasing productivity within a company, but often also contain a wider (sectoral) focus. If the skills learned in training are limited to being used one company, there is no public interest; these often have no public funding. Examples include energy

training for builders (Croatia), or the ICT skills conversion programme in Ireland. These all target the further development of skills in particular sectors to prevent employees ending up with obsolete skills that can only be used in one company.

This sectoral approach can also be identified in the emphasis on instruments to encourage different employers in a sector to work together. The review of instruments shows that across the EU, steps are taken to involve employers in adopting a ‘problem owner’ position, which is not only beneficial for financial reasons, but also because this helps to solve part of the problem. The Irish Skillnets instrument is exemplary in the way that employers not only organise sectorally to determine the skill needs of their sectors, but also group together to provide the training necessary to meet such needs.

4.4.2. Competition of ideas

Given the large and natural role for employers in instruments supporting training, different mechanisms were found, along with different incentives to obtain results. When considering, for instance, the employer-focused instrument ‘employer ownership of skills’, in the UK (which shows great resemblance to ‘assured skills’ in Northern Ireland and Skillnets in Ireland) the linkage between skills demand on the employers’ side and the supply in the form of training is assured in the most direct way, by involvement of employers both in the design of training and in its funding. To apply for funding from the government, interested employers had to succeed in a competitive application process. Besides making suggestions for the training design and the extent of their input to funding, bidders had to demonstrate an identified skills gap and the instruments to address it. They also had to provide a compelling, evidence-based case to demonstrate the suitability of their approach and the insufficiency of the existing instruments, as well as a reasonable cost structure for their plan. Though a very straightforward approach to combating skill mismatch, the challenge is to assure meeting not only employer needs, but also those of employees (for instance, the transferability of their skills among different employers) and of society as a whole. On the employer side, specific needs can remain unanswered. Despite the success of the UK ‘employer ownership of skills’ instrument, some self-selection dynamics could be observed in the employer participation; certain employers were better prepared for the application process than others due to previous participation in similar initiatives.

4.4.3. Cooperation of actors

While ‘employer ownership of skills’ generally shows a strong competitive aspect, the ‘initiative for skilled workforce, eastern Germany’ shows a more collaborative approach for tackling skill mismatch (beside modest competition). The main idea

of this instrument was to fund projects which included testing measures for securing skilled workforce in sectors with increasing demand for skilled personnel. The funded projects were developed bottom-up at local level through existing and reliable networks of regional stakeholders; the collaborative development and application can be seen as one of the core elements of this policy instrument. It demonstrates how important network structures and the integration of all partners at local level are for tackling the cross-cutting issue of skill mismatch. This – along with project results – was also a way of raising awareness among relevant actors and is expected to have future benefit.

While, in the examples above, the cooperation of relevant actors is primarily left to stakeholders given their shared interest, in some Member States it was found that the government may take a more leading role. To ensure the wider relevance of skill training for employees, lists with relevant skill shortages are defined in collaboration with labour market stakeholders and are then used to determine funding for training. In Flemish Belgium, for instance, there is reskilling training assistance through ‘strategic transformation support’ for occupations that are listed. Similarly in Austria, the apprenticeship system serves as a framework through which apprenticeships in which there are shortages of occupation are also opened up to employees. While a slightly different focus has been chosen, these instruments all seek to achieve cooperation between stakeholders, to prevent training endeavours being targeted only at skills limited to a single company, while ensuring training in relevant skills. The involvement of governments in aiding such cooperation, either by shared funding or by setting priorities, enables employers to make a real contribution to upskilling their existing employees for skill shortages.

Cooperation is not only crucial between employers; the Finnish example ‘door to learning’ also showed the potential benefits of cooperation between education providers. Effective cooperation between education providers can increase the availability and quality of relevant training provision and promotes the diversification of the training offer.

4.4.4. Training in sectors with skill shortages and structural training

Several instruments aim to train individual employees in certain skills, and so strengthen their position on the labour market. Other instruments more specifically train individuals in skills that are (immediately) needed on the labour market, to suit hard-to-fill vacancies. Despite the flexibility and necessary focus on mitigating skill shortages in the short and medium term, the more structural element of worker training is underemphasised. Instruments that combine elements of up/reskilling for skill shortages and recognition of prior learning offer a more structured approach. Though training of employees is important, it is just

as crucial that existing skills are recognised (for instance through validation), to prevent unnecessary training. From that perspective the introduction of modular ‘vocational qualifications’ in the Czech Republic indicate how training of employees can make existing skills more transparent, while also offering ways of further training, ideally for skill shortages. The partial qualifications offered are particularly relevant in relatively inflexible qualification systems. Rather than the unrealistic goal of ‘opening up the vocational system’, offering a more flexible way to validate one’s skills and possible directions for further education may be more effective.

The instruments in which a combination of different practices was found were considered most innovative. The combination of validation and education or training is relevant; other innovative instruments combined training with counselling, or more specific elements of career guidance, possibly on skill shortages.

Table 16. **Lessons from training instruments addressing the employed**

Fundamental	Policies that work	Innovative instruments
<p>Attempts to raise employee skill level through training for labour market needs.</p> <p>Including relevant stakeholders in discussions on how to improve workers’ skills, primarily employers, when there is going to be skill shortages.</p> <p>Creation of a basic structure to provide the training opportunities to prevent the obsolescence of skills of employees.</p>	<p>Connect the regional/local training offer for employees to regional/local labour market studies.</p> <p>Creating the right financial or other incentives for labour market actors to train their workers both in times of economic prosperity (no time for training) and in times of crisis (no money for training), e.g. by making partial qualifications possible.</p>	<p>Combine multiple approaches with training of employees (e.g. certification and education, counselling and training).</p> <p>Strengthening the networking approach of relevant partners (education sector, employers) e.g. by organising platforms to meet each other.</p> <p>Making employers problem owners, supporting their direct involvement in the process of organising (a) training (system).</p>

Source: Cedefop.

4.5. Creating a conducive policy environment and stimulating cooperation between stakeholders

The instruments discussed in this report and the lessons they offer can inspire policy-makers contemplating new policies to tackle skill mismatch. Beyond specific measures, the overall policy environment and cooperation between labour market stakeholders are also important parameters in determining how successful a country can be in addressing skill mismatch. We turn to these aspects below.

4.5.1. The need for national skill (matching) strategies

Given the specific ‘cross-dimensional’ nature of skill mismatch policies, which this report clearly underlines, a crucial factor for success is a conducive policy environment. An overarching national skills strategy can contribute to the integration of policy instruments from various policy fields, ranging from unemployment policies, education and training to national competitiveness strategies. Such broader policy programmes have the potential to provide guidance, based on which more specific policy instruments can be developed. In the framework of the Europe 2020 strategy, Member States have been asked to improve their national skills strategies.

However, background materials collected for this study shows that fewer than half of the Member States have developed national skill (matching) strategies. Many policy instruments discussed in the previous chapters, as well as several other instruments not selected for this study, are not grounded in a national strategy and sometimes not even embedded in a broader policy approach. The national reform programmes which monitor progress towards the EU 2020 targets in most Member States mention instruments that may be connected to the skill mismatch challenge, but these instruments are not necessarily integrated with others that seek to tackle skill mismatch. This may be explained by the fact that the EU 2020 targets in employment mainly focus on combating unemployment, while education targets are predominantly linked to quality issues. A better developed skill (matching) strategy, that explicitly proposes an integrative approach to these two intrinsic strands of policy-making, would benefit many Member States. The review of skill mismatch instruments targeting unemployment shows that the lack of coherence and streamlining between the two policy domains may also restrict their potential effects and wider impacts on European labour markets.

While the objectives and working mechanisms of an instrument may be well suited to addressing a particular problem, sustainability of the results may be at risk without an overarching and stable strategy. The review of skill mismatch

instruments across the EU sometimes suggests that some Member States produce one policy instrument after the other or in parallel, without necessarily building on previous experiences or results. A national strategy on skill mismatch, or at least some coordination of activities across different policy domains, can prevent such a situation and provide a long-term framework against which progress can be measured. Such a national strategy can link different instruments across different policy domains for a clearly defined common goal.

Belgium-Flanders is a good example of how a broader policy context can bring together and amplify the results of individual policy instruments. Here, under the broad policy programme 'Flanders in action', policy objectives are even set beyond the issue of skill mismatch. This broader policy formulates a strategic vision for 2020, but does so in addition to the EU 2020 targets. Under this umbrella, a future-oriented labour market study (Flemish labour market research of the future (VLaams ArbeidsMarktonderzoek van de Toekomst) (VLAMT), jointly funded by the ESF) delivered input for a number of policy instruments, such as 'competence-based matching'. The results of this study provided the impetus of engaging different sectors, and cooperating in redrawing occupational competence profiles, and served as a key element in the Flemish approach to combating skill mismatch. This shows how a broader policy framework can increase coherence between different policy instruments.

Germany adopted a thorough 'skilled workers strategy' in 2011 which:

'... explore(s) every avenue to close the skills gap nationwide along five specific paths: labour market mobilisation and safeguarding of jobs, combining family and career, education for all from day one, skills development: initial and further training, integration and qualified immigration' (German Federal Ministry of Economics and Technology, 2012).

Subsequently, below federal level, the individual German regions (*Länder*) have also developed strategies for securing the supply of skilled labour or are in the process of doing so. These local plans are connected to the overarching federal strategy, thereby linking regional actions to the national framework for combating skill mismatch.

In the UK, several broader policy programmes were also adopted as a response to the economic crisis (in 2010-11). The approach of these strategies includes an obvious skills-driven approach, which aims to:

‘... achieve a virtuous circle of skills development, between the skills available and the skills required (on the labour market).’

By this, the United Kingdom Commission for Employment and Skills (UKCES) ⁽¹⁸⁾ meant that ‘the future employment and skills system will need to invest as much effort on raising employer ambition, on stimulating demand, as it does on enhancing skills supply’. As such, it introduces a broader perspective to skill mismatch than the predominant focus on skills for (un)employed/at risk. This is a valuable lesson that is also reflected in more specific policy instruments. Significant emphasis is placed on the demand side of skill mismatch (the employer perspective). By designing policies and the more specific instruments with clearly defined involvement of employers, they show they are not the sole owner of the demand-side problem, and are more likely to join forces on skill mismatch.

A similar approach was observed in the Netherlands, where the government supported private sectors in their autonomy to develop their own initiatives to mitigate current or future skill mismatch, under its 2011 top sectors policy. By clearly defining the responsibilities between different stakeholders, initiatives developed in this field have the potential to be much more successful than rigid government-led instruments. This led to the establishment of sectoral human resource committees at national and regional level which conduct skill forecasts and develop initiatives to prevent skill shortages in their sectors: improving education and training provision for the sector, promoting worker training, and coordinating interventions directed at the unemployed.

Another valuable reason for developing a national skill strategy is the large number of active labour market policy measures analysed in this study that set skill matching as one objectives, yet in practice had the primary goal of tackling unemployment (with or without skill matching). In several instances there is a link to the programming for the ESF. In the convergence regions, the ESF is the main source of funding for ALMP. The employment chapters of the operational programmes, which also comprise the employment strategy of these Member States, are mainly developed from the angle of tackling unemployment. This is not surprising, given the high unemployment levels, also for higher educated.

⁽¹⁸⁾ UKCES is a publicly funded, industry-led organisation providing strategic leadership on skills and employment issues in the four home nations of the UK. Commissioners comprise a social partnership that includes chief executive officers of large and small employers across a wide range of sectors, trade unions and representatives from the devolved administrations.

Without skill shortages in certain sectors these Member States face the other type of skill mismatch in which: ‘... individuals take jobs in which their educational qualifications and skills are inadequately used’ (Cedefop, 2014). While this may not necessarily be problematic from an ALMP point of view, it is an issue from the perspective of skill matching. An explicit national skills strategy can help policy-makers to provide their policy instruments with clear direction and a deliberate choice between an employment objective and a skill matching objective.

4.5.2. Effective cooperation between stakeholders

In the complex field of combating skill mismatch, an important factor for the success of policies and instruments is the involvement of stakeholders: the government, the PES, the education sector, social partners, and employers. These have to be involved not only at the national, but also at the regional/local and/or sectoral levels. The importance of involving labour market stakeholders has become a key element of success in almost all instruments discussed in this study. For the success of an instrument, it is also necessary to identify one problem owner or a small group of problem owners who will mobilise the other parties and feel the responsibility to ensure the success of the programme. Most instruments analysed that achieved relevant results bring together different stakeholders that otherwise would not cooperate. To do so, successful instruments incorporated ways to consider carefully the interest of each stakeholder.

A principle that can be deduced from the instruments discussed in this study is that, for cooperation between stakeholders to be effective, the interests of all stakeholders should be accommodated in instrument design. Some instruments are only underpinned by a vague objective to contribute to the competitiveness of companies, while other instruments more specifically seek to provide direct incentives to employers in gaining their support.

Given that the study focused on public initiatives, another important issue is the administrative burden of the instruments. These are often the main obstacles to participation, even if the measures support noble objectives or have a longer-term benefit. A particular example of good practice in this respect comes from the Netherlands, where a national (private) service organisation takes care of registration of participants to municipal subsidised work schemes, which primarily targets medium and small businesses. Through a dedicated web portal, employers can bypass the municipal bureaucracy, allowing them to recruit participants, request financial support, and receive confirmation of eligibility for support in just a few hours.

Cooperation with and between employers and trade unions is fruitful when gathering labour market information on skills. This increases support and the

legitimacy of the information provided, while also ensuring that the information is relevant and up to date. For instance, social partners in Belgium-Flanders decided together on what future skills are required for each occupation. This created a wealth of information for job seekers, while also serving as a time-saving tool for individual employers looking for new employees. It is also good practice to involve stakeholders in the early stages of implementation. The Dutch example (national coverage of mobility centres) shows how employers were involved in building local mobility centres, making employers in sectors with shortages the problem owners and so part of developing a solution.

The social partners have been involved in the development of many instruments, and are sometimes even involved in implementation. This is a vital factor in cementing support, while also ensuring that the instruments stay on target and are used to address existing shortages. If the situation on the labour market changes substantially, the inclusion of social partners not only adds legitimacy, but also ensures that these changes are reflected in the implementation of the instrument.

Apart from the importance of involving social partners in most instruments, networking among a wider group of actors has also been a success factor. The core idea of the Finnish instrument 'door to learning' is that it served as central coordination point and as an umbrella for many activities related to skill mismatch. It also transferred the outcomes of related research projects into activities and coordinated a parallel evaluation process, focusing collaboration between actors. In Greece, local PES conduct activities to connect their training programmes for vulnerable groups to local labour market needs through development partnerships (non-profit organisations in which public and private actors cooperate in the context of European cohesion funds). By providing targeted training, development partnerships seek to promote labour market inclusion of vulnerable groups.

The Austrian instrument 'Ways to nursing', which addresses the unemployed, was found to be successful because the institution supporting participants and the organisation providing training and representing the employers have close institutional links with the municipality of Vienna. Politically, both institutions were assigned to the same unit and so opposite interests were either scarce or quickly resolved on the political level. Further, the interests of employers and employees were aligned from the start. In a situation with diverging interests among employers (and not, as in this case, a quasi-monopolist as the regional public health organisation) and less definite occupational profiles, more objections could be expected in identification of skill needs.

4.5.3. Lack of evaluation

The lack of national skill strategies may also explain why a general lack of evaluations has been encountered in this study. A systematic structure of evaluation may prevent new policies and instruments being developed without building on previous experience. Especially in the complex field of solving skill mismatches, where several policy fields are involved, it would be wise to accompany policies and instruments by a well-functioning system of evaluation. It is equally important that evaluation outcomes feed into policy-making. This is not a well-established practice. For example, in the ESF, where despite the fact that a tradition of evaluation has been developed, few evaluations contributed to improving the interventions involved (European Commission, 2014c).

Evaluating labour market interventions is not an easy task. Besides methodology, an important problem is that it is often only possible to evaluate the real impact of interventions after several years, especially if one takes a skill matching perspective. Decision-makers cannot or do not want to wait for this, because they have to be swift to adapt to new developments and may want to change policies as soon as they are elected.

As a consequence of the lack of evaluations, it is also sometimes difficult to explain which policies work and which do not. Policy-makers and officials involved in the policies and instruments evaluate their success (in a non-systematic way); in consequence, there are no other options than trusting that their opinion is right.

4.5.4. Strategies well-aligned with stakeholders and routine evaluations

Despite the identified shortcomings, the conclusion from this chapter may be that Member States are (slowly but steadily) developing from a situation where a loose set of skill mismatch policies is growing to that of an overall skill (matching) strategy in which all stakeholders are involved. Sometimes innovative approaches are used to get them aboard.

Some policy instruments are still at the fundamental stage: one example is where the PES or the VET system develops its own policies directed at the unemployed or students. Stakeholders such as the employer (and employer organisations) are only involved in so far as they have to provide the jobs for the unemployed or students. In most cases things have already evolved: instruments/policies at least involve the various stakeholders. In some Member States there are also strategies that combine the interventions in certain policy fields and/or sectors. The next stage is that of national skill (matching) strategies which deal with all aspects of skill mismatch policies: identification of skill mismatches, upskilling the unemployed, aligning the education system to deal with skill mismatch problems, and training workers. In some cases we can

identify innovative ways to stimulate cooperation between partners, for example when letting the social partners decide which skills are asked for in the future or when removing administrative burdens from employers through ICT-based support systems.

Table 17. **Lessons in creating a conducive policy environment**

Fundamental	Policies that work	Innovative instruments
<p>A loose set of skill mismatch instruments (presented in the earlier tables in this chapter under 'fundamental').</p> <p>Limited cooperation of stakeholders in the case of identified skill shortages.</p>	<p>National skill (matching) strategies (or sectoral/field-specific skill (matching) strategies).</p> <p>Full involvement of stakeholders in combatting skill shortages.</p>	<p>Social partners decide which skills will be trained for.</p> <p>Reducing administrative burdens for employers, e.g. by offering ICT solutions, increasing their involvement in training programmes.</p>

Source: Cedefop.

4.6. General conclusions and recommendations

This study presented a rich palette of policies and instruments that seek to tackle unemployment by addressing skill mismatch. The fundamental elements of skill mismatch policies may support many unemployed in getting a job, help students to make the right choices, and enable workers to participate in training helping them in their further careers, but it is likely that a significant share of skill mismatch is not tackled. When, as is the case in many Member States, there are few jobs available for the unemployed and there are only a few hard-to-fill vacancies at the higher end of the labour market, there is no strong case for developing skill mismatch policies and instruments, and the emphasis might be on policies with a focus on employment.

However, during the coming years, and in the long term, Member States will have to introduce effective policies and instruments tackling skill mismatch. Today's emphasis on quickly finding employment for young people may backfire in the mid or long term, if they are not placed in properly matching jobs. It is recommended that Member States without a strong overall policy focus on skill mismatch consider introducing such policies and that they accompany this with a skill-mismatch-oriented policy agenda. This study has given some important insights, but mainstreaming the innovative aspects of skill mismatch policies will benefit from more systematic proof of their effectiveness and efficiency.

With the ESF, EURES, specific studies, and skill needs analyses, the European Commission and its agencies already support Member States in gaining knowledge to target skill mismatch. Member States can be further supported by providing inventories, studies and evaluations, for which some suggestions are presented:

- (a) towards a full database of skill mismatch practices: while the current inventory of skill mismatch policies and practices can serve as a starting point for exchange and policy learning between Member States, it does not take away the need to search for and collect further international experience for specific skill mismatch challenges;
- (b) collecting and sharing knowledge on transferability of skills: even though it lies at the heart of skill (matching) strategies, knowledge about transferability has not been collected systematically, neither at national nor European level. While some European initiatives such as ESCO try to provide technical tools underlining the transferability of skills, experiences drawn from actual practice are probably more convincing for policy-makers and programme developers, and need to be collected systematically;
- (c) evaluating skill mismatch policies: this study shows that policies and instruments tackling skill mismatch are rarely evaluated systematically. A better evaluation of skill mismatch instruments and policies may help decision-makers to develop instruments and may support the transfer of good practices from one country to another. A specific set of evaluation designs could for instance be established in addition or as part of the evaluation of socioeconomic development (Evalsed) database ⁽¹⁹⁾ on evaluation of ALMP. In combination with some examples of good practice, this could support a more integrated approach to assessing skill mismatch policies, and pave the way for meta-evaluation of skill mismatch instruments.

There are a number of individual aspects and additional questions this study raised which deserve further action. Some of the most important ones are:

- (a) how can the next generation of (national) forecasting instruments be better linked to the local challenges of skill mismatch and made more effective?
- (b) how can the work-based learning component of active labour market policy instruments be strengthened and its effectiveness assessed?
- (c) how can employers become 'problem owners' and better involved in the implementation of skill mismatch instruments?

⁽¹⁹⁾ Evalsed is an online resource providing guidance on the evaluation of socioeconomic development. While Evalsed has a specific focus on evaluation in EU cohesion policy, it is also relevant to the evaluation of other socioeconomic development tools.

- (d) which are the means by which the view of job seekers and students on the skills in which they want to be (re)trained can be considered while also ensuring alignment with labour market needs?

This study has provided a solid empirical baseline from which further work can start. While there is scope for more work on policy effectiveness and efficiency, its findings already support policy learning and can help Member States shape policies with a stronger focus on matching and pave the way for skill-matching-oriented policy agendas.

List of abbreviations

ALMP	active labour market policies
AMU	labour market education
CPZ	Centre for Knowledge Promotion
CVET	continuous vocational education and training
ECDL	European computer driving licence
ESCO	European classification of skills/competences, qualifications and occupations
ESF	European Social Fund
EU	European Union
EURES	European employment services
Evalsed	evaluation of socioeconomic development
FDI	foreign direct investment
ICT	information and communications technology
IGLM	internet guide to the labour market
ISCED	international standard classification of education
ISCO	international standard classification of occupations
IT	information technology
MBO	middelbaar beroepsonderwijs [secondary vocational education]
NEET	young people neither in employment, education, nor training
PACE	partnership action for continuing employment
PES	public employment services
SERV	Flemish Social and Economic Council
SME	small and medium-sized enterprise
TSSA	training subsidy scheme for academic courses
UKCES	United Kingdom Commission for Employment and Skills
VET	vocational education and training
VQ	vocational qualification

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ANNEX 1.

Types of skill mismatch instruments included in this study

Target group	Approach	Type of instrument	# of instruments	Case study	Country
Reserves-unemployed	Upskilling	Providing general skills training for unemployed	9	Community (public) work programme	HU
		Offering training in specific skills	7	Education and training for labour market Active life measure – qualified employment	PT SK
		Providing training for specific skill shortages	7	Ways to nursing	AT
		Upskilling unemployed by in-company training	14	<ul style="list-style-type: none"> • Curative individual training in enterprise • Project <i>Välke</i> • Employment internships 	BE-FL PT FI
	Information provision	Guidance for unemployed	9	<ul style="list-style-type: none"> • Competence-based matching • Education and work web portal • Online guide to the labour market • Early identification of key competences 	BE-FL CZ SI SK
		Subsidised work	9	<ul style="list-style-type: none"> • Job rotation scheme • Starting grant for young people 	DK NL
		Mobilisation of reserves	4	Red-white-red card	AT
Reserves – other*	Information provision	Mobilisation of reserves	4	Red-white-red card	AT

Target group	Approach	Type of instrument	# of instruments	Case study	Country
Education and training	Upskilling	New training provisions in education	9	School ex programme	NL
		Match curricula/ qualifications to labour market needs	6	Assured skills programme	UK-NI
	Information provision	Career guidance in education and work	10	<ul style="list-style-type: none"> • Career guidance in tertiary education • VEU centres 	DK SI
Employees	Upskilling	Training of employees to improve their skills	11	<ul style="list-style-type: none"> • Step one ahead • Door to learning • Vocational qualification 	CZ HU FI
		Training of employees for skill shortages	7	<ul style="list-style-type: none"> • Employer ownership of skills • The initiative for skilled workforce, eastern Germany 	UK-EN DE
Macro level (*)	Information provision	Anticipation and labour market information	15	Skilled workforce bottleneck monitor	DE
Total			117		

Note: categories with a (*) were part of the information collection but are not described in this report.

Tackling unemployment while addressing skill mismatch

Lessons from policy and practice in European Union countries

This study reviews recent policies and practices aiming to tackle unemployment through addressing skill mismatch in the EU-28 Member States. It examines skill mismatch policy instruments aimed at reducing unemployment as well as measures to prevent it. While much research and analysis on mismatch exists elsewhere, it is the first comprehensive study that maps actual skill mismatch policies and practices in the EU. In-depth case studies help identify promising features of policy practices and contribute to better understanding of impact. The lessons support policy learning and can help Member States shape policies with a stronger focus on matching and pave the way for policy agendas that put skill matching centre stage.

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