



RESEARCH PAPER

No 37

Renewing VET provision

Understanding feedback
mechanisms between initial VET
and the labour market



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Foreword

A strong system of vocational education and training (VET) is increasingly seen as a precondition for overcoming the current economic crisis in Europe. From being treated as the 'poor relative' of education and training systems, policy-makers now acknowledge that VET not only plays a key role in the integration of young people into the labour market, it also provides the skills and competences essential for innovation and entrepreneurship. However, for VET to be able to meet these high expectations, continuous and systematic renewal is of critical importance. This study offers important insights into how countries organise the feedback between education and training systems and the labour market. From the perspective of Cedefop, the following points are of particular importance.

The political character of the feedback mechanisms between VET and the labour market needs to be fully appreciated. While apparently technical in character, these mechanisms should be viewed as policy interventions directly influencing the division of power between different stakeholders. Though reflecting national traditions and contexts, the study shows that there is considerable room for change within existing models and that this must be addressed in a transparent way. There is continuous need for review and renewal. To be efficient, feedback mechanisms need to operate on a permanent and (almost) day-to-day basis. While labour market research and skills forecasting play an increasingly important role in supporting the renewal of VET, the efficiency of feedback mechanisms decides whether findings from research and forecasting are taken into account.

Based on data from 15 European countries, the study illustrates and confirms the diversity of solutions currently applied across Europe. While underlining that national feedback mechanisms are embedded in national traditions and can only be transferred in part, the study points to three fundamental questions which can be asked by VET stakeholders in all countries:

- (a) how inclusive are national mechanisms for feedback between the VET system and the labour market? Is it possible to point to relevant stakeholders missing from the feedback mechanisms? Could it be that changes in the labour market, for example through the emergence of new occupations and skills, are not reflected by existing structures and institutions?
- (b) how responsive are existing mechanisms? How does information flow between the different stakeholders; how time and resource-demanding is this exchange of information? What mechanisms are in place to seek out

relevant information from relevant sources; including labour market research?

- (c) how transparent are the existing feedback mechanisms? Are the roles defined in a way which makes it clear who is supposed to do what; who to be consulted and who to decide? And to what extent are these mechanisms up for debate and systematic scrutiny?

The current study makes it clear that interaction between VET providers and labour market stakeholders must be given more attention. While concrete solutions will differ between countries, missing links in the feedback mechanisms between VET and the labour market can seriously reduce the capacity for review and renewal. The three questions listed above can be used to guide future activities in this area and as a starting point for a debate on the responsiveness of national VET systems to change. From the point of Cedefop this 'future-assurance' of VET systems lies at the core of our mandate and the further development of feedback mechanisms must go hand-in-hand with labour market research and skills forecasting.

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Table of contents

Foreword.....	1
Acknowledgements	3
Executive summary	7
1. IVET renewal.....	17
1.1. Economic crisis, austerity, rising youth unemployment and skills polarisation.....	18
1.2. European policy context	20
1.3. Related Cedefop research.....	21
1.4. Outline of the report.....	22
2. Study scope and methodology	24
2.1. Main conceptual foundations of the research	24
2.1.1. Formal feedback mechanisms	24
2.1.2. Incremental VET renewal versus VET reforms.....	26
2.1.3. Objects of change	27
2.2. Guiding questions.....	29
2.3. Method	30
3. Research background	31
3.1. Identifying future needs	31
3.2. Educational planning	33
3.3. Aspects that shape labour market IVET feedback	35
3.3.1. The role of VET in shaping work organisation and staff structures	36
3.3.2. Models of industrial relations.....	39
3.3.3. Varieties of skill formation and VET systems.....	41
3.3.4. Diverse models of social dialogue in different VET systems.....	44
4. Ways of renewing IVET	47
4.1. Basic models of feedback mechanism and their country contexts.....	47
4.2. The liberal model of feedback mechanism in the UK-England and Ireland	55
4.3. The statist model of feedback mechanism in Bulgaria, Estonia, Poland and in the school-based VET systems in Germany, Austria and Sweden	60

4.4. The participatory model of feedback mechanisms in Spain, France, Hungary, Finland and in the new apprenticeship training in Sweden.....	67
4.5. The coordinated model of feedback in Denmark, the Netherlands and Slovenia, and the apprenticeship systems in Germany and Austria.....	75
CHAPTER 5. Conclusions	84
5.1. Key findings.....	84
5.1.1. Four main types of feedback mechanism.....	85
5.1.2. Different types of feedback mechanism coexist in each country.....	86
5.1.3. Regional and national feedback mechanisms interact.....	87
5.1.4. Feedback mechanism type more decisive than sector characteristics.....	87
5.1.5. Feedback mechanisms vary according to object of change.....	88
5.1.6. Social partners increasingly included VET renewal.....	88
5.1.7. A need to capture the incremental change of VET systems.....	89
5.1.8. It is early to assess quality of feedback mechanisms.....	90
5.2. Issues for policy consideration.....	90
5.3. Research challenges and lessons learned	93
5.3.1. The challenge of identifying formally institutionalised feedback mechanisms as study objects	93
5.3.2. Determining the influence of specific actors	94
5.3.3. Finding adequate indicators for feedback mechanisms	95
5.4. Issues for further research.....	96
List of abbreviations	99
Bibliography and references.....	102
List of websites.....	118
ANNEX I. Case studies	119
ANNEX II. List of interviewees.....	161
ANNEX III. List of experts responsible for the country overviews.....	166

List of tables and figures

Tables

1	Examples of formal and informal feedback mechanisms	26
2	Country typology using the dominance of types of work organisation and preference for placing IVET	38
3	The typology of skill formation systems	43
4	Typology of VET systems.....	45
5	Integrating typologies of industrial relations, skill formation systems and social dialogue in VET and the likeliness of particular types (models) of feedback mechanism.....	51

Figures

1	Basic model of feedback mechanism between VET and labour market....	25
2	Advanced model of feedback between VET and the labour market.....	48
3	Main models of feedback mechanism identified in the 15 countries analysed	49
4	Feedback mechanisms in the dual system in Germany and Austria	80
5	The role and position of research in feedback mechanisms	155

Boxes

1	Feedback mechanism in England.....	56
2	SSCs in England.....	58
3	Feedback mechanism for school-based VET in Austria.....	61
4	Estonia's attempt to implement a liberal feedback mechanism in a statist system	64
5	Feedback mechanisms and IVET in Poland	66
6	The role of CPCs in France	69
7	The new apprenticeship training in Sweden: an emerging participatory feedback mechanism	71
8	National education and training committees in Finland.....	73
9	The knowledge centres	78
10	Coordinated feedback mechanism in Slovenia.....	83

Executive summary

Objective of the study

This research paper presents the outcomes of the Cedefop study on cooperation between stakeholders in the labour market and VET. The emphasis of the study is on the way formal feedback mechanisms influence the review and renewal of initial vocational education and training (IVET) programmes in 15 European Union (EU) Member States (Bulgaria, Denmark, Germany, Estonia, Ireland, Spain, France, Hungary, the Netherlands, Austria, Poland, Slovenia, Finland Sweden and the UK-England).

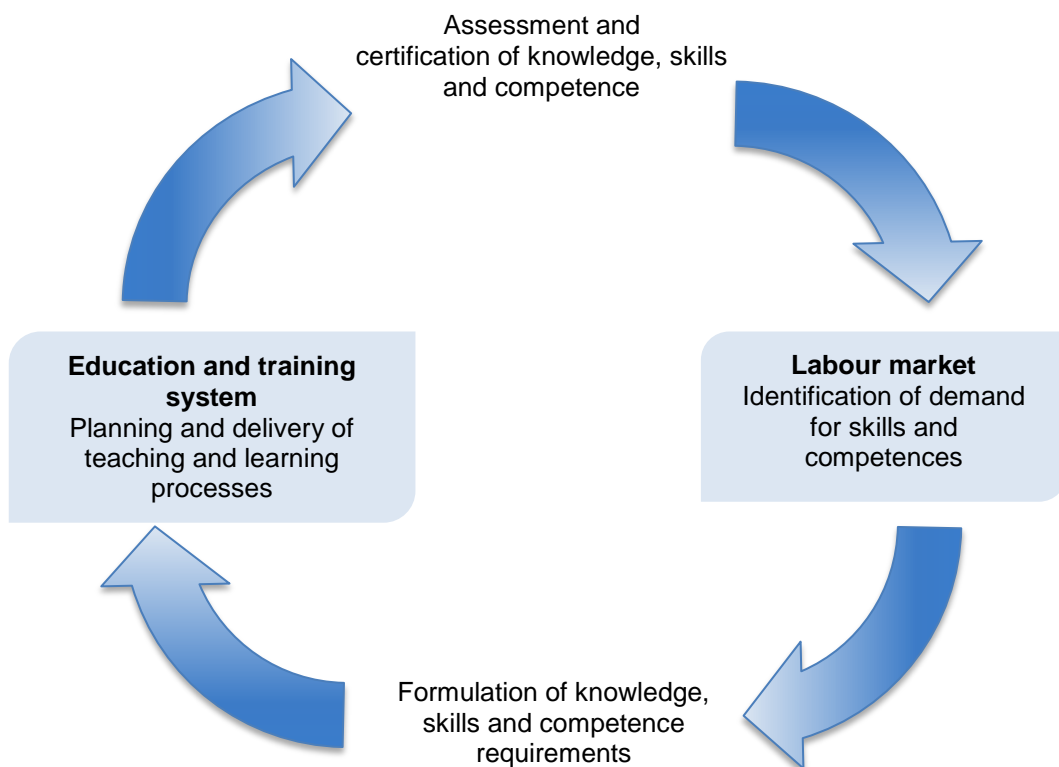
The aim of the study is to understand better the functioning of formal feedback mechanisms established to ensure dialogue between the education and training and the labour market. Mechanisms are purposefully implemented institutional procedures, defining how stakeholders in various areas and at different levels can influence the review of VET provision. Formal feedback mechanisms typically have a legal foundation, are established on a permanent basis, and comprise two or more actors (e.g. the state, employer and employee organisations). Their form varies between countries, whether they are part of education and training systems (for example curricula commissions in Germany), industrial relations (for example the Foundation for the Cooperation on Vocational Education, Training and the Labour Market (Samenwerkning Beroepsonderwijs Bedrijfsleven) (S-BB) in the Netherlands), or whether they have a coordinating function among employers (as for example sector skills councils (SSCs)).

Previous research (Cedefop, 2009a; Cedefop, 2010a; Cedefop, 2012b) showed that the mechanisms for IVET renewal may vary considerably in terms of the actors involved, scope of consultation, decision-making power, resources available, and processes implemented. Previous studies also show an increasing trend towards the institutionalisation of social partners' participation in developing and renewing qualifications, standards and curricula, even in countries with a weaker tradition in social partnership. However, we do not have a full understanding of the way this cooperation actually operates in different EU countries. Aiming to offer this understanding, the report is based on the following guiding questions:

- (a) how can formal feedback mechanisms be explained and systematically characterised in different EU countries? Are they associated to particular IVET systems, types of VET or economic sectors?
- (b) how do feedback mechanisms differ with regards to regional and sectoral aspects?

- (c) in what way do feedback mechanisms change and evolve in different countries?
- (d) in what way do they make use of IVET and labour market research?

Figure 1 **Basic model of feedback mechanism between VET and labour market**



Source: Based on Cedefop, 2009a.

Empirical research was undertaken in 15 EU Member States, with desk research, interviews, and a number of study visits, used to produce country reports. This was followed by the production of comparative case studies on selected topics covering two or more countries, in some cases also covering particular sectors or occupational groups (e.g. lorry drivers, bricklayers, welders) ⁽²⁾.

⁽²⁾ The case studies can be found in Annex I of the report; they provide empirical evidence to build the models presented below. In total, 77 national and European experts (representatives of national Ministries of Education; national chambers of commerce; national bodies of VET and labour market coordination; national institutes for VET labour market research; staff of regional ministries, representatives of social partners, etc.) were interviewed between March and November 2012.

Characterising formal feedback mechanisms in Europe

Cedefop's analysis confirms the complexity of VET systems in Europe and how the feedback mechanisms operate within each VET subsystem differently. Four main types of feedback mechanisms have been identified dealing with how specific processes of renewal of IVET are organised in each country, how this depends on the existence of certain IVET types and how these specific IVET governance structures are embedded in broader social, economic and political environments. The models of feedback mechanism identified do not necessarily reflect country characteristics, but illustrate cooperation between education and the labour market within distinctive parts of a country's VET system. Although they are simplifications of a complex reality, the four types of feedback mechanism proposed have the potential to improve our understanding of the interplay between IVET and the labour market. The four types are:

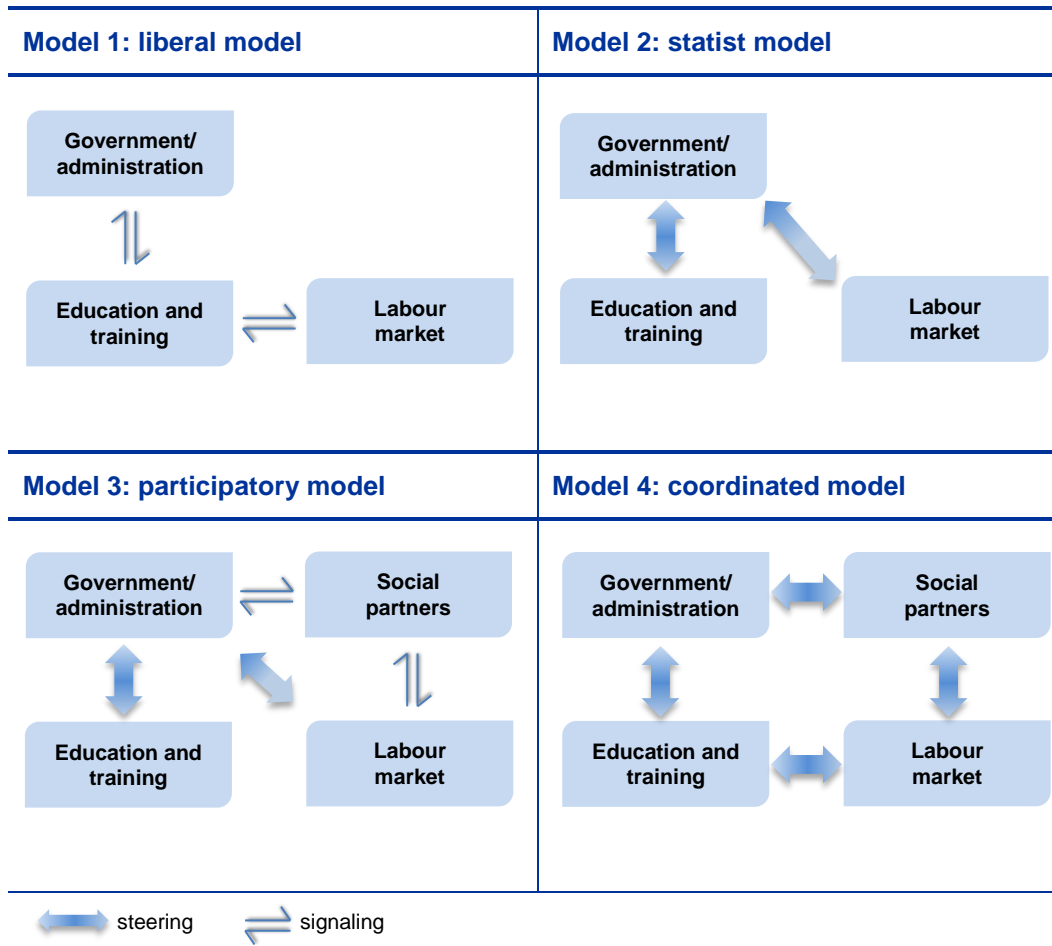
- (a) 'liberal', characterised by a low degree of coordination, where feedback between VET providers and the labour market is mainly regulated through the market;
- (b) 'statist', characterised by strong state regulation of education and weak links between education and the labour market in terms of formal communication;
- (c) 'participatory', which allows for the participation of social partners in the processes, but mainly in a consultative role;
- (d) 'coordinated', where social partners are the drivers of renewal processes and play an active role in its implementation.

The 'liberal type' of feedback mechanism is most likely to be found in countries where organisational space ⁽³⁾ dominates and where skills formation systems are usually classified as liberal or market-led. In England and Ireland, for instance, IVET systems and the formal feedback mechanism allow little room for organised interest groups, either on the employer or worker side. The liberal type of feedback mechanism is generally characterised by marginal social partner involvement and more direct communication between VET and the labour market on the level of employers and VET providers. Attempts have been made to enhance cooperation and communication between VET and the labour market,

⁽³⁾ Maurice et al. (1986) argue that enterprises have two options to organise work: they either shape workplaces deliberately and train workers to comply with the requirements or they build on existing occupations (*Berufe*) and the skills, competences, attitudes and expectations of vocationally trained workers. They coined the term 'organisational space' for the first and 'occupational space' for the latter approach.

especially in England, through the creation of the SSCs that aim at improving coordination between sectoral employers and education service providers.

Figure 3 **Main models of feedback mechanism identified in the 15 countries analysed**



Source: Cedefop.

All countries examined present at least some basic example of the ‘statist type’ of feedback mechanism within VET, although this is more prevalent in systems which clearly focus on state-regulated and school-based VET (e.g. Bulgaria, Estonia, Poland and school-based VET in Germany, Austria and Sweden). In most of these countries a board, committee or an observatory has been established within the educational administration responsible for school-based VET, with the purpose of managing change processes. Those involved include experts in various fields, government bodies, non-government organisations, schools (e.g. school principals), researchers and the corporate world. A common feature of this type of feedback mechanism is that social partners are not involved as formal actors, and hence, have no formal role

enabling them to articulate their interests and perspectives (proposals from social partners may still be integrated in the feedback mechanism without this role). Comparable types of statist feedback mechanisms can be found in the school-based part of IVET in Germany, Austria or Sweden. The newer Member States offer interesting examples of differences in the adaptation of the statist feedback mechanism. While Estonian, for example, tends to display characteristics of the 'liberal type', other countries tend slowly to integrate social partners within national VET policy (e.g. Bulgaria and Poland).

The 'participatory' type of feedback mechanism can be found both in countries where the state prescribes a precise role for social partners in policy-making and also where the state is formally involved in the implementation of VET. Although all countries grouped under this type may be characterised as 'statist', the degree to which social partners influence the content of VET justifies a distinction between 'statist feedback mechanisms' (lower influence) and 'participatory feedback mechanisms' (higher influence of social partners). France is a good example of a 'participatory type', because professional consultative committees (*commission professionnelles consultatives*) (CPCs) play an increasingly important role in VET labour market cooperation through the active role of social partners in awarding, creating and updating national qualifications. In its new apprenticeship programme, for instance, Sweden shows a clear intention to move towards a participatory model, away from the 'statist' model in their school-based VET, with engagement of social partners both on local and national levels (programme councils). Tripartite national training committees in Finland legally involve teachers and social partners in assessing, anticipating and analysing skills relevant for the labour market and also in formulating suggestions for training development and improvement. In Hungary, there has been a clear increase in the role of social partners in VET governance and employer organisations play in shaping curriculum and learning outcomes. This is also the case in Spain, where curricula and learning outcomes are formulated by working groups involving social partners.

In the 'coordinated' type of feedback mechanism, social partners play a very active and decisive role in IVET implementation, as well as in trainee recruitment or skills assessment. This type is mostly found in collective skill formation systems in which the state supports a clearly prescribed role for social partners, such as the dual system in Germany and Austria as well as IVET in Denmark, the Netherlands and Slovenia. Trade unions may also address specific issues concerning the labour market. These demands are mediated and expressed by the social partners to the government, which formally decides to implement change. Such change depends largely on the social partners, who are responsible for major areas of provision (apprenticeship places, training of

trainers, assessment, etc.). Although feedback mechanisms within this model and system of vocational training have strong commonalities, there are divergences. Stronger sectoral arrangements which can be found in Denmark and the Netherlands in the form of (autonomous) trade committees or SSCs, contrast with influential umbrella organisations of chambers present, for instance, in Germany and Austria. In these last two countries there are at least two feedback mechanisms (one for the apprenticeship system and one for school-based IVET), while Slovenia, despite having several VET tracks, has only one primary feedback mechanism.

Cedefop's analysis points to fundamental differences between feedback mechanisms with regard to their objects of change (i.e. VET content in terms of qualifications, standards, curricula or teaching materials). It is unlikely that a single feedback mechanism covers the whole spectrum of possible objects of change as VET provision, design, resources or media. Feedback mechanisms not only vary between and within countries, and between parts of the VET system, but they also vary according to their particular object of change. Even in state regulated IVET systems and feedback mechanisms characterised as 'statist', there are different processes to renew curricula or textbooks. In many statist and participatory feedback mechanisms social partners are only allowed to participate in the design of standards or curricula. However, when it comes to provision and resources, the state exclusively determines how this is undertaken (well illustrated by France, Hungary and Finland). Although the regularity and speed with which the various systems adapt to change seems a clear concept, it proved to be very difficult to grasp. Major reforms of the overall VET system have either recently taken place or are still under way in many countries and this makes it difficult to establish a benchmark against which incremental change can be measured. Finally, there is a wide range of quality concepts, such as efficiency, effectiveness or adaptability, but it remains unclear how to apply these to feedback mechanisms between VET and the labour market as defined in this study. Feedback mechanisms cannot be assessed in this respect.

Feedback mechanisms in practice

Comparative case studies revealed more subtle differences between feedback mechanisms (see Annex I).

How do feedback mechanisms differ with regard to sectoral aspects?

Sectoral aspects were analysed through studying the role of SSC. SSCs are not an exclusive feature of a particular type of feedback mechanism, but have been

identified in such diverse country settings as, Estonia, France, the Netherlands and the UK-England. However, there are significant differences in approach. A strong link with the regional training centre (*Regionaal Opleidingscentrum*) (ROC) in planning vocational development is a specific characteristic of the Dutch SSCs, while the UK's SSCs are employer-led boards. The SSC approach in Estonia can be described as a state-led process with strong employer-involvement, and with unions acting as professional representatives. Although the wish to involve labour market stakeholders is prominent, with social partners allocated a formal role, in reality, they tend to be marginally involved in the formulation of VET. The SSC approach in France is characterised by strong social partner involvement to build consensus under state supervision. The possibility of covering all of these sectoral concepts and approaches with a single notion, namely a SSC, is questionable, and raises the debate as to what extent new or more precise concepts are required.

How do feedback mechanisms differ with regard to regional aspects?

The case study on regional dimensions of feedback mechanisms reveals substantial differences between countries which cannot simply be explained by their different approaches to federalism. A comparison between the mechanisms for the dual system in Germany and the VET school system in Spain, (which used bricklayer education as an example) shows that, in both countries, the regions (*Länder* in Germany and *comunidades autónomas* in Spain) are represented and play an advisory role in the national central institutions responsible for renewing IVET standards. Social partner involvement is also institutionalised in both countries at the regional level. However, in the 'coordinated' model of the German dual system, social partners are granted a strong formal position in regional VET examination boards for assessing apprentice competences. The influence of social partners at a regional level in the 'participatory' feedback system of Spain is less pronounced, i.e. they are not responsible for operative tasks in IVET as they are in Germany.

In what way do feedback mechanisms change and evolve in different countries?

The in-depth analysis of transformative feedback mechanisms in England and Sweden suggests two hypotheses on how regulatory and participatory VET frameworks relate to one other. In countries with a strong framework for vocational and occupational regulations, such as the UK-England, stakeholder influence on feedback mechanisms is not a primary concern when defining the interchanges. In countries with a weaker framework for vocational and occupational regulations, such as Sweden, stakeholder influence on feedback mechanisms tends to be based on social dialogue and consultation. The ensuing

participatory elements in feedback mechanisms may be moderately formalised in state-centred VET systems and with stronger formalisation in countries with a clear participatory model of feedback mechanism.

The case study on feedback mechanisms in transition shows the different paths central and eastern Europe countries may take in the organisation of VET communication with the labour market: it uses Estonia, Poland and Slovenia as examples. Although all three countries adapted EU policy ideas to their national VET developments, they seem to have grown in different directions. In Estonia and Poland, which tend to follow the liberal model of feedback mechanism, social partnership is weak and there is an unequal distribution of power among the main actors. Slovenia, in contrast – despite acquiring features of a liberal market economy (LME) (labour market) – follows the German or Austrian coordinated model in organising renewal of IVET.

In what way do feedback mechanisms make use of IVET and labour market research?

The analysis showed that research fulfils multiple functions in supporting the renewal of VET, from indicating potential requirements, to aiding implementation, and evaluating policy outcomes. Three basic roles have been identified for research in feedback mechanisms between VET and the labour market:

- (a) as a separate feedback mechanism;
- (b) to convey information from the labour market;
- (c) in an ad hoc manner with a view to providing background information aiding various interactions between the labour market and VET institutions.

Further insights in our understanding of feedback mechanisms

This study focuses on the importance of VET governance and the interaction of relevant parties in the renewal of IVET, an aspect which has not received enough attention in recent VET research and policy literature. It contributes to theory building and better understanding of how VET is embedded in a particular context. It shows how the formulation of feedback mechanisms is dependent on historical developments and wider socioeconomic contexts, which makes it difficult to provide any general recommendations on how to intervene and improve individual feedback mechanisms.

Nevertheless, the research points to the need for policy-makers constantly to revise the relationship between VET and the labour market, taking into consideration three main issues:

- (a) inclusiveness and collaboration: ascertain whether existing feedback mechanisms are missing stakeholders that are able to aid communication between VET and the labour market;
- (b) openness and responsiveness: investigate whether the flow of information between the labour market and VET is hampered by time-consuming consultations that could be undertaken by other VET institutions, e.g. those in charge of labour market information;
- (c) transparency and communication: ascertain whether the roles of IVET institutions in terms of information, consultation and decision-making are sufficiently clear.

The proposed four models provide a framework for better understanding these three aspects and acting on them. However, it is important to note that the analysis of any feedback mechanism requires a very specific focus, to avoid getting lost in the complexity of it. It also requires thorough analysis of stakeholder involvement. Previous research is limited in terms of a holistic approach, so it is difficult to build on existing literature. Policy-makers should take this into account when analysing how to improve the VET renewal process.

The role of social partners and their influence in renewing VET was identified as decisive both for the characterisation of feedback mechanisms and the broader institutional settings of VET: it is crucial that any assessment of this influence is adequate and robust. There is a need for further work in the tools to determine stakeholder influence, understanding of which is aided by the four models presented. Without such understanding it will be impossible to establish new ways of VET provision.

This is particularly relevant in the current discussion on apprenticeship and the establishment of dual systems in several European countries. More attention seems to be paid to the type of VET provision (how are learning sites combined and how is instruction organised?) than to the particular institutional settings (how is the system governed and how are VET standards renewed; how is the labour market structured?). To avoid unrealistic expectations, the typology of feedback mechanisms developed in this study could be taken into account when organising any subsequent policy learning (peer-learning) activities on this topic to frame the intervention. A more targeted method of policy learning would not select isolated solutions but would also attempt to consider contextual factors; it would not just compare the form of VET provision, but also the processes governing this provision.

It has become evident that gaining an insight into the interaction of actors and the processes which govern the constant renewal of VET is crucial to understanding different VET systems beyond the form and quantity of VET

provision. The concept of formal feedback and a typology of mechanisms is promising, but needs to be further developed.

It is also necessary to explore and work further on indicators for judging the effectiveness and quality of feedback mechanisms. The three issues described above (inclusiveness, responsiveness and transparency) might provide an initial framework to assess feedback mechanism outcomes, but they require further work and consensus-building between relevant stakeholders.

CHAPTER 1.

IVET renewal

The main aim of this study is to map and analyse how VET systems and the labour market cooperate and communicate to renew the content of IVET provision in 15 EU Member States: Bulgaria, Denmark, Germany, Estonia, Ireland, Spain, France, Hungary, the Netherlands, Austria, Poland, Slovenia, Finland, Sweden and the UK-England. The main focus is the legal, institutional and practical arrangements allowing stakeholders to enter into dialogue to define and renew IVET provision at different levels. This chapter introduces the relevant economic and political context, shows how the study relates to other Cedefop research and provides an outline of the report.

One of the key questions of any education provision is how can we know today how to educate and train people for tomorrow? This is particularly relevant for IVET, which usually has longer planning cycles and appears less flexible and adaptive than continuing VET. Although the extent to which VET systems should adapt to occupational structures and labour market needs is disputed, and varies between countries and systems, it is unquestioned that, besides personal development, VET should prepare individuals for the labour market. In its simplest conception VET can be regarded as a system that consists of inputs (e.g. curricula, teaching materials), processes (e.g. teaching methods) and outcomes (e.g. knowledge, skills and competence) which should be aligned to changing labour market needs. However, today it is taken for granted that not only are VET systems constantly adapting to changing labour market needs, but also that the provision of VET itself has an effect on labour market structures.

To understand better the cooperation between VET actors and the labour market in developing, renewing and updating IVET, the concept of formally institutionalised feedback mechanism is developed and utilised (see Section 2.1). It describes a purposefully implemented institutional procedure allowing for the continuous renewal and adaptation of VET (sub-) systems to emerging labour market needs.

Cedefop (2009a) has shown that feedback mechanisms can be found in all countries. However, they vary widely, most notably in terms of those involved, scope of consultation, decision-making process, resources provided and processes implemented. Up to now, systematic overviews have classified feedback mechanisms only by the use of selected criteria such as the non-involvement of social partners or whether there is more consultative or more guiding authority (Cedefop, 2009a). Further, the position of a feedback

mechanism varies: it can be regarded as part of the education system (curriculum commissions in Germany), as part of industrial relations (knowledge centres in the Netherlands), or part of coordination among employers (the SSCs in England). These feedback mechanisms may also coexist within one country.

Feedback mechanisms in this research have been studied in the context of industrial relations and varieties of skill formation systems (i.e. Maurice et al., 1986; Crouch, 1993; Hall and Soskice, 2001; Thelen, 2004; Streeck, 2009). The literature review and desk research revealed that an in-depth, cross-country comparative analysis on the functioning and institutional logics of formally institutionalised feedback mechanisms is lacking, so the study developed an exploratory analysis of types of formally institutionalised feedback mechanisms within a comparative framework.

1.1. Economic crisis, austerity, rising youth unemployment and skills polarisation

There are a number of factors relating to the economic crisis that pose challenges for VET labour market cooperation in Europe. The first is the increasing (potential) demand for IVET in relation to rising numbers of unemployed young people. While young people are not the only target group for IVET, they represent the largest cohort within IVET programmes. Countries are facing rising youth unemployment and skills polarisation. There are more than 5.6 million unemployed young people in the EU and the youth unemployment rate has reached approximately 24% (Eurostat, 2013). In 2012, 12.9% of young people in the EU aged 15 to 24 years old were not in education, training or employment. Young people in this situation are disengaged from both work and education and at higher risk of labour market and social exclusion (Eurofound, 2012). Although youth unemployment rates vary considerably between the 15 countries covered in this study, unemployment rates in general have risen dramatically in most countries since the onset of the economic crisis (ibid. p. 3). A UK-based report (Lanning and Rudiger, 2012) theorises that the lower unemployment rates in countries such as Germany, the Netherlands and Austria can be attributed to the close connections between education and work found there. As Biavaschi et al. (2013) state, young people face particular difficulties in entering the labour market; this is influenced by institutional factors which can both mitigate and aggravate obstacles to transition. When comparing school-based systems to the dual system, the latter tends to be associated with a smoother transition from school to work and lower youth unemployment (ibid.; Cedefop, 2012c).

The second challenge is the impact of fiscal austerity on the financing of IVET and VET in general and the ways in which IVET will respond and adjust. The crisis is serving to intensify skills polarisation in terms of qualification requirements, that are rising for all occupational groups, even elementary ones (see Cedefop, 2008b); skills mismatch is also becoming more pronounced due to contractions in the global economy (Cedefop, 2010d). Therefore, to identify and anticipate future skill needs, to develop better matching between skills and labour market needs, and to bridge the gap between the worlds of education and work, the European Commission has launched its flagship initiative 'An agenda for new skills and jobs'. Measures developed as part of this agenda include Cedefop skills forecasts, the development of SSCs (Council of the EU and European Commission, 2010a) and the EU skills panorama (European Commission, 2013b) ⁽⁴⁾.

While current austerity measures exert considerable pressures on IVET systems, it is difficult to assess their impact on the countries covered in this study. A 2009 Cedefop survey underlined the uncertainties of the impact of the recession, stating that 'Member States are increasing expenditure on training, but some are in the unhappy situation of having to make cuts. Financial constraints may discourage investment in human capital' (Cedefop, 2009c, p. 4). There is evidence that training and education measures have played a significant part in strategies to combat the employment crisis, and in many cases IVET has been combined with active labour market policies (ALMP). This has generally proven to be more successful in countries in which training systems have been defined as 'corporatist' or 'cooperative' and where employers and unions have a formal role in the regulation of training, such as, for instance, Denmark, Germany, the Netherlands and Austria (Heyes, 2010; 2013). However, evidence suggests that there is a general decline in apprenticeships (ratio of apprenticeships to employees), even though in some individual cases apprenticeship programmes have been expanded (Brunello, 2009). We can, therefore, deduce that austerity and the economic downturn will create tensions, conflicts and challenges for social dialogue and inevitably impact on VET feedback mechanisms within the EU. While this is not the specific focus of this study, it is an important policy issue given the emphasis placed on the importance of vocational training in addressing fundamental structural economic and social problems in the EU policy agenda (see below).

⁽⁴⁾ <http://euskillspace.ec.europa.eu/>.

1.2. European policy context

A number of European policy measures have been introduced in the last decade aimed at fostering systemic dialogue and cooperation between the worlds of education and work in updating and renewing VET. The Copenhagen declaration (Council of the EU and European Commission, 2002) initiated a process of closer cooperation in VET throughout Europe, involving governments, social partners and EU institutions. The social partners were given a crucial role in the development, validation and recognition of vocational competences and qualifications in the Copenhagen declaration (ibid.). The Bruges communiqué stated that ‘integrating changing labour market needs into VET provision in the long term requires a better understanding of emerging sectors and skills, and of changes to existing occupations’ (Council of the EU and European Commission, 2010b). Hence, occupational and educational standards should be regularly reviewed with the involvement and collaboration of stakeholders to increase the labour market relevance of VET provision. This process of review should include representatives from professional sectors, social partners, relevant civil society organisations and education and training providers (ibid.).

The Bruges communiqué also focused on the implementation and added value of transparency tools such as the European qualifications framework (EQF), and the European credit transfer system for vocational education and training (ECVET). The Europe 2020 strategy was a reaction to the challenges posed by the economic crisis and aims to help foster ‘smart, sustainable and inclusive growth’ (Council of the EU and European Commission, 2010a). The strategy comprises seven flagship initiatives to achieve five strategic goals. These initiatives include ‘Youth on the move’, which aims to improve education systems and aid the entry of young people to the labour market, and the ‘Agenda for new skills and jobs’, which attempts to increase labour market participation and more effectively match labour market supply and demand (ibid. p. 4).

The recent initiatives to combat youth unemployment also foresee a central role for cooperation between VET and the labour market. In 2013 the youth employment initiative established a EUR 6-billion package for the period 2014-20 to support young people not in education, employment or training. Among the initiatives is one to finance the ‘youth guarantee recommendation’ that establishes that ‘all young people up to age 25 receive a quality offer of a job, continued education, an apprenticeship, or a traineeship within four months of leaving formal education, or becoming unemployed. This requires good and adequate cooperation between the labour market and education systems, and VET in particular. In addition, the European Alliance for Apprenticeships aims at increasing the quality and supply of apprenticeships across Europe.

1.3. Related Cedefop research

To address the EU policy priorities outlined above, Cedefop carried out several studies focusing on changing of qualifications, or educational and occupational standards (Cedefop, 2009a; Cedefop, 2010b), learning outcomes approaches in VET curricula (Cedefop, 2012b; Cedefop, 2010a), or assessment practices (Cedefop, 2013a, forthcoming) the outcomes of which have informed this study.

The study *Learning outcomes approaches in VET curricula* identified some of the consultation processes and those involved in the renewal of VET. It concluded that most countries examined in the study that introduced overarching curricula reforms did so after undertaking broad consultation processes (Cedefop, 2010a; Cedefop, 2012b). The conclusion was drawn that such consultation processes may have an impact on the relevance of curricula for the labour market and society as well as on the legitimacy and acceptance of these curricula (Cedefop, 2010a; Cedefop, 2012b).

The dynamics of qualifications: defining and renewing occupational and educational standards (Cedefop, 2009a) is especially relevant to this research as it investigated how vocational standards are constructed and renewed in 32 countries. It revealed a trend towards the institutionalisation of social partner participation in the development and renewal of qualifications, even in countries where such participation has traditionally been marginal (ibid.). The study considered the dialogue between different stakeholders in awarding qualifications: how this dialogue is organised and to what extent there is balance in the involvement and participation of different stakeholders (ibid.). It demonstrated that a systematic dialogue and a balanced participation of education and labour market stakeholders is crucial for the renewal of qualifications. This interaction between the world of work and the world of education was described as a 'feedback loop', a notion that the present study has adopted as its central foundation.

The comparative analysis of the dynamics of qualifications revealed considerable variation between the national approaches used to set standards. The results demonstrated that approximately two thirds of the investigated countries have already developed, or are currently developing, occupational standards. Another study (Cedefop, 2012b) shows that, since 2009, a number of countries have developed, or started developing occupational standards (ibid. p. 68). The study on dynamics of qualifications assumes that these standards can help ensure that qualifications remain relevant for the labour market but this is dependent on the ability of occupational standards to bridge the gap between work and education (Cedefop, 2009a). The study claims that learning-outcomes-based approaches support the link between employment and education. Further,

work-related tasks and competences and the involvement of stakeholders are identified as crucial factors for effective feedback loops and ensuring the relevance of qualifications for the labour market (ibid.).

Evidence from these studies demonstrates the need to encourage dialogue between stakeholders on the changing needs of the labour market. The studies conclude that increased interaction, cooperation and communication is required between those involved in the renewal of IVET provision to ensure it is high quality and relevant. However, while previous studies have addressed specific topic areas, this study focuses on wider issues and influences on the communication processes when introducing or renewing IVET.

1.4. Outline of the report

The report is structured as follows:

Chapter 2 introduces the main concepts used (e.g. formal feedback mechanism) and describes renewal of IVET as an incremental form of change as opposed to more fundamental VET reform. It explains the research questions, methodology and research process of the study.

Chapter 3 reviews the most relevant research literature. First, it shows how the renewal of IVET relates to skills forecasting and education/training planning. Then it discusses the most important aspects that shape cooperation between IVET and the labour market: the interaction of VET and work organisation; labour market and welfare state policies; the variety of skill formation systems; and the diverse models of social dialogue in different VET systems.

Chapter 4 summarises these findings by proposing a typology of four basic models of feedback mechanism: a 'liberal', 'statist', 'participatory' and 'coordinated' model. Each model is described in detail by presenting examples from the 15 countries. Their particular characteristics and most important differences are discussed in the context of the dominant systems of welfare state, industrial relations and conditions of social dialogue in VET in the respective country. This chapter builds on the findings from the case studies (see Annex I). The first case study identifies sector specificities within national feedback mechanisms by investigating the establishment and role of SSCs in, Estonia, France the Netherlands and the UK-England. The second examines regional aspects of feedback mechanisms with respect to the bricklayer occupation, using Germany and Spain as examples. The third case study explores the question of whether changes in the VET system have the potential to influence or transform prevailing types of feedback mechanism and considers Sweden and the UK-England in this respect. The fourth compares feedback mechanisms in the

transitional contexts of Estonia, Poland and Slovenia, each country representing different types of economic systems. The fifth explores the role of research, in terms of skills forecasting, in national feedback mechanisms and discusses differences in the way the Danish and Austrian apprenticeship systems use research in their respective renewal processes.

The concluding Chapter 5 discusses the main research findings and lessons learned, and presents topics for further enquiry and policy recommendations.

CHAPTER 2.

Study scope and methodology

This study is based on a comparative analysis of 15 country reports and five complementary case studies. The main focus is on IVET (international standard classification of education (ISCED) level 2 and 3), although VET in higher education (HE) and post-secondary education (ISCED levels 4, 5) has also been taken into account when this was defined as IVET in respective countries.

The 15 countries were selected according to several criteria including geographic and geopolitical considerations (such as the distinction between older and newer Member States). Further, to achieve a meaningful selection of countries, several typologies of VET systems were considered: Green, 1999; Saar and Ure, 2013, forthcoming; Crouch, 1993; Crouch et al., 1999; Winterton, 2007; and Busemeyer and Trampusch, 2012 (see also Chapter 3). On the basis of these criteria, Bulgaria, Denmark, Germany, Estonia, Ireland, Spain, France, Hungary, the Netherlands, Austria, Poland, Slovenia, Finland, Sweden and the UK-England were selected for further investigation.

2.1. Main conceptual foundations of the research

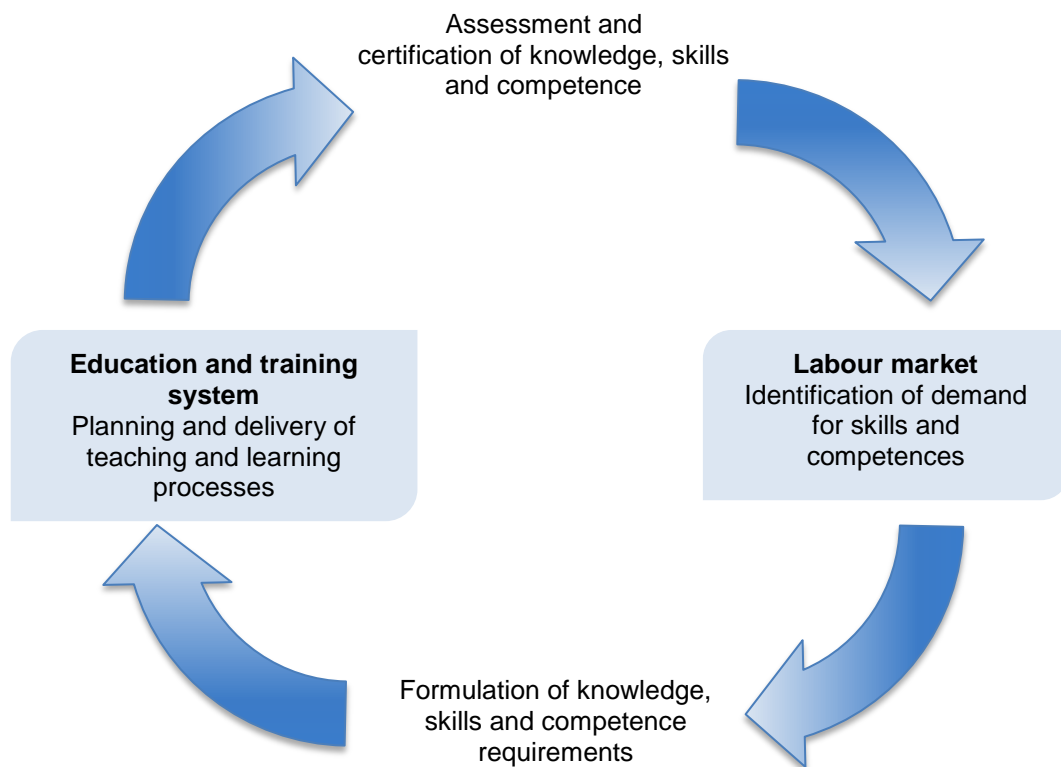
Three key concepts have been crucial in defining the scope of this research: the distinction between the major process of renewing IVET, and a number of peripheral activities, for which the concept of 'formal feedback mechanism' was coined; the need to distinguish more 'incremental renewal' processes from substantial and 'radical reforms'; and the need to name and structure 'objects of change'.

2.1.1. Formal feedback mechanisms

Feedback mechanisms are purposefully implemented institutional procedures that allow VET (sub-) systems continuously to renew themselves and adapt to emerging labour market needs. They can be understood as a policy intervention in the coordination of education and work, achieved by various other existing social exchange processes. Feedback mechanisms typically have a legal basis and define two or more actor positions (e.g. the state, employer and employee interest organisations). They are typically organised – in different ways – around decision-making or consultation bodies (SSCs in England or the General Council on VET (Consejo General de Formación Profesional) (CGFP) in Spain). The concept of feedback mechanism is illustrated in the Figure 1.

According to this basic model (see Figure 1), new or updated qualifications, VET programmes and curricula are the outcome of the interaction between the labour market (companies, chambers of commerce, employer and employee organisations, etc.) and the education system (VET providers, school boards, education ministries). Thus, new or changing demands in labour are identified and put on the education and training agenda via those active in the labour market. The number of those involved in this process varies considerably between European countries, as does the number and type of communication structures. However, the effectiveness of this cooperation is also influenced by the characteristics of the education and training system, for example whether or not it is oriented towards the labour market.

Figure 1 **Basic model of feedback mechanism between VET and labour market**



Source: Based on Cedefop, 2009a; Fretwell et al., 2001; Gielen et al., 2000.

It is important to this study that formally institutionalised feedback mechanisms are distinguished from more informal, more local feedback processes, such as local school boards. Such informal feedback processes are found in all countries and in any arrangement of VET labour market coordination. Table 1 provides examples of formal feedback mechanisms which are the focus of this study and other informal feedback mechanisms which are beyond its

scope, but that are equally important for the cooperation between VET and the labour market. Informal mechanisms of VET labour market cooperation have been investigated several times and a great deal of literature is available on such processes (e.g. studies on work-based training or exchange programmes).

Table 1 **Examples of formal and informal feedback mechanisms**

Formal feedback mechanisms	Informal feedback mechanisms
<ul style="list-style-type: none"> • Sector skills councils, e.g. the cooperation between employer-led organisations and the Commission for Employment and Skills in England. • Trade committees, e.g. Denmark, bipartite arrangements of employer associations and trade unions supporting new VET, adjustments or closing of outdated programmes. • Advisory boards on apprenticeships, e.g. Austria, where social partners are involved in the process of developing/renewing occupational profiles. • Managing boards and expert committees for VET, e.g. Bulgaria, where state and social partners cooperate in the development and renewal of school-based VET curricula commissions to be found in most countries examined. 	<ul style="list-style-type: none"> • Local school boards. • Professional internships. • Exchange programmes. • Dual systems, work-based training. • Alumni networks. • Career fairs. • Projects in companies. • School at work initiatives (in-company learning in cooperation with schools). • Work at school initiatives (experienced professionals provide supervision and professional skills training in school).

Source: Cedefop.

2.1.2. Incremental VET renewal versus VET reforms

A simple categorisation of formal and informal feedback mechanisms is insufficient in distinguishing between renewal of VET in terms of continuous change taking place within the given structures (change as integrated component of the VET system, renewal), and occasional changes in the fundamental structures of the VET system (reform). It is necessary to distinguish the renewal of VET from reforms in VET. For example, the introduction of new occupational profiles as part of the German dual system is considered to be (continuing) renewal of VET (see also Chapter 4 and Annex I, case study 2 of this report), while the introduction of the *baccalauréat professionnel* (Bac Pro) in France in 1985 is considered to be VET reform.

The distinction between VET renewal and VET reform can also be expressed by distinguishing between incremental and radical change (Mahoney and Thelen, 2010). Incremental change refers to processes of adaptation and improvement achieved by procedures foreseen and implemented in the VET system itself (e.g. the change of curricula or the development of new programmes against the backdrop of existing models). However, solutions

generated within VET may require external approval (e.g. by the parliament). Radical change in VET refers to changes in its foundational structures, implying a fundamental change of actors, roles, procedures, hierarchies of programmes and outcomes. Radical change in VET requires the involvement of actors outside the VET system and typically results in a new legal basis for the sector, approved by national parliaments.

2.1.3. Objects of change

Even when considering VET renewal only in this 'incremental' sense, the range of aspects and elements susceptible to change to be considered is still broad. A traditional way of structuring 'objects of change' is by distinguishing them into input, process and output/outcome: examples are teacher qualifications or number and length of programme (input), time allocated to workplace learning (process), learner attainment or qualifications (output) (Cedefop, 2008a). However, this structure is more appropriate for economic and statistical analyses of VET systems in their entirety. In the context of the present research, which focuses more on the qualitative aspects of the feedback between VET and the labour market, another categorisation has been developed:

- (a) provision: the provision of new learning opportunities, e.g. in terms of new programmes ⁽⁵⁾, or new providers (at existing or new locations);
- (b) design: the design of curricula ⁽⁶⁾ (e.g. new subjects), qualifications ⁽⁷⁾, educational/occupational/assessment standards ⁽⁸⁾, including new

⁽⁵⁾ Programme of education or training refers to implementation of learning activities while curriculum refers to the design, organisation and planning of these activities (Cedefop, 2011).

⁽⁶⁾ Refers to the inventory of activities implemented to design, organise and plan an education or training action, including the definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers (Cedefop, 2011).

⁽⁷⁾ Qualification covers different aspects:

- (a) formal qualification: the formal outcome (certificate, diploma or title) of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards and/or possesses the necessary competence to do a job in a specific area of work. A qualification confers official recognition of the value of learning outcomes in the labour market and in education and training. A qualification can be a legal entitlement to practise a trade (Cedefop, 2011);

- (b) job requirements: knowledge, aptitudes and skills required to perform specific tasks attached to a particular work position (International Labour Organisation (ILO)) (Cedefop, 2011).

- standardised categories (e.g. course units, modules, school days or school years);
- (c) media (resources): learning and teaching materials, textbooks, learning technologies, teacher qualifications;
 - (d) processes: actual design of instruction, such as instruction or assessment methods applied.

Other potential research focuses, such as new types of VET or new VET tracks, new compensatory or social integration programmes, or the upgrading of IVET institutions to HE institutions, have not been considered because they represent radical change to VET systems. Financial or human resources (teacher qualifications or teacher training standards) have not been assessed.

The effect of change in education has been described in various ways. Cedefop's study *Changing qualifications* identifies a range of six types of 'depth of change' which relate to the impact that change has on the education system and broader society. It ranges from 'policy discussions (no concrete implementation)' to 'the new system delivers benefits to individuals, organisation and society' (Cedefop, 2010b, p. 17). Other studies distinguish between changes which affect core, as opposed to peripheral, activities. Another method of grasping the effects of change is to examine its scope (e.g. the number of occupational standards renewed in relation to the overall number; the number of pages reviewed in a textbook in relation to the whole book). However, this type of deconstruction in change categories was considered to be too detailed for this study. Therefore, the effect of change has been investigated under a broader notion of 'scope of change' without further distinguishing between depth, core/peripheral activities and with a narrower quantitative notion of scope.

To clarify, this study focuses particularly on provision and design (new programmes, new standards, etc.) rather than media and processes. Whenever the feedback mechanisms analysed cover media and processes in addition to provision and design (as defined above), these elements have also been analysed. Feedback mechanisms which, for example, only address textbooks or new instruction methods have not been considered as these would either form a

⁽⁸⁾ Statement approved and formalised by a recognised body, which defines the rules to follow in a given context, or the results to be achieved. A standard may be expressed in quantitative terms, stating absolute or relative figures or using indicators, or in qualitative terms, using wording which has to be specific and accurate. Further distinctions can be made between input, process and output standards as well as between competence, educational, occupational, assessment, validation and certification standard (Cedefop, 2011).

new independent feedback mechanism, or not form part of any formalised feedback mechanism. This is illustrated by the example of the dual system in Germany which includes a complex and highly institutionalised feedback mechanism for the renewal of occupational standards at national level. The production of textbooks for IVET schools, however, including those dealing with theoretical background for the practical company-based training, is not part of this formal feedback mechanism or any other formal procedure, but is run by commercial publishing companies. The decision to renew a textbook or create a new one, therefore, is primarily based on commercial considerations (see Germany case study).

2.2. Guiding questions

Two main sets of research questions informed the collection of data on formally institutionalised feedback mechanisms in the 15 selected countries. The first set aimed at identifying and characterising feedback mechanisms:

- (a) how can feedback mechanisms be explained and systematically characterised (e.g. by positions of those involved, basis of legitimacy of actors, distribution of power resources, support structures available)?
- (b) are there specific models of social dialogue that support closer links between education and the labour market?

The second set of questions addresses the national context and the cross-country comparison of formally institutionalised feedback mechanisms:

- (a) do particular types of feedback mechanism better suit particular subsystems⁽⁹⁾, types of VET or economic sectors?
- (b) do particular types of feedback mechanism demonstrate complementarities/incompatibilities with particular types of education systems, skill formation systems, types of market coordination and types of welfare regime?
- (c) how do feedback mechanisms differ with regard to regional and sectoral aspects and the way they make use of VET and labour market research?

⁽⁹⁾ The sum of all provision of VET in a country forms its particular VET systems. Highly diverse parts of such a VET system (e.g. due to different educational tracks, students populations or forms of governance) may be grouped into VET subsystems. The systems of IVET provided in schools and in companies usually form two different VET subsystems.

- (d) in which countries are new types of feedback mechanism emerging? How could the emergences of new types or the reform of existing types be explained? What are driving factors for these changes?

2.3. Method

The empirical research undertaken for this study utilised a two-step process. Initially, country overview reports were produced from desk research and interviews. This was followed by comparative case studies on selected topics covering two or more countries and involving further interviews. Detailed guidelines and templates were produced and used for each step.

National experts reviewed the relevant literature and conducted two to four interviews for each report, depending on the availability of data and documentation for each country. Interviews, either in person or via telephone, were conducted between March and September 2012 with representatives from a large range of VET stakeholders (see Annex II). Three study visits were undertaken in Ireland, France and the Netherlands. And face-to-face interviews were conducted with relevant EU experts in Brussels.

Further insight was gained by conducting comparative case studies. Each case study consists of an in-depth analysis of a particular topic illustrated by a comparison between feedback mechanisms (or between aspects of feedback mechanisms) in two or more countries and, if appropriate, in particular sectors or occupational groups (such as lorry drivers, bricklayers and welders ⁽¹⁰⁾). The case study interviews took place between August and November 2012 either in person or via telephone. Two or more experts were interviewed in each case study, depending on the information available on the particular theme.

The combination of the insights from these case studies with the integration of typologies of industrial relations, skill formation systems and social dialogue in VET produced the identified models of feedback mechanism that illustrate the cooperation between education and the labour market in a specific subsystem of the country's IVET system; the models cannot be applied to a whole country.

In total, 77 national and European experts were interviewed between March and November 2012 (see Annex II).

⁽¹⁰⁾ Criteria for the selection of occupations were the existence of previous comparative research, (Brockmann et al., 2010; Cedefop, 2013b) and distinct features of the occupations in terms of labour market regulation, tradition, professional organisations involved.

CHAPTER 3.

Research background

Feedback mechanisms, as analysed in this study, aim to inform planning and delivery of teaching and learning processes according to identified labour market demand for specific skills and competences (as illustrated by Figure 1). Current labour market demands are not the primary concern of IVET planners, but future skills needs. Although its prominence has increased in the last decade, the forecasting of labour market demands has origins in educational planning that can be traced back to the 1950s. This chapter begins with a brief summary of the research on the identification and forecasting of future skill needs, followed by a summary of education planning approaches used in the second half of 20th century. It then draws on existing research to illustrate various aspects that shape cooperation between the worlds of work and of education. First, the interaction of VET and work organisation is discussed. Second, the embeddedness of education institutions in a network of political and socioeconomic institutions, such as collective bargaining, corporate governance and financing procedures are relevant to this study; consequently, labour market and welfare state policies are reviewed. Next the variety of skill formation systems is examined and, finally, the diverse models of social dialogue in different VET systems are considered.

3.1. Identifying future needs

Identifying and forecasting future skill requirements – for individuals, enterprises and society as a whole – and ensuring that these requirements are incorporated into education and training has long been the subject of research and political discussion (Haskel and Holt, 1999). The exposure of European countries to globalisation and the internationalisation of economies, job markets and education and training, has changed the objectives and approaches to forecasting in developed industrial and post-industrial societies. Demographic transition and the transformation to information and knowledge-based societies have also had an impact on this forecasting (see Tessaring, 2003). In contrast to the attempts of the 1960s and 1970s to discover and project laws and rules of socioeconomic change, more recently it has been acknowledged that these mega trends affect European education and training and labour markets to different extents (Cedefop, 2012a). As the European labour market has become

more integrated, finding ways of obtaining consistent and comprehensive information on future European skills demand and supply – including through joint European action – has become a priority.

In 2005, Cedefop began to explore the feasibility of establishing a European skill needs and supply forecasting system. The aim was to fill the gap in information on future skill needs at pan-European level. The European skills panorama (European Commission, 2013b) and the Organisation for Economic Cooperation and Development (OECD) skills strategy and their respective information tools (OECD, n.d.), are the most recent and visible examples of attempts to fill this gap. The Cedefop skills supply and demand forecast is one of the most important instruments in the coordination of the anticipation of skills needs at European level (Cedefop, 2010c). While it is acknowledged that pan-European projections should not compete with individual country forecasting (Cedefop, 2010c), balancing these aims appears to be a significant challenge. The problems identified by Cedefop's forecast (Cedefop, 2012a) suggest that national challenges are echoed at pan-European level. These problems include underlying assumptions about the objectives of forecasts, the ways this information might be obtained and used, its intended audience and the particularities of the context of the country in question (Tessaring, 2003).

What should be forecast and how forecasting should be conducted depends on the type of education and training system and labour market conditions within a country. A number of factors can have an effect: whether the boundaries between general/VET/continuing training are distinct; whether there are nationally defined training and qualification standards; whether labour markets are vocationally-oriented or predominantly competition-based or internal (Tessaring, 2003); whether economies are small, open and flexible, and thus highly sensitive to exogenous shocks (as Baltic economies are) (Martinaitis, 2012); whether there are imbalances between labour market demand and supply (Humburg et al., 2012). Government policies are also important (Field et al., 2009), particularly whether there is a more *laissez-faire* or strong interventionist approach to education and training (Leney, 2012).

Given that the role of labour market information and intelligence is twofold – to assess existing skill needs and to provide a longer-term perspective to enable training to take account of future requirements – the results are assumed to be useful for a broad range of audiences. These include policy-makers, education and training providers, and stakeholders such as public employment and guidance services, social partners, sectoral organisations, education and training practitioners, enterprises, analysts (Cedefop, 2010c) and individuals attempting to plan their careers (Tessaring, 2003). At the same time, expectations of the purpose and focus of forecasts varies substantially between different audiences.

Longer-term projections are necessary for fundamental redesign of education and training systems, but are only of limited relevance for individuals who desire information on employment prospects in the near future. Similarly, employers tend to be more interested in short- and medium-term skill trends (Tessaring, 2003).

It may be impossible to meet policy-maker expectations for detailed and accurate forecasts given the uncertainty that surrounds the future demand for skills (Martinaitis, 2012). Attempts to close the gap between expectations and labour market forecasting have inspired long-standing discussions on the assumptions, methods and quality of data (e.g. Neugart and Schömann, 2002). The inherent restrictions in the use of purely analytical methods of anticipating skill needs have led to a new interest in the design of more practical cooperation between VET and labour markets which do not require macro-economic forecasting, especially at regional or local levels (see Lassnigg and Markowitsch, 2004). The collection of information on future skill developments is only one crucial aspect; planning and delivery of new or adapted education and training programmes to learners are also critical. Previously, this aspect was categorised under the heading educational planning.

3.2. Educational planning

Educational planning (which is not restricted only to VET) first emerged in the 1950s and developed into an academic discipline and regular practice in the 1960s. It was a response to the need for post-war economic reconstruction and, more generally, to the post-war demographic 'boom'. This demographic shift was accompanied by rapidly rising expectations of social and economic mobility, a sense of economic and military competition between the 'democratic-capitalistic West' and the 'socialist bloc', and the development of the human capital theory, which saw education as an investment in national economic growth (Farrell, 1997). By the end of the 1970s the body of literature on educational planning was enormous, difficult to classify (Inbar, 1980), and almost impossible to survey (Lynch and Tason, 1984). The following, therefore, by no means provides a full account of this topic, but attempts to place the question of renewing education in a historical context.

Educational planners in the 1960s were concerned with two major problems (Coombs, 1970). First, there was allocation: how best to distribute public resources among competing demands. Second was efficiency: how best to use those resources. This model of educational planning favoured the narrow and technically focused quantitative exercise of forecasting the costs of changes in

enrolment figures and attempted to link education systems to qualified manpower and national economic growth.

The manpower planning approach evolved in the 1960s and introduced estimates of projected 'needs' for personnel with varying levels of formal education and specific sets of technical or professional skills and knowledge in the economy. These estimates were used to regulate and adjust the provision of appropriate forms of education to align education outputs with the requirements of the economy (Adams, 2000; Lewin, 2011). This model became popular very quickly, particularly due to its perceived 'success' in the Soviet Union. It was assumed that technical and vocational education would increase worker productivity and meet the challenge of unemployment.

Educational planning during this period was influenced by macro models, national plans and national targets aligned with regional ones. Expanding education for national development was the primary concern. However, the resources were allocated mainly to the provision of school facilities and teachers (Varghese, 2011). Expanding access and improving learning conditions in schools consumed most of the resources allocated to education. This pattern was stimulated and promoted by international organisations.

In the 1970s, concerns about education development shifted from growth alone to growth with redistribution. Educational progress in many countries was characterised by a widening disparity in access to (high-quality) education. Educational planning began to move away from macro-level solutions to tackling emerging disparities, especially regional disparities (Carron and Ch au, 1981), and began to focus on the external efficiency of the education system, something that had been taken for granted in the 1960s.

Educational planning in the 1960s and 1970s was criticised for paying insufficient attention to implementation and for being too isolated; upstream from the political process and downstream from budget preparation with the educational administration responsible for implementation (Caillods, 2011). Traditional educational planning was also guilty of relying on narrow forecasting methods and focused too strongly on theoretical debates rather than acquiring knowledge on the underlying conditions of education and change in education as a social process.

Bailey, commenting on his analysis of two decades of United States (US) forecast, stated 'perhaps the most serious problem with the forecasting approach for understanding future educational needs is that it is not much help in indicating how the education system should be reformed' (Bailey, 1991, p. 19). He argued that 'educational reform as it relates to work and competitiveness must focus on the interaction of the content and organisation of work with the content of schooling. Occupational forecasts as they are presently conducted tell us nothing

about these crucial issues and the policy debates that they encourage lead to a discussion of numbers, not content' (ibid. p. 20).

Aside from scholarly criticism, sociological factors also contributed to a reduction in interest in educational planning. Its legitimacy was questioned when the post-1945 baby-boom generation reached the end of compulsory schooling. Part of this generation entered a less egalitarian university structure and the economic slowdown of the 1970s led to rising numbers of graduates who were unable to achieve or access expected careers suited to their level of education. Further, the growing discourse on 'over-education', the 'diploma diseases' (Berg, 1970; Dore, 1976) and 'credential inflation' (Bourdieu and Passeron, 1990; Collins, 1979) marked a temporary breakdown in public belief in what education could deliver. Projections by educational planners failed to anticipate more fundamental institutional changes such as the changing role of women in education and the labour market and the legitimacy of educational planning was diminished and related activities reduced.

Although the term 'educational planning' more or less disappeared from the research vocabulary and the public debate during the 1980s, many of the associated practices continued. In particular, methods of forecasting and anticipation of skill needs were further developed and became commonplace, not least because of the increasing possibilities presented by information technology and statistical software. These forecasting activities, however, tended not to be associated with or motivated by concrete educational planning issues, but were increasingly spurred by public labour market institutions, such as public employment services and labour ministries.

Since the 1980s, there has been a divergence between forecasting activities and VET planning and renewal. However, this study reveals a renaissance of educational planning which is more concerned with the content of education. The assumptions made about the relationship between education and the labour markets that underlie previous educational planning approaches are put in a completely different perspective by more recent research. The next chapter reviews this body of literature and introduces the most important aspects to consider when analysing cooperation between VET and the labour market.

3.3. Aspects that shape labour market IVET feedback

This chapter provides an overview of the aspects that shape labour market IVET feedback and country classifications of in relation to these aspects. It describes:

- (a) the interaction of VET and work organisation;
- (b) the models of industrial relations;

- (c) the varieties of skill formation and VET systems;
- (d) the models of social dialogue in different VET systems.

Cross-country comparative research on the education-labour market link has taken two main forms (Saar and Ure, 2013, forthcoming):

- (a) one line of research takes the differences in the labour market and the organisation of work as a starting point and investigates how different forms of organisation of work interact with approaches to providing education;
- (b) a second line of research takes the characteristics of the education and training systems as a starting point, before assessing different responses by employers to the differences of the system.

3.3.1. The role of VET in shaping work organisation and staff structures

The 'societal effects' school (notably Maurice et al., 1986) studies why firms located in different countries, but which operate in the same sector and employ similar technology, organise their work and structure their workforce differently. Why do some countries (Germany, Japan) employ more skilled personnel and fewer management personnel, while the reverse is true of others (France, the UK)? They also investigate why wage differences between groups of employees are much higher in some countries (France, the UK) than in others (Germany). The role of education, and in particular of the VET system, has been identified as crucial to developing an understanding of these differences. The timing of VET over the life course and its relation to academic education is regarded as an important factor.

Maurice et al. (1986) argue that enterprises have two options in the way in which they organise work. Either they intentionally shape the workplace and train workers to operate in the work environment, or they build on existing occupations (*Berufe*) and the skills, competences, attitudes and expectations of vocationally trained workers. Maurice et al. (1986) coined the term 'organisational space' for the former approach and 'occupational space' for the latter. As a result, the role of VET differs: where 'organisational space' dominates, VET programmes have less to offer, as they are only a prerequisite for a smaller number of positions. Where 'occupational space' dominates, VET programmes are key to entering the labour market. In this case the programme content is organised around vocational principles (*Berufsprinzip*, Reuling, 1998).

Consequently, feedback mechanisms differ in their impact with regard to dominance of 'organisational' or 'occupational' space. While in organisational space, changes in VET simply open up new yet idiosyncratic opportunities for firms, in 'occupational space' changes to VET programmes imply immediate shifts in the way work is organised for a multitude of organisations. The

distinction between employment systems where the individual enterprise determines individual work organisation, and systems in which it is the 'occupational space' (occupational labour market) that imprints work organisation beyond the organisational level, became fundamental to various approaches in cross-country comparative research (Shavit and Müller, 1998; 2000; Müller and Gangl, 2003).

Another crucial distinction refers to the timing of IVET during the life course. VET viewed either as something specific to be provided in a workplace following the completion of the school career (e.g. Japan, the UK, the US), or as an extended spell of education in its own right provided for young people, who are diverted from education providing access to HE (as in France, southern and eastern Europe countries) or who have chosen vocational education as an equal option (as in Denmark, Germany, Austria).

The role of the employers in VET clearly differs according to the age of the trainees: whether they are adult employees continuing their career within the firm or younger people obtaining qualifications that will allow them to enter the labour market (although some of these individuals may stay with the firm providing the training). The role of public authorities also differs for adolescents compared to (young) adults: where IVET represents one pathway into higher secondary education, it is typically financed entirely or primarily by the state. Finally, the characteristics of IVET programmes tend to differ considerably between those targeted at adolescents who are yet to enter the labour market and those that are designed for employed adults (Brinton, 2005). Table 2 summarises the major IVET regimes reflecting different patterns of organising work and structuring the life course.

Table 2 **Country typology using the dominance of types of work organisation and preference for placing IVET**

Timing of VET education		
	Before entry into (main) career (respectively for young people 15-19 years)	After entry in the labour market (respectively, 20+)
<p>Occupational space</p> <p>(Few) Regulated clear-cut occupations (professions, semi-/para-professions)</p>	<p>(a) Broad, specific programmes, leading to polyvalence and strong occupational identities, e.g. in AT, CZ, DE, DK, NL, NO, SE, SL.</p>	<p>(b) Narrow, specific (off-the-job) programmes, adding to occupational identities, supporting job enlargement and or preparing for (more) authority/promotion, e.g. strong in DE, AT.</p>
<p>Organisational space</p> <p>Scattered job profiles, representing highly variant bundles of skills and competences</p>	<p>(c) Broad, generic and introductory programmes, preparing for various types of job with leaving occupational identity undefined, e.g. in EE, EL, ES, FR, IT, LV, LT, HU, PL.</p>	<p>(d) Sequence of narrow, specific programmes, with a weak off-the-job component, providing skills and competences for current job (or stages on a job ladder).</p> <p>(e) Broad, specific and deep programmes off-the-job providing skills and competences for a career trajectory within an organisation, e.g. in IE, Japan, UK, US.</p>

Source: Maurice et. al., 1986; Mardsen, 1999; Hefler, 2013; Hefler and Markowitsch, 2012; Streeck, 2012.

- (a) In occupational space dominated countries, IVET programmes on higher secondary levels have a strong identity, high prestige, and are regarded as an alternative to academic higher secondary education. Many programmes are linked to specific occupations and, as occupations structure the organisation of work, programmes contribute to a good job prospects for IVET students. Programmes are typically broad (in terms of content) yet occupationally specific, leading to high levels of occupational expertise; they also include a considerable amount of workplace learning. This type of IVET is dominant in Denmark, Germany, the Netherlands, Austria and Scandinavian countries.
- (b) In occupational space dominated countries, occupational programmes are also available at a post-secondary, non-tertiary level, offering career opportunities for former IVET students. However, programmes are reserved for adults only and often not regarded as IVET but as continuous vocational education and training (CVET). Countries with a strong tradition in this regard include Germany and Austria.

- (c) In countries dominated by organisational space, the role of IVET for young adults is structurally limited, as IVET programmes cannot establish niches or clear routes of career progression reserved for their graduates. Further, the number of workplaces requiring particular vocational training is limited. IVET programmes are offered as an alternative within higher secondary education, yet are clearly regarded as lower in prestige than their 'academic' counterparts. Programmes are typically school-based, with workplace learning only comprising a minor component. Programmes are broad, but generic and often not designed for a specifically defined occupation. This type of IVET dominates in France and in parts of southern Europe, such as Greece, Spain and Italy.
- (d) In countries where organisational space dominates and IVET is provided mainly for young adults after extended spells of academic higher secondary education, there is polarisation of IVET into 'lower' and 'higher' routes. Students who underperform in secondary school are trained in the workplace for a particular entry-level job in narrow, specific programmes. Alternatively, they collect 'units of qualifications' within a framework approach that utilises strong work-based elements and weak off-the-job components. Standardisation of vocational education is low. This polarisation can be seen in Ireland, the UK and the US, and variants can also be found in Japan and many countries in south-east Asia (Brinton, 2005; 2011).

3.3.2. Models of industrial relations

Within this study industrial relations are defined as comprising the institutions and processes which substantively or procedurally regulate conditions of work and employment by means of collective bargaining between employers and trade unions, state regulation, or informal norms and practices (Hyman, 2001).

The role of IVET in countries dominated either by organisational or occupational space cannot be understood without reference to the prevalent systems of industrial relations (Maurice et al., 1986). Occupational space requires considerable involvement by the social partners, including a strong position for trade unions and high levels of interest coordination among both employers and employees. Consequently, we turn to systems of industrial relations as another essential element in explaining differences between countries in VET labour market relations.

Colin Crouch (1993) distinguishes three models of industrial relations systems: contentious relations, pluralist bargaining and neocorporatism. These models are based on the exchange of relations between organised labour and capital, i.e. between the organisations of workers and employers. Ebbinghaus

(2008) (see also Ebbinghaus and Visser, 1997; European Commission, 2009) has further distinguished between different types of neocorporatism: Nordic neocorporatism, with strong organised labour, and continental social partnership, with weak organised labour. He identified four models:

- (a) Anglophone pluralism is dominant in Ireland, the UK and the US. Employers and labour promote their particular interests via free collective bargaining without state intervention. The interest organisations, capital and labour, are relatively fragmented and weak on both sides;
- (b) Nordic corporatism is the dominant form in the Scandinavian countries. Organised interests in these countries are relatively centralised and the organisations enjoy a high degree of membership compliance. The labour market partners recognise each other and are also consulted by the state in political decision-making. With the support of the state, the collective bargaining systems are highly institutionalised;
- (c) continental social partnership is dominant in Germany and the Netherlands. More segmented societies have led to fragmentation of associations. The state partially intervenes in labour relations and defines general collective bargaining rights. However, it leaves crucial self-regulatory functions to social partners. Work councils represent stakeholder interests in firms (Streeck, 1995);
- (d) Roman polarisation is the dominant pattern in France and Italy. Employer associations and trade unions do not always recognise each other's rights as legitimate collective bargaining partners. Their bipartite ⁽¹¹⁾ relations, as well as those with the state, are rather contentious. Given the fragmented and polarised systems, the employers and labour organisations strive for recognition by the state.

Industrial relations research provides insights into the conditions which may allow employers and trade unions to include regulation of training in collective agreements (Busemeyer and Trampusch, 2012). First, employers may agree to provide training if they can offset the cost by paying lower wages (Acemoglu and Pischke, 1999). Second, collective agreements on social benefits are more likely to be agreed if trade unions favour them over market-solutions or state-run schemes (Trampusch, 2010). Trampusch and Eichenberger (2011) indicate that trade unions may leave provision of training to market mechanisms and

(11) 'Bipartite' refers to the social dialogue between the social partners (employer organisations and employee organisations/trade unions) without the involvement of national or European public authorities.

enterprises because they prioritise other issues in their bargaining efforts. Third, employer preferences in collective bargaining depend greatly on public policies and the approach of the state. If government plays an active role in industrial relations, there are more incentives for employers to reach collective agreements that include measures on training (Traxler, 2010). While tax incentives and labour legislation can influence employer and trade union bargaining strategies (Ebbinghaus, 2008), employers may attempt to establish agreements with trade unions to prevent the imposition of state regulations (Visser and Hemerijck, 1997).

3.3.3. Varieties of skill formation and VET systems

Traditionally, scholarship on VET institutional political economy (Schmitter and Streeck, 1999; Hall and Soskice, 2001; Thelen, 2004; Streeck, 2009) focuses on how training institutions are embedded in a network of political and socioeconomic institutions that includes collective bargaining, corporate governance and financing, labour market and welfare state policies, and industrial relations. The configuration of skill formation systems is largely conditioned by the decisions made on the division of labour between firms, associations and the state in skills provision and financing.

Several crucial variations in the institutional design of training are identified in the literature. These include the main location of training (school or enterprise), the degree of standardisation and certification of skills, the degree of stratification and differentiation, the role of the state, the linkages between skill formation and socioeconomic institutions such as production systems, and industrial relations and the welfare state (Ashton et. al., 2000; Calloids, 1994; Rainbird, 1993).

Furth (1985) has classified education and training systems according to their post-compulsory vocational training provision. He identified three models of education provision: the schooling model, which integrates most forms of provision within the formal educational system (typical for Canada, Japan and the US); the dual model, which is characterised by a strong and structured apprenticeship system (typical for Austria, Germany and Switzerland); and the mixed model, where greater importance is assigned to the non-formal sector, typical in the UK. Lynch (1994) also places emphasis on the location of the training. This typology is closely connected with the classification of countries based on the organisation of vocational training (Blossfeld and Stockmann, 1999; Shavit and Müller, 1998). They distinguish the following types:

- (a) 'theoretical' vocational training, mainly in schools (schooling model) (the Netherlands, Sweden);
- (b) a dual system that includes both school training and work experience in which the emphasis is on apprenticeship (Denmark, Germany);

- (c) on-the-job training (Italy, Spain, the UK, the US), where employers assume responsibility for training.

Crouch et al. (1999) stress the role of institutions and distinguish between three dominant forms of skill provision in initial vocational training: first, direct state involvement, where skills are provided in state-run and/or funded vocational schools and the role of employers is marginal (France and Sweden); second, corporatist networks, where employer associations play an important role in the provision and administration of training (Germany); and third, market-driven, which lead to the dominance of on-the-job training (the US).

Greinert (1993) also adopts an institutional approach, but focuses on the role of the state in skill provision. Greinert (2004) differentiates between three structural models of vocational training in Europe: market-driven (type A), comprehensive state-bureaucratic (type B) and dual corporatist models (type C):

- (a) in type A, the economy takes priority; training is regulated primarily by market forces. The functional needs of the company or the actual job are the leading didactic principles;
- (b) in type B, politics take priority; training is primarily regulated through bureaucratic control. The academic principle is the main didactic tenet;
- (c) in type C, society takes priority; training is primarily regulated by dual control, i.e. a combination of market and bureaucracy. The vocational principle is the determining didactic orientation (Greinert, 2004; Cedefop, 2004).

The 'varieties of capitalism' approach contends that institutional complementarities exist between skill formation systems and institutional spheres of the political economy and that these create mutual and beneficial interaction effects (Estévez-Abe et al., 2001; Iversen, 2005; Iversen and Stephens, 2008; Busemeyer, 2009; for adult education see Desjardins and Rubenson, 2009). Hall and Soskice (2001) distinguish between two varieties of market economy associated with distinct skill formation systems. The crucial dimension in their typology is the specificity of skills that the systems provide: general or specific skills. In LMEs (such as the US) the general education system, in particular the HE system, provides generic human capital assets which can then be developed and shaped through on-the-job training in enterprises. In contrast, coordinated market economies (CMEs) (such as Germany) emphasise vocational training in addition to HE.

Busemeyer and Trampusch (2012) point out that the varieties of capitalism approach has contributed to understanding the variety of training regimes across countries and to demonstrating the importance of the training policy of firms for the dynamic of skill formation systems. The varieties of capitalism approach has also shown that skills investment by firms is dependent on other actors such as

employer associations or the state, which take responsibility for the financing and provision of training as well as for the certification and standardisation of skills.

Based on the varieties of capitalism approach and previous classifications, Busemeyer and Trampusch (2012) made a distinction between the liberal solution of narrow on-the-job-training, the segmentalist solution of self-regulation, the statist solution of state-run training, and the collective solution in which firms, associations and the state collaborate to provide and finance skills development (see Table 3). They argue that two major dimensions are helpful in describing the variety of skill regimes, the first being the degree of firm involvement in the provision of IVET. This dimension refers to the willingness of firms to invest in skill formation, in particular in IVET. The second dimension is the degree of public commitment to vocational training, which encapsulates various aspects: state subsidies to vocational training, public policies, which monitor skill formation through certification and standardisation, and the formulation of occupational training profiles.

Table 3 **The typology of skill formation systems**

		Involvement of firms in initial vocational training	
		Low	High
Public commitment to vocational training	Low	Liberal skill formation system (IE, US)	Segmentalist skill formation system (JP)
	High	Statist skill formation system (FR, SE)	Collective skill formation system (DE)

Source: Busemeyer and Trampusch, 2012.

In liberal skill formation systems, skills are largely shaped through markets and in general education. Vocational skills of higher quality and complexity are provided in community or vocational colleges which have limited institutional links to the labour market. The difference in the segmentalist skill formation regime is that firms are far more willing to invest in the formation and development of

employee skills. In the statist skill formation regime, in contrast to the others, public policy-makers are much more committed to supporting VET as a viable alternative to academic HE. The aim is to (re)integrate young people with weak academic qualifications into education and employment; employer involvement in is very limited. Collective skill regimes occupy a special position in comparisons as they are characterised by the strong commitment of both the state and firms to invest in vocational skills. Collective training systems combine the influential involvement of firms in training with a marked commitment of the state to support vocational training.

However, several authors have highlighted shortcomings in the varieties of capitalism approach (Bohle and Greskovits, 2009; Streeck, 2009; Trampusch and Eichenberger, 2011). First, the distinction between liberal and CMEs, or between general and specific skill systems, is very broad and cannot account for different types of regimes within the separate clusters (Busemeyer and Trampusch, 2012). Second, although the role of industrial relations is acknowledged to be crucial for developing an understanding of the formation of skills, the question of which collective agreements finance and regulate skills provision is left unexplored. This is because the literature focuses on provision by firms, the market or the state, and leaves the collectively negotiated provision of skills largely unexamined. Third, although 'varieties of capitalism' views state actors as crucial in the development of training systems, the literature overlooks the influence that the state may have in forming employer preferences, interests and strategies as well as in supporting coordination among employers (ibid.). Fourth, its theoretical tools are less well developed when it comes to explaining the transformation of these systems (ibid.).

3.3.4. Diverse models of social dialogue in different VET systems

Winterton (2006) argues that the nature of regulation of the VET system and its dominant focus, whether this is school or the workplace, are contextual factors that serve to promote or constrain social partner involvement and social dialogue. Social dialogue refers to the connection between the social partners, institutions representing employers and employees. Employer associations and trade unions typically engage in consultation and negotiation as part of the established processes of industrial relations. Social dialogue also generates links to wider political processes.

Winterton (2007) proposed a typology of VET systems in terms of two key dimensions: the focus of skill formation (workplace or school) and the regulation of the VET system (state or market). As a result he distinguished four types of systems (see Table 4).

Table 4 **Typology of VET systems**

		Mode of regulation	
		Market-led	State-regulated
Focus	Workplace	IE, NL, UK	DK, DE, AT
	School	IT	BE, ES, FI, FR, IS, NO, PT, SE

Source: Winterton, 2007.

3.3.4.1. *State-regulated school focus*

The state-regulated systems that have a school focus are characterised by a precise role allocated to the social partners in policy-making, often with long-standing statutory rights. Social partners are also formally involved in the VET implementation but have less influence at the local level in these systems. Social partners play a role in defining curricula, but have no involvement in the recruitment of trainees and employers have ultimate authority for determining training priorities within the company. While this approach generally guarantees an adequate level of training, VET that is predominantly designed within the formal educational system does not necessarily take account of labour market needs. This is the predominant VET system in Europe and, according to Winterton (2007) can be found in Belgium, Finland, France, Iceland, Norway, Portugal, Spain and Sweden.

3.3.4.2. *State-regulated workplace focus*

State-regulated VET systems with a workplace focus are a characteristic feature of the German dual system, which has strongly influenced those developed in Austria, Denmark, the Netherlands, Slovenia and Switzerland. In these countries the involvement of social partners in VET policy is a legal necessity. Social partner involvement in implementing VET decisions, such as the development of curricula and qualifications, is extensive. They are involved in VET implementation at local company or workplace level, in adapting curricula to meet local labour market needs, in the selection and allocation of training subjects, and in undertaking analyses of training needs. They are also consulted on the introduction and implementation of training measures, on participation in both internal and external training measures, and on special training facilities and the

selection of trainers. Further, social partners play a role in interviewing and selecting apprentices and trainees.

3.3.4.3. *Market-regulated school focus*

This system has no binding legislative framework and employers have no obligation to provide training. This weakness is further exacerbated by conflicts between central and local state authorities, government and labour, and capital and labour. School-focused VET systems are usually state-regulated, but in Italy VET was, until very recently, left entirely to market forces. Arrangements are market-led, with responsibility for training lying primarily with employers.

3.3.4.4. *Market-regulated workplace focus*

In countries with a tradition of voluntarism, most notably Ireland and the UK, legislation concerning the involvement of social partners in VET policy has historically been much less prescriptive. The role of social partners in VET implementation at the local level is weak due to the absence of statutory support. At company level, social partner participation in VET varies substantially because there is no statutory prescription of roles; the extent to which social partners are able to contribute to VET in these companies is entirely dependent on the willingness of the employer to engage in social dialogue.

Winterton's (2007) main conclusions are:

- (a) state-regulated systems support a clearly prescribed role for the social partners, while market systems are associated with uneven involvement;
- (b) social dialogue in school-focused systems is inevitably less developed than in workplace-focused systems, since school-led VET is divorced from the domain where the social partners operate;
- (c) the state-regulated workplace model offers solutions better suited to labour market needs than the state-regulated school model.

CHAPTER 4.

Ways of renewing IVET

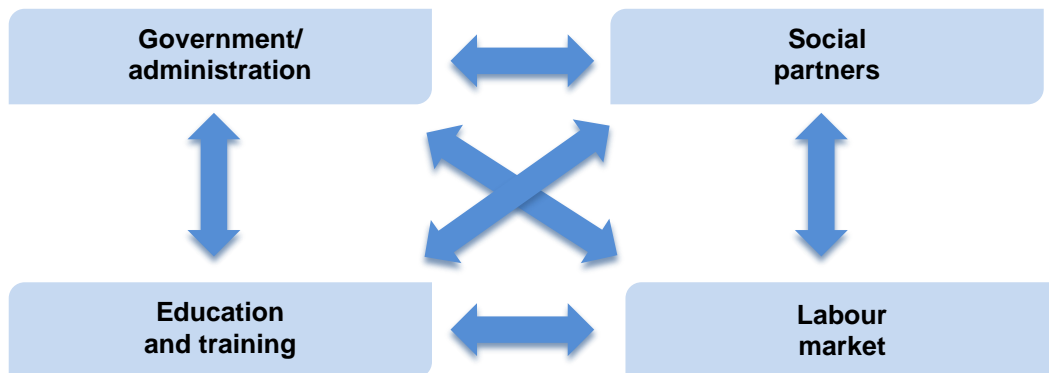
The previous chapter analysed how VET systems are embedded in broader social relations with which they interact and demonstrated that the characteristics of stakeholder involvement can only be understood by considering this context. From these theoretical considerations, and the feedback mechanisms identified in the 15 country studies and the case studies (Annex I), this chapter presents a proposal on how to develop the principal model of feedback mechanism. A typology of four types of feedback mechanism is introduced to structure the different ways of organising cooperation between IVET and the labour market as found in the countries investigated. Each of the four basic models identified – liberal, statist, participatory and coordinated – is discussed in more detail through country examples and analysis within their broader contexts. The four models propose a way of understanding the IVET renewal process and the case studies in Annex I show the renewal process in practice.

4.1. Basic models of feedback mechanism and their country contexts

The idea of a feedback mechanism (as illustrated in Figure 1 in the introduction) does not distinguish any particular actors within education and training or the labour market. However, feedback between VET and the labour market is always mediated through particular actors, be it the school administration on the one side or employer and employee organisations (social partners) on the other. The following actors can be identified (see Figure 2, compare Markowitsch 2000; 2001; Henkel and Markowitsch, 2005):

- (a) the government or administration (Ministries of Education, awarding bodies, qualification authorities);
- (b) the education and training providers (schools, colleges, enterprises);
- (c) the labour market (understood as the interplay between employers/demand and workers/supply);
- (d) the social partners (collective interest organisations of the employers and the workers, i.e. employer organisations and trade unions).

Figure 2 **Advanced model of feedback between VET and the labour market**



Source: Cedefop.

- The following forms of exchange between these actors can be distinguished:
- 'steering', referring to interaction processes designed to achieve a compromise between divergent interests; the communication results in changes that have consequences for everybody concerned with a particular occupation (the VET providers, the companies, the workers);
 - 'signalling', referring to the transmission of various weakly aggregated 'needs and concerns', which may be contradictory and are not necessarily adjusted to each other; 'signals' may be used for orientation. As various signals are transmitted and respondents freely choose whether or how to respond to signals, any exchange process will only affect the particular VET or occupational standards in question, leading to potentially different outcomes with no or few meaningful consequences for the VET system ⁽¹²⁾.

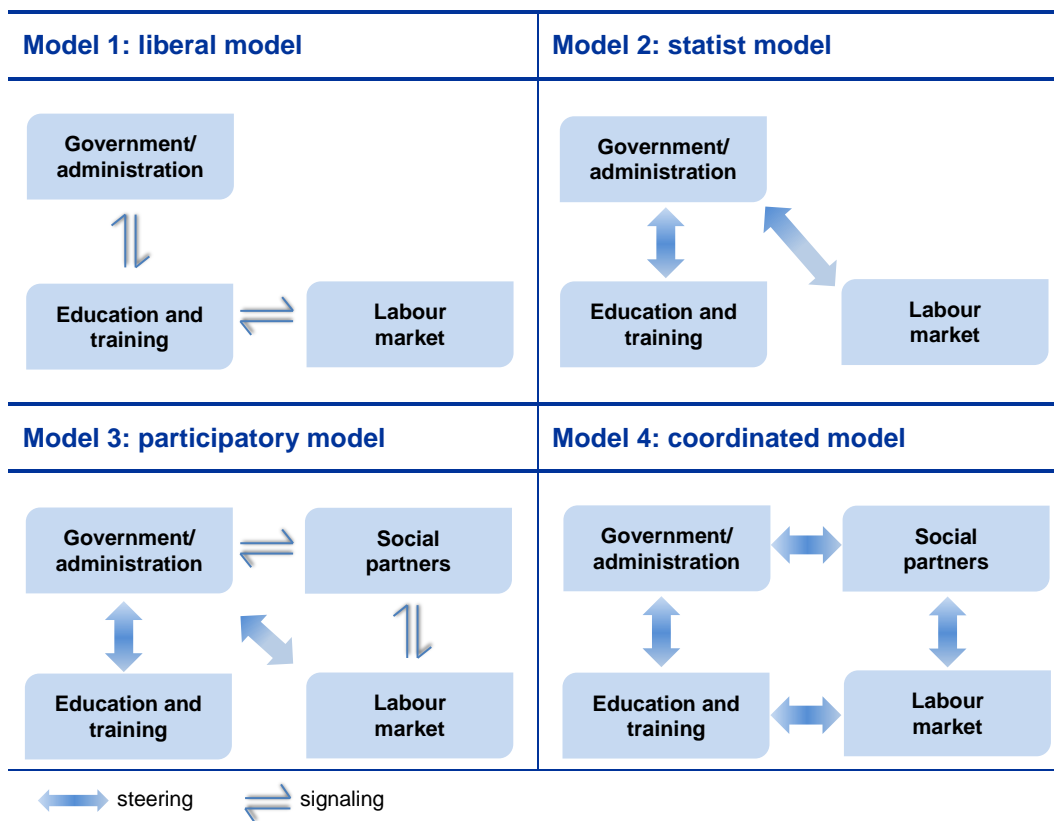
By adding these elements to the very simple model identified above, (explained in Figure 1 in the introduction) and based on the findings of the country analyses, four fundamentally different ways of organising feedback between VET and the labour market can be identified: 'liberal', 'statist', 'participatory' and 'coordinated' (see Figure 3).

⁽¹²⁾ It is interesting to note that an investigation of the role of qualifications in VET governance structures distinguishes between qualifications as 'instruments of communication' and their 'regulatory function' (Cedefop, 2013b), a potentially similar differentiation to that presented above, and which should be explored further. The assumption is that the number of qualifications with regulatory functions is higher in labour markets which are steered in the above sense.

In all four basic models, described in more detail below, there is feedback between VET and labour market, but the way this feedback is mediated through the government or education administration differs, as does the role of social partners. These are models and they cannot describe perfectly how a particular system works in all of its complexity. They are derived from the most dominant parts of VET systems analysed and may not apply in the same way once focus is shifted to specific subsystems, private VET provision or VET as part of labour market initiatives.

Once we combine this bottom-up general approach, which illustrates ways of organising VET and labour market cooperation, with a top-down approach that follows the typology of skill formation systems (Bussemeyer and Trampusch, 2012) and VET systems (Winterton, 2007) outlined above, we can develop strong hypotheses about how particular feedback mechanisms function in the countries examined.

Figure 3 **Main models of feedback mechanism identified in the 15 countries analysed**



Source: Cedefop.

Although they utilise different approaches, the typologies of Trampusch and Busemeyer as well as Winterton produce similar groupings of countries when only EU countries are examined. The distinction between workplace and school focus used by Winterton seems to be reflected in Busemeyer and Trampusch's distinction between collective and statist skills formation systems. These suggest greater involvement of firms when the focus is on the workplace and greater state commitment when the focus is on school. A comparison of these typologies also reveals, however, that even if there is a focus on the workplace, employer contribution to IVET can be low, as is the case in England and Ireland. In both of these countries this is explained by fact that the 'market-led' (Winterton, 2007) or 'liberal' (Busemeyer and Trampusch, 2012) approach is used here (see Table 5). However, only the added distinction between occupational and organisational space, as summarised in Table 2 (Section 3.3) permits distinguishing between the large group of countries described as 'statist' or 'state-regulated systems'. Table 5 illustrates the combination of this top-down approach by integrating typologies of industrial relations, skill formation systems, and social dialogue in VET with the bottom-up approach of identified models of feedback mechanism. However, such models of feedback mechanism do not represent country characteristics, but illustrate the cooperation between education and the labour market in particular, and distinctive parts of a country's VET system.

Depending on the nature of the VET system and its respective subsystems (e.g. work-based VET in parallel to school-based VET) more than one feedback mechanism is usually found in each country. The grouping process for country feedback mechanisms specifically relates to the VET subsystem analysed in each country and does not necessarily represent the VET system of a country as a whole. For Germany, Austria and Sweden, the apprenticeship system and school-based systems follow different feedback models.

However, certain types of feedback mechanism may require a particular institutional environment to flourish and so specific types of mechanism are more likely to be present in certain countries.

Table 5 **Integrating typologies of industrial relations, skill formation systems and social dialogue in VET and the likeliness of particular types (models) of feedback mechanism**

Maurice et. al. (1986), Mardsen (1999), Hefler (2013), Hefler and Markowitsch (2012)	Organisational space, after entry into labour market: IE, UK, US	Organisational space, before entry into labour market: EE, EL, ES, FR, IT, LV, LT, HU, PL	Occupational space, before entry into labour market: AT, CZ, DE, DK, NL, NO, SI, SE	
Bussemeyer and Trampusch (2012)	Involvement of firms: low. Public commitment: low. 'Liberal': IE, UK, US.	Involvement of firms: low. Public commitment: high. 'Statist': FR, SE.	Involvement of firms: high. Public commitment: high. 'Collective': DK, DE, AT.	
Winterton (2007)	Workplace, market-led: IE, NL, UK	School, state-regulated: BE, ES, FI, FR, IS, NO, PT, SE	Workplace, state-regulated: DK, DE, AT	
Likely models of feedback mechanism and examples	Model 1 'liberal': IE, UK	Model 2 'statist': BG, EE, PL. School-based VET in DE, AT and SE.	Model 3 'participatory': ES, FR, HU, FI. Dual VET in SE	Model 4 'coordinated': DK, NL, SI. Dual system in DE, AT.

Source: Cedefop; Bussemeyer and Trampusch, 2012; Winterton, 2007; Maurice et al., 1986; Hefler and Markowitsch, 2012.

Although constrained by regulatory frameworks such as the national qualifications frameworks (NQFs), liberal systems are characterised by high levels of autonomy and low levels of constraints on employers in terms of their ability to organise work and utilise skills. IVET providers have a similar level of freedom in tailoring IVET provision to students and prospective employers. As a result, a large number of different VET programmes prepare workers for highly diversified types of workplace. The low degree of coordination between education and the labour market is mirrored in the prevalent feedback mechanisms of the liberal model (model 1). Employers signal their interests to a heterogeneous group of IVET providers; these providers respond with various strategies to meet the perceived, but not aggregated, employer demands and justify these strategies when negotiating funding with public authorities. IVET providers develop different interpretations of needs and reactions. When state authorities issue new occupational profiles or qualifications, there is a lack of engagement required to implement change due to the weak or non-existent involvement of social partners.

‘Signals’ provided by liberal type feedback mechanisms could be quickly explored and provide the basis for ‘local’ innovation in IVET. They could be used to introduce new programmes in the IVET market, meeting the perceived requirements of at least some groups of employers. But the flexibility and fast adaptability to market needs found in liberal systems is gained at the expense of sustainability (for example signals from only a few or certain groups of employers tend to dominate change agendas) and low penetration of the entire system. This exacerbates polarisation between high- and low-performing programmes, as market mechanisms alone may not be sufficient to improve the latter and a ‘low-skill-equilibrium’ (Finegold and Soskice, 1988) requires lower numbers of IVET graduates beyond HE levels.

The most common feedback mechanism in Europe is the statist type (model 2). This is also the primary type of feedback mechanism that informs policy on general education. Feedback between VET and the labour market is mainly mediated through the state (particularly in the form of the school administration). Within this model, there are variations between statist VET governance exercised by one or several ministries (Poland), and more decentralised but still tightly state-controlled feedback mechanisms, e.g. based on principles of new public management (Sweden). There is little direct exchange between VET and the labour market aside from informal practices (e.g. internships, enterprise representatives in school boards). The state is aware of new skills demands. It commissions research to forecast skill needs or invites representatives of employers to curriculum commissions. Changes to VET systems use the knowledge gained from these sources.

The relevance of feedback mechanisms of this type very much depends on the importance of VET in the respective country and the level of emphasis placed on employability by the government. This is partly reflected in the way research activities (forecasting skill needs, evaluating the implementation of VET schemes and VET changes in general) are integrated and to what extent external stakeholders are consulted. There may be a large number of stakeholders to be consulted when proposing a new curriculum (chambers of commerce, trade unions, teacher associations, parent and student associations), but whose influence is restricted to commenting on, and occasionally amending, proposals. This is the case in statist skill regime countries such as Bulgaria, Estonia, Spain, France, Finland and Sweden. However, in Spain, France and Finland, the modest influence of social partners that can be observed justifies the classification of their respective VET feedback mechanisms as a participatory model (see below). Estonia, in contrast, has moved in the direction of the liberal model. Further, we find the statist type for school-based VET tracks in collective skill regimes, such as Germany or Austria.

In cases in which the state assigns a distinct consultative role to social partners (be it in national or regional boards) that exceeds a mere commenting function in renewing VET curricula or standards, the statist model becomes a participatory one (model 3). The boundary between these two models may be blurred. However, as the majority of feedback mechanisms in Europe will fall into one of these two categories, it is useful to differentiate them according to extent of the influence of social partners. Taking this differentiation into account, VET systems in Spain, France, Finland and Sweden can be said to possess weak 'participatory types' of feedback mechanism, while Hungary possesses a stronger 'participatory type'.

The coordinated model (model 4) is only found in collective skill formation systems in which the state supports a clearly prescribed role for the social partners. Here there is a very close link between VET and the labour market. As education takes place in the firms (at the workplace) this link is mediated through the social partners and is regulated by the state to varying degrees. In Denmark, characterised by social partner self-regulation, the state uses a light steering hand⁽¹³⁾. The motivation and initiative to renew VET is often generated directly by the firms (due to changing needs and demands), or by trade unions who are aware of the problems experienced by apprentices on the labour market. Demands are expressed to the government and mediated by the social partners, and the state makes formal decisions on changes to VET. The implementation of change is largely dependent on the social partners, who are responsible for major parts of the provision (apprenticeship places, training of trainers, assessment). This coordinated model is best represented by feedback mechanisms applied in the apprenticeship systems in Germany and Austria. This model can also be found in VET systems in Denmark and the Netherlands and, to a lesser extent, in Slovenia.

As subsequent sections will explain, the method of organising feedback between VET and the labour market varies not only between countries but also between different VET programmes, trajectories or subsystems within a country. This is illustrated by Austria, which according to Busemeyer (2013, forthcoming) has a 'hybrid' collective and statist skills formation system. Here there is both a school-based VET system (mainly VET colleges) and an equally important apprenticeship system. Although both are state-regulated, there are clear differences in focus (school versus workplace) and the commitment of firms (low

⁽¹³⁾ For a comparison of industrial relations in Denmark and Sweden and their impact in other domains, see e.g. Due and Madsen, 2001.

versus high). Thus, the VET system in Austria is well regulated with coexisting feedback models for different VET subsystems: the dual system follows the 'coordinated model' and school-based VET the 'statist model' ⁽¹⁴⁾. This is also the case in Germany, with a coordinated type for the dual system and statist type for (smaller) school-based VET. The new Swedish apprenticeship system displays some participatory elements, but the dominant governance structure in VET is the statist model ⁽¹⁵⁾.

In most countries there is more than a single type of feedback mechanism, though the existence of different VET tracks does not necessarily lead to different types of feedback mechanism. For instance, Spain, France, Slovenia, Finland, all have different VET tracks, but only one central feedback mechanism.

The case for the existence of particular feedback mechanism can be summarised as follows (compare Table 5):

- (a) the 'coordinated model' of feedback mechanism is most likely to be found in countries such as Denmark, Germany, the Netherlands, Austria and, to a lesser extent, Slovenia, in which occupational space dominates, which are classified by Busemeyer and Trampusch (2012) as collective skill formation systems, which have a work-based focus and which are state-regulated;
- (b) the 'liberal model' of feedback mechanism is most likely to be found in countries in which organisational space dominates, and which are classified either as liberal or market-led skills formation systems, such as England and Ireland;
- (c) the 'participatory model' of feedback mechanism can be found both in countries in which occupational or organisational space is dominant, and that are classified as statist systems with a focus on schools. In some cases, the participatory model may be closer to, and share more features with, the coordinated model (e.g. in Slovenia); in other cases it may be closer to and share more features with the statist model (e.g. in France or Finland). The participatory model can be termed an 'intermediate' model that lies between the two other distinct types;

⁽¹⁴⁾ The 'liberal model' can also be found in the Austrian higher VET system (polytechnics), and therefore a third type of mechanism exists (see also case study 5, Annex I).

⁽¹⁵⁾ More feedback mechanisms were also identified in Sweden (four in total), but as they cover only a minor part of the VET student population, they are not analysed further here.

- (d) the 'statist model', the most common in Europe, can also be found in countries in which either occupational or organisational space dominates. However, it is more likely to be found in countries with systems which have a clear focus on state-regulated school-based VET (e.g. Bulgaria, Estonia and Sweden).

4.2. The liberal model of feedback mechanism in the UK-England and Ireland

According to the characterisation of country skill formation, welfare and industrial relations systems, variants of the liberal feedback mechanism are dominant in the UK-England and Ireland. There is no formal definition of vocational education in England and it is generally regarded as a system of education and training whose subject matter is knowledge and skills used within certain trades, occupations and professions. Most IVET programmes are provided for individuals who have completed compulsory education (school-based study up to the age of 16). IVET on higher secondary level is generally provided within a multifaceted further education sector, which caters both for young people preparing for entry to the labour market, and adults, many of whom work part time. Although there are many IVET providers, the further education sector is the major provider of post school IVET: 86% of all students aged 19 and over participated in further education programmes (Wolf, 2011). Providers shape their programmes in accordance with established professional norms and the perceived needs of students and employers. In the absence of state regulation, IVET providers tend to conform to professional patterns of good practice established among the educational organisations in their field.

The UK-England

A distinctive feature of the English system is the plethora of qualifications and individual awarding bodies (Wolf, 2011). With so many IVET providers – rather than a regulated number of state-controlled institutions – 'transparency instruments' have emerged. Perhaps the most notable features of these transparency instruments are 'occupational standards', which follow well-established models of professional practice. Governance of IVET is implemented via the definition and renewal of occupational standards. IVET providers are expected to conform to these standards. Consequently, feedback mechanisms govern occupational standards at national, sectoral and regional levels.

Education providers have some discretion in how they adapt to changes in occupational standards.

For both IVET and the labour market, occupations are not legally defined in terms of the right and duties of those who perform them. The *Berufsprinzip* (see Chapter 3, Reuling, 1998), a cornerstone of many continental VET systems, is conspicuously absent in England and Ireland (with the exception of some trades).

However, this deficit is partially compensated for by expanded 'professions' with strongly defined qualifications, specific entitlements and duties, considerable similarities in patterns of activity across employer organisations, and a 'professional' labour market. Professions typically require qualification at post-secondary and HE level. In Ireland and the UK there are alternative feedback mechanisms for professions, in which professional bodies (representing employee interests) and business interest groups (employing professionals in larger numbers) have a more significant role. Therefore, although the liberal feedback mechanism is dominant in IVET, in these countries, other types of feedback mechanism may be found at other qualification levels or in particular economic sectors (e.g. health).

Box 1 **Feedback mechanism in England**

A number of agencies are involved in the formulation and renewal of IVET. One such agency is the UK Commission for Employment and Skills (UKCES). UKCES plays an important role in leading the VET policy agenda and oversees the development of the SSCs by regulating operating licences. The UKCES operates on a 'social partnership' basis with representation of businesses, the public sector and trade unions on the board. The Office of Qualifications and Examinations Regulation (Ofqual) is primarily responsible for overseeing the quality of IVET. Ofqual ensures that qualifications, examinations and assessments provide the basis for future progression of all learners. Ofqual regulates and monitors organisations that award qualifications. The SSCs determine which awarding bodies are able to offer a qualification. To receive SSC approval, all units in a qualification must be directly related to a specific national occupation standard, which are developed by the SSC to reflect current employer requirements. Qualifications must also comply with the requirements of the qualifications and credit framework to be approved by an SSC and therefore to be eligible for Ofqual accreditation.

Source: England country overview.

In many large sectors of the economy, there is no strong link between IVET, occupational standards, work organisation and labour market demand: employers determine the organisation of work, the use of skills, and requirements of qualifications. Legal qualification requirements are not typically determined for

'occupations' as a whole, but for specified areas of activity – for example with regard to health and safety. There are jobs with a strongly defined occupational profile (e.g. in maintenance departments) that are connected to more standardised educational programmes but they are less common than in occupational labour markets (Eyraud et al., 1990; Mardsen, 1999). These countries are characterised by low overall numbers of IVET students (compared to academic tracks and HE), low prestige and little standardisation of IVET programmes that have little exchange value in the labour market. But IVET programmes with a strong 'nearly professional' status and identity that provide good career opportunities for a small 'blue collar elite' can also be found (Arum, 1998).

The IVET system and its formal feedback mechanism allow little room for organised interest groups, both on the employer side (business interest organisations) and the worker side (trade unions), to exercise influence. However, the SSCs and the UKCES are considered to be 'social partner' organisations (see Box 2). The deregulated nature of vocational training influences the way feedback mechanisms are organised with respect to curriculum development. The content and assessment arrangements for VET qualifications are subject to the accreditation requirements of the regulatory body and the requirements of national occupational standards. Ofqual interacts with awarding bodies, regulating these organisations and accrediting their individual qualifications. As SSCs effectively both design and approve qualifications, they too are a crucial part of this regulatory triangle. It can be argued that the existence of a qualifications market, driven by a combination of government policy and private investment, is a distinguishing feature of the English education system.

Box 2 **SSCs in England**

The SSCs, introduced in 2003, are the latest attempt to create a voluntary, employer-led coordinating body to improve coordination between employers in a single sector and between employers and educational service providers. SSCs are licensed private bodies, supported by core groups of sectoral employers, which aim to promote the active participation of relevant enterprises in their work, and which until 2010 received grants to assist in this process. Core tasks include:

- (a) labour market intelligence;
- (b) the promotion of company training;
- (c) the creation and support of modern apprenticeship schemes;
- (d) actively contributing to the formulation and incremental improvement of occupational standards relevant to the sector, usually in close cooperation with established bodies responsible for formulating occupational standards.

Typically, councils are responsible for contributing to high numbers of occupational standards for particular activities (*). Based on updated standards, training providers are expected to implement any changes and provide the framework for IVET qualifications. SSCs are responsible for organising employer-led feedback on changing occupational standards, training and apprenticeship projects, including input from various employers and further education providers. This should increase cooperation within the sector, leading to mutual learning and the development of more shared practice. This, in turn, makes skill provision more effective, as can be seen in models of coordinated skill formation systems. By 2012, 23 SSCs had been established and had been continued after one evaluation and relicensing process. Up to now the effectiveness of SSCs has been mixed. Typically, due to the voluntary basis of operation, the councils reach out only to a minority of organisations in their sector. Further, SSCs tend not to become strong representatives of their sector as a whole when attempting to guide cooperation between distinct enterprises (when compared to many other frameworks that aim to build networks between firms in IVET and further education). Consequently, they are unable to play the role that sectoral business associations found in CMEs do (see also case study 3). Funding rules have drastically changed since 2010, as councils have to apply for project money in competitive procedures instead of receiving a lump sum of funding.

(*) <http://nos.ukces.org.uk/Pages/index.aspx> [accessed 13.8.2013].

Source: England country overview.

Ireland

IVET provision In Ireland is similar to the UK in that there are weak links between occupational standards and IVET provision; standardised patterns of work organisation based mainly on voluntary (self-) coordination are more prevalent.

The impact of the market-oriented approach taken in Ireland led to a major crisis in VET provision and subsequently to reorganisation of the governance of VET in 2012 (Ireland country overview). A significant feature of this change is the weakening of social partner interests within the VET process. According to interviewees, this is partly because the reform did not fully engage the social partners but is also due to social tensions which followed the enactment of austerity measures. The major thrust of the reforms has been to rationalise the number of bodies involved in VET through the creation of a single new agency, the Qualifications and Quality Assurance Ireland. The amalgamation of the different VET bodies is an integral part of public sector reform and is designed to cut costs and make more efficient use of resources. Since 2007, the Further Education and Training Award Council (FETAC) has managed the common awards system, which provides a framework for all full time education awards in terms of award type and award structure, and uses a credit system compatible with ECVET. By the end of 2013 all existing awards – except those linked to apprenticeships – will have migrated to the common awards system and older awards will be decommissioned. Providers registered with FETAC can use award standards to develop their own programmes based on the learner profile and submit them for validation.

A number of standards development groups (SDGs) have been established to carry out the review of occupational standards. This is undertaken at a sectoral level and SDGs can be considered the Irish equivalent of a sector skills body. The SDGs include experts from the relevant industry/sector, education bodies and government. The establishment of a single unified agency is an attempt to assure the quality of qualifications and of learners' experience of education and training at all levels in Ireland. It is expected that the NQF will become the central feedback mechanism as a result of the reform process. The amalgamation could generate a closer link between the labour market (skills assessments made by the SDGs) and education.

Irish VET system is similar to the English in that it comprises market and employer dominated institutions and has undergone reform that has been defined by fiscal austerity. It is difficult, however, to assess how Irish austerity measures will impact on the economy and VET organisation. Economic problems are severe in Ireland and there is a discussion within the policy community about how

to avoid the problems of poor VET planning that played a role in the VET crisis of 2011 (interview).

4.3. The statist model of feedback mechanism in Bulgaria, Estonia, Poland and in the school-based VET systems in Germany, Austria and Sweden

In most countries where all IVET or part of IVET higher secondary education is state-financed, state-run and state-controlled, variations of the statist model of feedback mechanism can be found. In these countries the administration responsible for school-based VET has usually established a board, a committee, or an observatory with the purpose of managing change. Individual members of the boards are invited to participate based on their expertise. Representatives include experts from various fields: the schools (school principals), researchers, various governmental bodies, non-governmental organisations and the corporate world. A characteristic feature of this model is that, in most cases, the social partners are not involved as formal actors. The key goal of the feedback mechanism is to inform the administration about change and to draft proposals for action. Typically, the range of possible reforms is constrained as fundamental change is the prerogative of parliament, not the administration. Based on the outcome of one round of feedback, the administration adapts binding rules for all VET schools in a particular field. The impact of this feedback mechanism is considerable. For more substantive reform activities, proposals may have to be discussed and approved by the parliament.

Major differences between countries arise in the way in which mechanisms impact the labour market. In countries with a strong occupational labour market, such as Denmark, Germany and Austria, where the *Berufsprinzip* (see Chapter 3) dominates and work organisation makes frequent use of defined vocational qualifications as a foundation, any changes to VET curricula and the corresponding qualifications tend to have a lasting impact on both employers and workers. Whole occupational groups and sectors are affected by these decisions. Consequently, collective interest organisations engage with the feedback mechanism and attempt to influence the decision process, even if they have no formal role. Experts act as spokespeople for various groups, even when not formally delegated to do so. A good example of this is the feedback mechanism for school-based VET in Austria (see Box 3 below). Similar mechanisms are found in school-based IVET in Germany and Sweden.

Box 3 **Feedback mechanism for school-based VET in Austria**

School-based IVET makes up almost 40% of a youth cohort and half of all participants in IVET in Austria. There is a variety of higher level VET colleges (about 27% of a cohort) and corresponding VET schools (about 10% of cohort) in different technical domains and in fields such as business administration, tourism, health care or agriculture. While enjoying some autonomy, schools follow binding national curricula, which are typically fully renewed over a long time (about 10 to 15 years), but that can be partially adapted at short notice. Specialised administrative units (*Fachabteilungen*) within the Ministry of Education are responsible for VET colleges and schools in a particular occupational field. Administrative experts from the *Fachabteilungen* observe changes and are approached by various social interests – the Austrian social partners, particular large firms, experts – with observations, concerns and proposals. While there are more regular opportunities for exchange (e.g. yearly conferences), interaction with organised interests is not formalised and feedback from employers and employees is informal. Senior teachers of vocational subjects in various schools, who maintain regular communication both with one another and the *Fachabteilungen*, are another important source for information. VET teachers become aware of new and changing requirements in the world of work through their interaction with firms at local and/or sectoral level via the research projects and compulsory internships undertaken by students, or through their own personal networks. However, it is the responsibility of the *Fachabteilungen* to draw conclusions and take concrete steps towards reform. In the event that a fundamental change needs to be made to curricula, proposals are developed by commissions (*Lehrplankommission*) of VET teachers representing all relevant regional VET schools. Experts may be consulted and supporting research activities commissioned by the *Fachabteilung*. Administrative experts also seek exchange with relevant social partners. Typically, a series of forums and conferences support the exchange with social partners, sector experts and individual firms. Participation of others within the *Lehrplankommission* beyond the *Fachabteilung* and VET teachers remains informal. However, even in the absence of a formal role, the strong influence of Austrian social partners on curricula reform must not be underestimated. Beyond informal participation in the preparation of regulation on curricula, legally entitled social partners typically enjoy the right to consultation (*Begutachtungsrecht*) on any formal regulation prior to implementation. For the *Fachabteilungen*, taking into consideration the views of social partners is a natural requirement in preparing curriculum reform despite the absence of any formal obligation.

Source: Austria country overview; Henkel and Markowitsch, 2005.

In countries with a weak occupational labour market, where employers are not required to employ substantial numbers of IVET graduates from a particular school-based programme, the impact of the feedback mechanism depends on various other elements. In this respect, post-socialist countries present differences in the outcomes of statist feedback mechanisms. Following the transition to capitalism, these countries developed in different directions and, while they left the state-led nature of the IVET system largely unchanged, they allowed new patterns of coordination between IVET and the labour market to emerge (for more details see case study 4 in Annex I).

Bulgaria

Bulgaria is still influenced by its socialist past, even though the late 1990s saw the introduction of VET reform that led to the creation of the National Agency for VET. The Bulgarian VET reform envisages a clear role for social partners in shaping VET, but as yet the impact on IVET of their involvement has not been great. The state is still the strongest VET influence even though social partners have become more active in recent years and there is an increasing awareness about the need to align VET better with labour market needs. However, despite this growing recognition, there is currently little evidence of concrete measures that could improve this link (Bulgaria country overview). VET in Bulgaria is generally experiencing a reduction in student numbers despite modernisation efforts (Cedefop, 2009a, p. 16).

Estonia

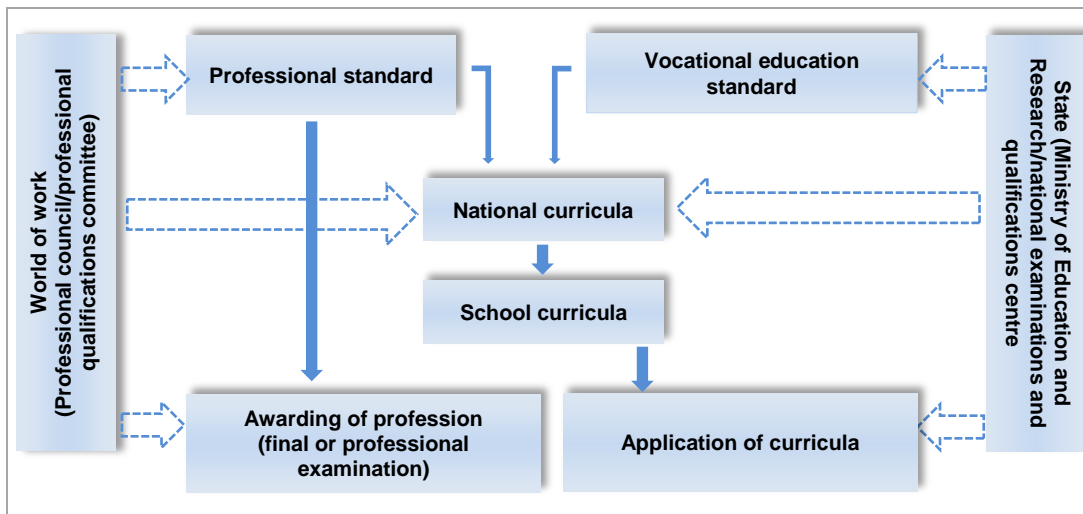
Estonia differs from the other 'post socialist' countries as government policy has a predominantly neoliberal focus, reflected through the reduction of regulation for enterprises and the promotion of private investment and economic growth. Fragmented business interests of firms, mainly foreign owned, have the support of the state, while the trade union movement is comparatively weak. Nevertheless, the social partners are involved in the specification of professional standards and awarding of professional qualifications as well as the development and application of curricula. In accordance with Ordinance No 645 of the Minister for Education and Research of 2 August 2006, curriculum group councils are formed to support the development and implementation of national VET curricula. According to this ordinance, councils may include representatives of employers, employees and professional associations in addition to representatives of VET and other education institutions. As the list of approved councils shows, although these labour market actors participate, the degree of participation varies between councils.

The Estonian feedback mechanism in IVET closely resembles that found in England in that it first defines occupational standards and then adapts curricula to these standards (see the previous section and Box 4). While the state-run IVET system continues to operate after substantial reform, parents and students strongly favour HE, because it leads to better labour market prospects at home and abroad. Although students of higher IVET programmes are formally entitled to access HE, they perform less well on average in the standardised HE entry test (Saar and Unt, 2011). Consequently, the reputation of IVET has been considerably damaged within education. Further, employers also prefer to employ either students who are participating in HE or HE graduates. IVET has emerged as part of a 'two tier' VET system in which it is accorded low status. In the absence of sector-wide collective agreements or state regulation, employers are not obligated to employ IVET graduates of any kind, or pay above minimum wages to qualified workers. Soaring participation rates in HE further undermine the value of IVET credentials, and have the potential to create skill polarisation (ibid.).

Box 4 Estonia's attempt to implement a liberal feedback mechanism in a statist system

The development of professional standards is governed by professional councils, of which there are 16 in Estonia, as the labour market is divided into 16 sectors (on the basis of a statistical classification of economic fields). According to the Professions Act, professional councils are tripartite organisations which assign equal weight to representatives of employees, employers, and professional associations. The Estonian Qualification Authority (Kutsekoda) (EQA) organises the work of professional councils and is responsible for the technical support of their expert groups. The EQA is a private legal entity (foundation) established in August 2001 to continue the development of the occupational qualifications system launched by the Estonian Chamber of Commerce and Industry in 1997. EQA was established by the Estonian Chamber of Commerce and Industry, Estonian Employers' Confederation, Ministry of Social Affairs, Estonian Employees' Unions' Confederation and the Confederation of Estonian Trade Unions. In addition to representatives of the founders of the EQA, the supervisory board of the EQA includes a representative of the Ministry of Education and Research (*). It organises the development and improvement of professional standards as well as the work of the professional councils to increase the competitiveness of the Estonian workforce and promote the development, assessment, recognition and comparison of occupational competences. The role of the Estonian Ministry of Education and Research (Haridus- ja Teadusministeeriumi Kutse- ja Täiskasvanuhariduse osakond) (MoER) is to establish and reorganise public education institutions (except universities and applied HE institutions), to direct and organise the preparation of curricula, study programmes, textbooks and teaching/study aids (except for universities) and to administer the resources allocated to the education system. The VET and adult learning department of the MoER coordinates the preparation and implementation of education policies through local governments and other relevant ministries.

(*) See also <http://www.kutsekoda.ee/en/kutsekoda> [accessed 13.8.2013].



Source: Toom, 2010.

Poland

Poland has taken significant steps in the formulation of its national qualifications framework (PQF), involving a broad range of stakeholders: social partners, employers, education and training institutions, teachers, employment offices. The PQF is an integral part of the current VET reform process. The Ministry of National Education plans to introduce a number of proposed changes to improve the link between VET and labour market by 2015 ⁽¹⁶⁾.

Poland has taken a different approach from Estonia with regard to social dialogue. Polish state reforms introduced a role for social partners within VET policy. A significant body for social dialogue at national level is the Central Employment Board (Naczelna Rada Zatrudnienia), which fulfils an advisory role to the Minister for Labour. The board consists of representatives of public administration, employer organisations, trade unions and local administration. It is consulted on issues such as training for the unemployed, programmes

⁽¹⁶⁾ This includes engaging employers in: developing curriculum and examination standards; assessing vocational qualifications as members of the examination boards; shaping the content of courses for adults who want to acquire vocational qualifications; curriculum reform (*inter alia* basing the curricula for all occupations on learning outcomes; including key competences into vocational school curricula; making exams lead to uniform vocational qualifications, irrespective of the way skills and competences have been acquired); and modernisation of classification of vocation classifications (*inter alia* describing qualifications by a set of skills and competences, making the Polish qualifications framework compatible with the EQF).

promoting employment and planning and use of the labour fund (a dedicated state fund) among others. The activities of this body are primarily concerned with segments of Polish education that focus on the continuing education of adults and training of young people by employers. One considerable barrier to social partner involvement is the lack of tripartite or bipartite agreements between VET stakeholders. Further, it is difficult to discuss training issues as there is no legal basis for trade unions to engage in a dialogue with employers on these issues. Trade unions have to build capacity and lack the resources to influence the design of training services. Local labour offices rarely develop relationships with Polish trade unions and collective sector agreements typically do not address the shortcomings of training provision (Poland country overview).

Box 5 Feedback mechanisms and IVET in Poland

At the national level, education policy is formulated and implemented centrally by the Ministry of National Education. The Minister for National Education, by means of regulations and detailed arrangements, creates a legal framework for the functioning of all educational establishments, including VET. The Minister cooperates with ministers from other departments that also have responsibility for supervising vocational schools: Minister for Culture and National Heritage (artistic schools), Minister for Agriculture (agricultural schools), Minister for Environment (forestry schools), Minister for Health (medical schools), Minister for Justice (schools for juveniles placed in reformatories) and Minister for Defence (army schools). At regional level, Voivodship employment boards have been established with an advisory role, while the same functions are performed at the local level by Poviats employment boards. The Voivodship employment board provides advice on the criteria used in the division of labour fund resources in the region and provides advice on the characteristics of training, vocational training and employment in the region. Under the current institutional framework, the role social partners, particularly that of Tripartite Commission for Social and Economic Affairs, is to consult and give opinion related to programme documents for vocational schools (core curricula, detailed curricula and examination requirement standards). According to the amendment of the Education System Act of 19 August 2011, after 1 September 2013 new provisions will come in force that will alter the amount of money available for the benefit of employers in IVET. In addition, local governments, in their role as school managing authorities, receive state funding drawn from the educational segment of the general subsidy to finance school tasks. This includes the management of post-lower secondary schools which provide vocational education including practical occupational education in schools and directly at employer workplaces.

Source: Poland country overview.

Companies occasionally cooperate locally with vocational schools to adapt learning programmes to the needs of employers; this has led to curriculum developments devolved to the schools and vocational courses (so called course forms). Employers can ask schools to establish such courses with the purpose of aligning training opportunities with labour market needs.

4.4. The participatory model of feedback mechanisms in Spain, France, Hungary, Finland and in the new apprenticeship training in Sweden

There are subtle differences that can be detected within state-regulated (in terms of Winterton, 2007) statist (in terms of Busemeyer and Trampusch, 2012) systems when formal feedback mechanisms between VET and the labour market are examined. In some cases there is no distinct bipartite (employee and employer representatives) or tripartite board (employee, employer and state representatives) at all and social partners are consulted ad hoc to make contributions, as in curricula commissions (compare the case of school-based VET in Austria in the previous section). In other cases social partners may be assigned a particular role in national advisory boards, but are involved only in strategic decisions (e.g. in Bulgaria and partly in Spain). There are other cases in which social partners have a greater role and are involved in defining VET curricula or standards (as in France, Hungary and Finland). Although the general VET systems in all these countries may be characterised as 'state-regulated' or 'statist', the influence of social partners on VET varies and it is therefore more appropriate to distinguish them into 'statist' (lower influence) and 'participatory' (higher influence) feedback mechanisms.

France

France provides a perfect illustration of the latter. The French model of VET can be classified as a state-regulated school model: IVET is centralised and embedded in the comprehensive education system (Ogunleye, 2011) in which the state has sole responsibility for content of curricula and examinations. Apprenticeship training (undertaken by less than one third of all VET students) is considered to be an integral part of IVET, while participation in VET in general is modest and only comprises approximately one third of the entire student population.

The strategic analysis centre (centre d'analyse stratégique) (CAS), located in the office of the Prime Minister, has responsibility for monitoring general trends in the economy and labour market to assess VET demand. CAS produces regular authoritative reports that are used to inform policy at national and regional levels. Regionally, there are observatories for jobs and training. One example is the Regional Employment and Training Observatory (Observatoire Régional Emploi-Formation) which collects and analyses data on skills and the labour market, particularly relating to regional trades and qualifications. At sectoral level, the Institute for Monitoring Future Trends in Occupations and Qualifications (Observatoire Prospectif des Métiers et des Qualifications) (OPQM) provides analyses on skills trends in the labour market. These analyses are then used to suggest changes in the supply of skills and qualifications.

A key role in implementation is played by *académies*, which are responsible for managing school-based IVET and are found in all 26 French regions (European Commission and Ecorys, 2010). The *académie* matches the supply and demand for vocational courses in each region as part of its responsibility for school management. Each *académie* determines whether a school should offer VET courses and at which level; assesses the demand for a qualification and the supply of that qualification; and also carry out assessments of underpinning competences in IVET provision. The National Commission for Vocational Certification (Commission Nationale de la Certification Professionnelle) (CNCP) is also growing in importance. It has sole responsibility for identifying valid/recognised qualifications in France and for establishing the French NQF.

While the state provides input into the design of IVET curricula, the primary responsibility for this task lies with the CPCs. There are 14 CPCs comprising employers, employees, public authorities/bodies and qualified individuals, which ensure that the competences acquired on completion of IVET programmes match with the skills needs of the labour market. Each sector CPC is responsible for assessing the need for (new) qualifications, preparing qualifications including a lists of the subjects to be incorporated, outlining the structure and organisation of examinations and the preparation and dispatching of documentation to the Minister for National Education for approval (see European Commission and Ecorys, 2010). Once a new qualification is approved, it is introduced into programmes in upper secondary level education (see also Box 6).

Box 6 **The role of CPCs in France**

The CPCs bring together all partners in a given sector to create new qualifications or revise existing ones. Almost every ministry must establish a CPC to create and renew their respective vocational qualifications: Ministries of Agriculture, Culture, Health and Social Care, and Labour have a CPC. CPCs are composed of four collegiate bodies: employers, employees, public authorities and eminent experts. The diploma design or the revision process includes the following elements:

- (a) an analysis phase, during which studies are undertaken to determine whether a new diploma is required, or if a revision of existing diplomas is sufficient;
- (b) the elaboration of reference guidelines on the trade activities is undertaken, intended to be five year forecast on the main activities involved in jobs that future diploma holders are likely to perform.

Source: France country overview.

Prospective study contracts (*contrats d'études prospectives*) are another key instrument allowing the state and social partners to collaborate in analysis of the private economic sector and plan possible action.

The state in France has a central steering role in the development of VET. However, the SSCs (such as the CPCs) play an increasingly important role in aiding cooperation through the active role of social partners in awarding national qualifications and the creation, updating and design of related referential standards for specific sectors.

Spain

In Spain, the VET system is characterised by state control, internal labour markets, and a primarily school-based system of upper secondary education with minimal apprenticeship training. Curriculum and learning outcomes are formulated by working groups. The General Vocational Training Council nominates experts from regional and national authorities to participate in these working groups and social partners also have access to them. The National Vocational Qualification Agency provides methodological expertise. The 'autonomous' regions also play a significant role, providing expertise and guidance in relation to sectoral development within each region and in specific regional sectors (see Cedefop 2012b, see more in case study 2, Annex I).

Sweden

In Sweden, vocational programmes taught in upper secondary schools were shaped significantly by a reform programme initiated in 1971. This gave birth to an integrated upper secondary school system of vocational and general education programmes (Olofsson, 2007). Although these vocational programmes have not followed a purely school-based development line, the many experiments on consultation and mediation mechanisms have not resulted in specific formalised forms of interaction with the labour market. Therefore, the main VET track in Sweden appears to be a good example of a statist feedback mechanism, similar to German or Austrian school-based VET ⁽¹⁷⁾.

In 2011, however, following the completion of a pilot phase, Sweden introduced new apprenticeship training (for a detailed description see also case study 3). While it is perhaps too early to evaluate the outcomes of this VET reform, this new apprenticeship training clearly demonstrates the intention to move towards engaging the social partners and towards a participatory feedback model. Programme councils have been established both at national level (national programme councils) and local level (local programme councils) and are composed of representatives from employer and employee organisations. These councils advise the Swedish National Agency for Education on the design of curricula and programmes, and on the development of workplace training as part of vocational education programmes (see Box 7 below).

⁽¹⁷⁾ The country report for Sweden identified two additional feedback mechanisms: a third IVET feedback mechanism, subject to widespread influence from the social partners, is the sector-based joint business-labour training boards, mostly found in the building and construction sectors. Parts of the apprenticeship period take place in upper secondary schools contracted by the joint business-labour training boards with a view to assisting the training. In this mechanism, change occurs when the boards are involved in designing the training materials. A fourth feedback mechanism relates to the involvement of Swedish municipalities in *Komvux* and *Yrkesvux*, which target adults without upper secondary education as well as individuals who need a new route of vocational training. The direct link to the labour market is in *Yrkesvux*, aiming to counteract the scarcity of qualified workers.

**Box 7 The new apprenticeship training in Sweden: an emerging participatory
feedback mechanism**

The 12 vocational educational programmes offered to students in upper secondary schools following the 2011 VET reform form part of the governance structures around the newly established programme councils.

At national level, there is a council for each educational programme. Policy documents indicate that these national programme councils (*nationella programråd*) will play an active role in quality assurance, continuous development, the analysis of programme participation and the transition of young students into the labour market. They will include representatives from employer and employee organisations alongside other experts. The councils will provide advice and support to the Swedish National Agency for Education (Skolverket) in composing directional documents and curricula that are relevant to labour market needs. In addition, local programme councils (*lokala programråd*) have been established, composed of representatives from local employer and employee organisations. The local councils advise the Swedish National Agency for Education assisting in the development of workplace training as part of vocational education programmes and in adapting VET to local labour market needs. At local level, upper secondary schools offering vocational educational programmes sign contracts with enterprises that agree to train apprentices.

Source: Sweden country overview.

The new feedback mechanism for apprenticeship training replaced the apprenticeship councils established during the 2008-11 experimental period preceding the 2011 VET reform. It is still too early to make definitive judgements on the efficacy of programme councils in the present stage of implementation.

It should be noted that the Ministry of Education has not produced guidelines on how these councils should work in practice, or the role they can play in observing and translating labour market signals into the VET system. Programme councils are given the discretion to organise their own work processes. The programme councils are strictly consultative and do not have any direct authority over crucial issues that are pertinent during the initial phases of the new IVET apprenticeship scheme, such as resource allocation or quality assurance (Sweden country overview).

It is possible that the current collaborative process of decision-making for the new apprenticeships will be weakened by the phasing out of the ad hoc apprenticeship councils. These councils contributed to shaping the new apprenticeship arrangements by drawing on the experiences and viewpoints of the social partners and other labour market stakeholders. As the apprentice councils will no longer be part of an IVET feedback mechanism, the advisory role

of consultation bodies (the national and local programme councils) becomes more prominent. Simultaneously, the decisive role of the Swedish National Agency for Education, which receives this advice, is further underscored.

The National Agency for Education should establish evaluation criteria for apprenticeships linked to upper secondary schools. How this evaluation will be adopted in each municipality and upper secondary school had not been finalised at the time of drafting this report. Commentators point out that the local programme councils will be required to handle all questions related to vocational education in upper secondary education, such as those on quality issues (important for any new scheme), without a specific responsibility for the apprenticeship scheme (Olofsson, 2007, p. 120). Local programme councils are supposed to bring together labour market partners and schools for the joint development of IVET. In view of their weak and undefined role, some commentators (Olofsson and Panican, 2012; Olofsson and Wadensjö, 2012) fear that the councils will not be active enough in updating workplace training and in quality control of apprenticeship schemes. Responsibility for the latter has been allocated to the Swedish Schools Inspectorate (Skolinspektionen), which has been commissioned to investigate workplace learning during inspections and to assess the quality of all programmes in upper secondary schools.

When compared with countries that possess a similar structure but a clearer dual VET system with typical apprenticeship schemes, it is apparent that Sweden still possesses a strong school-based IVET system. State bodies (like the Ministry of Education, the Schools Inspectorate and the National Agency for Education) maintain a decisive role in defining how labour market signals are reflected in IVET programmes. The future trajectory of the feedback mechanism is therefore likely to lean towards a participatory model of cooperation and partnership ⁽¹⁸⁾.

⁽¹⁸⁾ For a comparison of industrial relations in Denmark and Sweden and their impact in other domains, see Due and Madsen, 2001.

Finland

Like Sweden, Finland has a primarily school-based VET system ⁽¹⁹⁾, but in contrast to Austria or Sweden, the social partners also contribute to school-based VET; only one feedback mechanism could be identified. The dominant position of the Finnish National Board of Education in all matters related to IVET sustains the hypothesis of a single feedback mechanism. This was developed in the late 2000s, when a new government introduced new or modified institutions, such as the tripartite national education and training committees. These committees are tripartite bodies that aim to develop VET in a specific branch or occupational field (see Box 8).

Box 8 National education and training committees in Finland

These committees are important in defining the main feedback mechanism found in Finland. They are tripartite bodies under the auspices of the Finnish National Board of Education and the Ministry of Education. Serving for a period of three years, they operate with a mandate to plan and develop VET in certain branches or occupational fields. They are also tasked with assessing, anticipating and analysing the development of skills for the labour market and with providing advice on the qualitative and quantitative development of training. There are 26 committees, comprising representatives of the national education and training administration, teachers, employers and employees. The national education and training committees were established in 2007 following legislation issued in 2005 and 2006 that defines their composition and tasks. The committee structure dates back to the late 1980s, but was renewed by the government in 2010 alongside the renewal of both national and local curricula. Evaluations of previous curricula reforms (see a three-year overhaul in 1999-2001) conducted at this time revealed a strengthening of collaboration between VET institutions and the labour market, although the actual involvement of labour market actors was quite modest (Ahola, 2012).

Source: Finland country overview.

One notable characteristic of the Finnish committees is that, alongside social partners, teachers are also legally involved in the process of assessing, anticipating and analysing skills relevant for the labour market and contributing to

⁽¹⁹⁾ Some authors claim that the Finnish education system is increasingly stamped by marketisation, e.g. a performance-based funding model for VET, *inter alia* to measure how many students from each institution find a job after completing a vocational programme (see Antikainen, 2005; Stenvall, 1993).

the qualitative and quantitative development of training. Since the early 1990s a rolling five-year development plan for education and research has aimed to define curricula according to learning outcomes and relate them to job tasks in the labour market. Knowledge, skills and competence are included in the objectives in line with the EQF. On the basis of the national curriculum, training providers develop local curricula and students create an individual study plan through the selection of modules. Qualifications are based on a core national curriculum established for each branch or sector by the Finnish National Board of Education. IVET providers develop curricula from these national core curricula. Local providers of vocational training have formed coordination bodies active in organising training and defining vocational curricula. Many of these bodies use different advisory councils (one or many field-specific local advisory councils); they are composed of representatives of employees and employers, along with students, teachers and other stakeholders.

Hungary

In contrast to Finland and Sweden, in Hungary VET is not currently considered an attractive educational option (interview). Individuals who possess skilled worker certificates have fewer employment opportunities than those with higher qualifications. Although secondary vocational school has been a popular option in the past, and this is still the case today, there is a large gap between the two main vocational tracks in Hungary. For most pupils, the skilled worker vocational route is only a last resort.

The government formed in 2010 intends to raise participation and the prestige of VET. In future VET should become less theoretical and include greater work-based learning, with more training in enterprises as Hungary moves towards a dual system (inspired by countries with a strong apprenticeship system such as Germany). The prime minister and the president of the Hungarian Chamber of Commerce and Industry (Magyar Kereskedelmi és Iparkamara) (MKIK) signed a framework agreement in November 2010. The MKIK will play a key role as it will take on responsibility for VET-related tasks currently performed by the state and will be financed from the state budget. The MKIK was recently commissioned by the government to develop occupational profiles and framework curricula for 125 occupations, practically all skilled manual occupations in Hungary. This is just one example of the increasing role of social

partners in the governance of VET in Hungary. In the past two decades several bipartite and tripartite bodies have also been established; some of these operate on a formal basis ⁽²⁰⁾. Another example is the work undertaken on the national qualifications register (*Országos Képzési Jegyzék*) (OKJ). Professionals representing different sectors were involved developing the register and also continue to play a significant role in elaboration of the training exemplar of 2 400 training modules. The OKJ committee was established in 2006 to monitor and evaluate development of the qualification structure and make recommendations for modifying the OKJ.

4.5. The coordinated model of feedback in Denmark, the Netherlands and Slovenia, and the apprenticeship systems in Germany and Austria

The coordinated model can mostly be found in collective skill formation systems in which the state supports a clearly prescribed role for the social partners and in which firms demonstrate high commitment to work- and school-based vocational training. The motivation and initiative to renew VET often come directly from the firms (due to changing requirements and demands), including their representative organisations, or from trade unions that are able to highlight specific issues and problems relating to the labour market. These demands are mediated by the social partners and expressed to the government in the form of proposals. The government then takes the formal decision on any change. The implementation of change depends largely on the social partners who are responsible for major parts of the provision (apprenticeship places, training of trainers, assessment).

⁽²⁰⁾ The most significant national consulting bodies are: the National Interest Reconciliation Council (*Országos Érdekegyeztető Tanács*), a tripartite forum for strategic VET issues, which was abolished in 2011. A new formation established: the National Economic and Social Council (*Nemzeti Gazdasági és Szociális Tanács*) involving not only the three main players, but civil organisations, representatives of the scientific sector and the Church; the National Vocational and Adult Training Council (*Nemzeti Szakképzési és Felnőttképzési Tanács*), a consultative-advisory body to the minister in charge which involves representatives of responsible ministries and various stakeholders and participates in OKJ development and allocation of the training subfund of the labour market fund (*Munkaerőpiaci Alap*) training subfund resources; and the seven regional development and training committees (*Regionális Fejlesztési És Képzési Bizottságok*) which also include the social partners and, in fact, are dominated by representatives of the economy (Hungary country overview).

Although many commonalities can be identified between countries adopting this model and system of vocational training, there are some divergences. First, there is a contrast between the stronger sectoral arrangements which can be found in Denmark and the Netherlands in the form of (autonomous) trade committees or SSCs, and the influential umbrella organisations of chambers present in Germany and Austria. Second, in Germany and Austria there are at least two feedback mechanisms: one for the apprenticeship system and one for the school-based VET system. Third, Slovenia, which despite possessing several VET tracks, has only one main feedback mechanism in which social partners have influence; social dialogue in Slovenia has a greater 'participatory' element in IVET feedback mechanisms than is found in those countries that are described as 'participatory.'

Denmark

Denmark can be classified under the coordinated model with alternating IVET, i.e. practical training in a company alternates with teaching at a vocational college. There are 111 VET programmes clustered in 12 vocational groups. The social partners have considerable influence and great responsibility for VET at national, branch and local levels. Trade committees (sectoral level) are the strongest link between vocational training and the labour market in the Danish IVET system. An interesting aspect of the Danish system is the decentralisation of policy and implementation, with local VET colleges possessing a high degree of autonomy in the design of curricula for specific VET programmes within the frame of nationally defined targets. The colleges work in cooperation with local education committees – including representatives from the local social partners, often shop stewards and managers drawn from local enterprise – who counsel the colleges with respect to ensuring that curricula match local labour market requirements and conditions. The relevance of curricula to practising apprentices is also taken into consideration. This form of feedback mechanism is much more informal and draws primarily on the experience that the members bring to the committee, making the committees weaker than the mechanisms found at the level of the trade committees.

Employers and employees participate in approximately 50 bipartite trade committees with equal representation of employer associations and trade unions. The members are appointed by the social partners (e.g. staff from the social partner organisations and or managers/shop stewards from enterprise). Decision-making is highly consensus oriented. Feedback occurs when social partners, supported by the committee secretariats, monitor and analyse skill needs and

sectoral developments. The trade committees establish the objectives, structure (e.g. the split between practical training and school-based teaching), duration, and assessment of VET programmes. Each year the trade committees deliver a mandatory development account (*udviklingsredøgørelse*) for the coming year to the department of education. In these accounts, the committees describe important economic and technological developments in sectors in which VET programmes are established. The trade committees present proposals for the establishment of new VET programmes, adjustment to existing programmes, or the closing of outdated programmes based on these developments.

Local education committees are appointed by trade committees and are situated in every college that provides a VET programme. The involvement in these committees of local managers and shop stewards from enterprises in the surrounding area ensures representation of the social partners. Local education committees advise VET colleges on the didactic planning of programmes by providing input on technological and organisational developments in enterprises. The goal is to update programme content and contribute to the production of an adequately qualified future work force in the area.

The Council for Vocational Training is appointed by the Minister for Education and consists of a number of members nominated by the social partners; representatives of the authorities, teachers and students also participate. Special experts can also be appointed. The main responsibility of the council is to monitor important societal developments and to determine important trends for VET. The council also makes proposals to the department of education with regard to the establishment of new VET programmes, major adjustments to existing programmes, or the closing of VET programmes, building on recommendations by trade committees.

The Netherlands

The Netherlands is characterised as a CME in most typologies, while Winterton classifies the Netherlands as a typical market-based system (see also Chapter 3). The Dutch labour market illustrates the difficulties of building typologies and the country may be seen as a hybrid of the two types of system, as Anderson and Nijhuis (2012, p. 101) state that 'economic and social institutions in the Netherlands often deviate substantially from the ideal types prominent in social sciences. The Dutch welfare state is difficult to place within Esping-Andersen's 'worlds of welfare' and the Dutch political economy combines characteristics of both LMEs and CMEs. The Dutch skill regime also defies precise classification,

because it cannot be easily categorised as either purely school-based or dual system' (Esping-Andersen, 1990; Hall and Soskice; 2001; see also Chapter 3).

Box 9 **The knowledge centres**

The knowledge centres for VET trade and industry (*kenniscentra beroepsonderwijs bedrijfsleven*) (KBBs) are responsible for developing and monitoring qualification standards in the Netherlands. They operate under an umbrella organisation known as the S-BB, formerly known as the Association of Knowledge Centres for VET and Trade and Industry (COLO), responsible for coordinating the KBBs. The KBBs comprise representatives of different stakeholders: social partners, the government and VET providers. Each KBB has two mandatory tasks. The first is to maintain the link between the VET needs of the labour market and to establish qualifications (or 'occupation competences profiles') relevant for the sector. Social partners are responsible for compiling an occupational profile and ensuring that it is up to date. The second is to accredit work placement companies and to guarantee the quality of training. KBBs have a regional structure and are therefore well embedded in the local labour market.

Source: Netherlands country overview.

In the Netherlands, the 17 KBBs play a crucial role in feedback between VET and the labour market and aim to bridge the gap between sectoral needs and education provision. The KBBs can be classified under the coordinated model and are similar to Danish trade committees, representing a sectoral approach to the development, renewal and updating of qualification standards. In contrast, in the German, Austrian and Slovenian feedback mechanisms, social partners are represented via chambers or specific employer and employee organisations.

Germany

Germany is a CME with a conservative orientation and an occupational labour market ⁽²¹⁾ (Saar and Ure, 2013, forthcoming). The strong tradition of interplay within the social partnership is based on cooperation and compromise accompanied by high levels of trust. There are approximately 350 recognised

⁽²¹⁾ Occupational labour markets are characterised by heavily demarcated jobs requiring specific training and qualifications (see Chapter 3).

training professions and so Germany belongs to the countries where 'occupational space' dominates and VET programmes are key for entering the labour market. In Germany the coordinated model applies only to the feedback mechanism in the dual system, which takes the form of a tripartite arrangement (Government, social partners, standing conference of the Ministers for Education and Cultural Affairs (Kultusministerkonferenz) (KMK)).

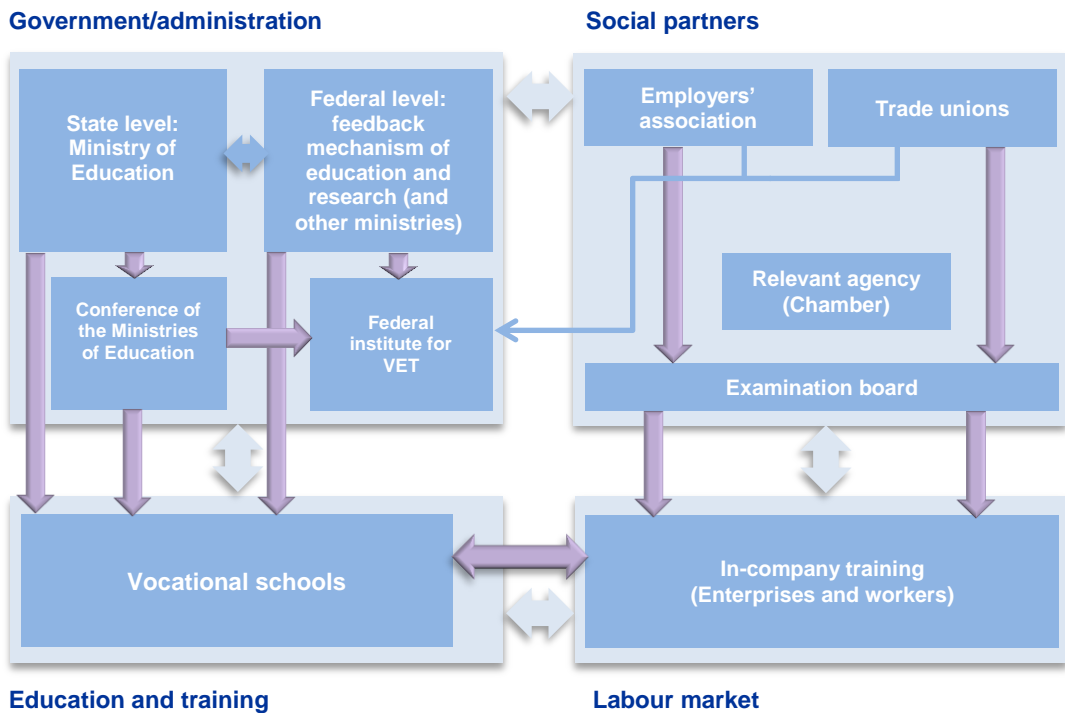
Under this system, social partner involvement is great and legally defined. Social partners are involved in implementing VET decisions and there is a relatively high level of employer engagement in both funding and shaping IVET within the work place. The system is also characterised by an intricate web of checks and balances at national, state, municipal and company levels that ensures that the short-term needs of employers do not distort broader educational and economic goals. The VET system as a whole is well-resourced, combining public and private funding.

New training regulations are only issued with the consent of the social partners (consensus decision-making). For company-based training, the vocational competences to be acquired are established in the training regulation (*Ausbildungsordnung*) which is accompanied by a framework curriculum (*Rahmencurriculum*), developed in line with regulation for every recognised training profession. The motivation and initiative for an amendment to training regulations or development of new ones (together with the framework curriculum) usually comes from the social partners. The organisation and supervision of the renewal or creation of training regulations is managed by the Federal Institute for VET (Bundesinstitut für Berufsbildung) (BIBB) on behalf of the federal government. The KMK is simultaneously responsible for organising and supervising the framework curricula, though these are not compulsory for the individual *Länder*. Each *Land* accepts the parts of the curricula relating to occupational subjects, but develops its own general education subjects. The feedback mechanism of the dual VET system consists of two independent parts that develop in parallel and includes a well-developed and institutionalised VET labour market research capacity. The number of programmes developed and updated by this feedback mechanism is currently quite low: in 2011 just one new training occupation was created and only 16 of the total 344 recognised training professions were renewed/adapted (see Cedefop expert workshop, 27 and 28 September 2012) ⁽²²⁾.

⁽²²⁾ For a more detailed description of the German feedback mechanism in the dual system see case study 2, Annex I).

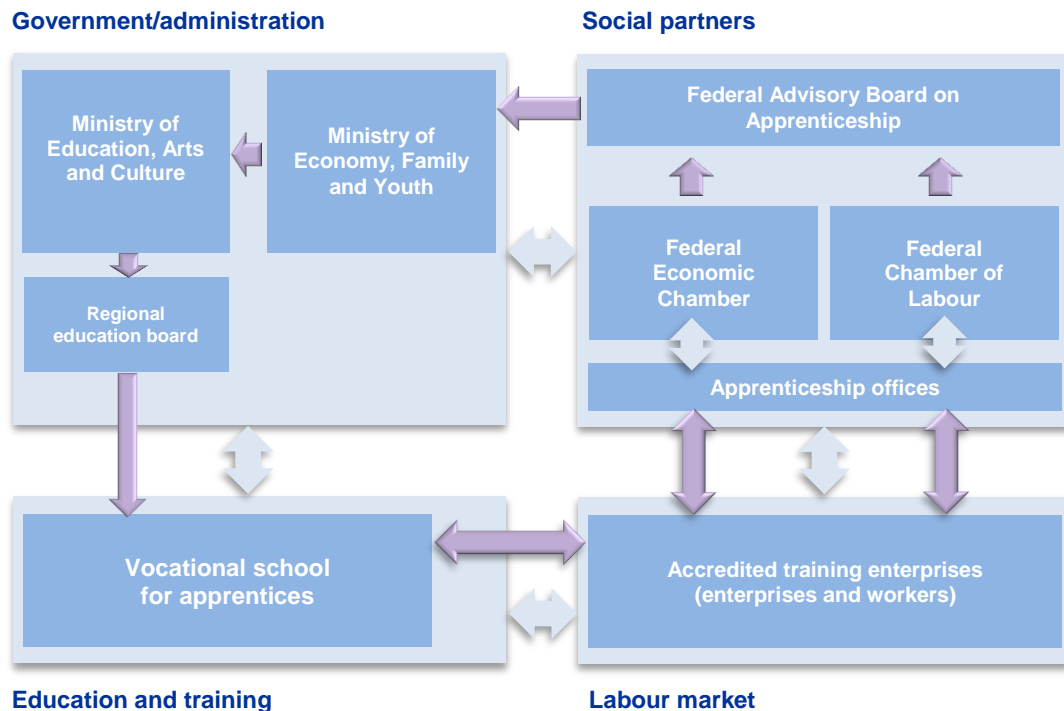
Figure 4 **Feedback mechanisms in the dual system in Germany and Austria** ⁽²³⁾

Feedback mechanism in the dual system in Germany



⁽²³⁾ The diagrams illustrate the main processes and interaction of actors and how they relate to the basic model of a coordinated feedback mechanism. However, they present a simplified illustration of the model which does not cover all details, e.g. the role of regional and local boards.

Feedback mechanism in the dual system in Austria



Source: Cedefop.

Austria

In principle, the Austrian feedback mechanism for renewing occupational profiles is very similar to the German one. The actual design of in-company curricula, and thus the orientation of qualification requirements, is primarily conducted by the tripartite Federal Advisory Board on Apprenticeship (Bundesberufsausbildungsbeirat) (BBAB). BBAB subcommittees or the educational research institutes of the social partners introduce proposals or draw on expert opinion concerning reform proposals, e.g. on the introduction of new or modernisation of existing apprenticeships. An initial draft proposal is usually developed by the Institute for Research on Qualifications and Training of the Austrian Economy (Institut für Bildungsforschung der Wirtschaft) on the employer side and the Austrian Institute for Research on Vocational Training (Österreichisches Institut für Berufsbildungsforschung). Internal discussions are conducted and, once consensus is reached, a draft proposal is submitted to the BABB. The role of the social partners is institutionally cemented in the Federal Advisory Board which consists of the economic and labour chambers. The Austrian dual system displays characteristics of the coordinated model.

There are differences that can be identified, however, between the Danish and Austrian coordinated models. Denmark's IVET feedback mechanism is based on sectoral trade committees, while in Germany and Austria social partners are mainly represented by the sectoral subunits of the chambers of commerce; the Chamber of Labour in Austria, and the trade unions in Germany. One significant difference between the German and Austrian systems also frequently highlighted is that the employer side is much more dominant in Germany.

Slovenia

The Slovenian IVET system can be most appropriately classified as a coordinated model, and bears a resemblance to the system found in Germany. VET in Slovenia is characterised by an extended, predominately school-based IVET system, higher track VET colleges that offer VET and general higher secondary education and access to HE, and lower track VET occupational schools which prepare individuals for direct entrance to the labour market (although pathways leading back into education do exist). VET colleges attract most VET students, leaving lower tracks under pressure to improve quality and prestige. An apprenticeship system with alternating school-based and work-based training was introduced into the lower track in 1995 (Ivančič et al., 2012). Students become employed on the basis of an apprenticeship contract. Social partnership is fundamentally important at all levels of IVET, from decision-making and financing to implementation. It is largely formalised and institutionalised and therefore representatives of employers and employees are part of all important decision-making bodies and expert and working groups in the IVET area. Slovenia shares similarities with Austria in that it possesses a strong VET college system and an apprenticeship system. Further, the shift to a more liberal economy (reduction of the welfare state and the introduction of market features, increased flexibility of employment) act as a barrier to effective cooperation between the main social actors in Slovenia.

Box 10 Coordinated feedback mechanism in Slovenia

The business sector plays the main role in developing and proposing occupational standards as well as providing the vocational training that takes place in enterprises. It also participates in decision-making on most issues concerning the IVET system. Feedback mechanisms reflecting social partnership in VET have been established at national level. The Expert Council of the Republic of Slovenia for VET is a tripartite body composed of representatives of the state, employers and employees. It is appointed by the national government from among the most prominent experts in the field of Slovenian VET. The state is represented by the Education Ministry; employers are represented by the Chamber of Commerce and Industry of the Republic of Slovenia, and the Chamber of Craft and Small Businesses of the Republic of Slovenia. Social partnership is of fundamental importance at all levels of IVET, from decision-making to financing to implementation. Social partnership is largely formalised and institutionalised and representatives of employers and employees take part in all important decision-making bodies and expert and working groups in the area of IVET.

Source: Cedefop.

The feedback mechanism identified in Slovenia encompasses the entire VET system (school-based and dual system). The actors involved are the Expert Council for VET (tripartite body composed of representatives of the state, employers and employees), the Centre for VET (defined as a systemic VET entity of social partners providing expert support to the VET system) and sectoral committees for occupational standards, which are mainly composed of social partners (e.g. chambers, trade unions) and a representative of the Ministry of Labour (their role is to coordinate and harmonise the work of social partners on drafting occupational standards). The Ministry of Education is the main coordinating body in the feedback mechanism. Social partners appear to enjoy less autonomy in Slovenia than in Germany and Austria, where the social partners form the most important body for the feedback mechanism in the dual system.

CHAPTER 5.

Conclusions

This study was designed as explorative research into a complex area in which scientific and empirical evidence is scarce. However, by providing initial insights, it paves the way for further analysis and discussion.

5.1. Key findings

The adaptation of VET to changes in the labour market has always been at the heart of VET policies. Previous attempts to achieve an effective VET labour market match, such as educational planning which was popular in the second half of the previous century, were more concerned with quantitative aspects and typically relied on the nation state as main agent of change. However, increasingly scattered occupational structures and increasingly rapid changes in labour markets require a stronger focus on the quality and content of VET programmes. The processes by which the VET provision is renewed, particularly in terms of curricula and qualifications, have gained attention. The goal of this study has been to carry out a systematic and rigorous analysis of the VET planning process within different labour market regimes.

The research introduced the concept of 'formally institutionalised feedback mechanism', which describes purposefully implemented institutional procedures allowing for the continuous renewal and adaptation of VET to emerging labour market needs. Feedback mechanisms typically have a legal basis, are established on a permanent foundation and define two or more actor positions (e.g. the state, employer and employee organisations) which are typically organised in decision-making or consultation bodies (the BBAB in Austria, SSCs in England, the KBBs in the Netherlands, the CGFP in Spain, the Expert Council of the Republic of Slovenia for VET).

5.1.1. Four main types of feedback mechanism

Four main types of mechanism have been identified in the countries and VET systems examined: 'liberal', 'statist', 'participatory' and 'coordinated' types. Their particular characteristics and the most important differences between them can be explained by the dominant systems of industrial relations, skill formation systems, and conditions of social dialogue in VET in respective countries.

The 'liberal' type is characterised by a low degree of coordination and more direct feedback between VET providers and the labour market through market signals. The 'statist' model is characterised by strong state regulation of education and weak (formal communication) links between education and the labour market. The 'participatory' type allows for a particular role for social partners. In the 'coordinated' type the social partners are the drivers of renewal processes and are also partly responsible for their implementation.

These types can be used to describe the cooperation of IVET and the labour market in specific parts of a country's IVET system. They cannot be used to categorise the country in its entirety: in Austria the dual system was identified as a coordinated type, while the equally important school-based VET system in the country is characterised as statist; in Sweden up to four feedback mechanisms following different types were identified. The models help, however, to understand how particular processes of renewal of VET are organised in respective countries, how this is dependent on the availability of certain types of VET, and how specific VET governance structures are embedded in broader social, economic and political environments. It is possible to predict the existence of a particular model of cooperation between VET and the labour market on the basis of the dominant type of VET and the dominant system of industrial relations in a respective country.

A basic type of 'statist' feedback mechanism can be found in all of the 15 European countries examined. However, they are more likely to be found in systems which clearly focus on state-regulated, school-based VET (Bulgaria, Estonia and Sweden).

The 'liberal' model of feedback mechanism is more likely to be found in countries in which organisational space dominates and which are classified either as liberal or market-led skills formation systems, such as Ireland and the UK-England.

The 'coordinated' model of feedback mechanism can be identified almost exclusively in countries where occupational space dominates (i.e. labour markets structured by occupations), which are classified as 'collective skill formation

systems', have a work-based focus and are state regulated, such as Denmark, Germany, the Netherlands, Austria and, to a lesser extent, Slovenia.

The 'participatory' model of feedback mechanism can be found both in countries where occupational or organisational space dominates, with state-led IVET systems, with a focus on schools. In some cases, however, the 'participatory' model may more closely resemble and share more characteristics with the 'coordinated' model (Slovenia), and in other cases, it may more closely resemble the 'statist' model (Spain, France and Finland). Thus, the 'participatory' model can be seen as an intermediate one, while the others are distinct.

5.1.2. Different types of feedback mechanism coexist in each country

Countries with strong and hierarchical VET systems are more likely to have more than one feedback mechanism in place, but this is not a universal rule (this is the case in Germany and Austria, but not in Slovenia).

It was possible to identify at least one major formal feedback mechanism in all 15 countries examined by focusing on the most important type of VET (in terms of student numbers), the main actors involved (e.g. government, social partners, education/training providers), their interplay, and the basis of legitimacy (e.g. representativeness, legal status, structures to ensure effective participation). All feedback mechanisms identified are legally regulated, though there are considerable differences in the respective practice. The legal prescription to include social partners can produce varied outcomes in practical terms. For example, the requirement to include employers can lead to the invitation of employers (mainly from large enterprises) that may represent the interests of only a single enterprise (incidences found in Spain but also in Ireland and Sweden), while in other cases employers may be represented through the major employer organisation (Germany, Austria), resulting in the dominance of organised interests in terms of feedback. In some countries more than one feedback mechanism was discovered (Germany, Estonia, Austria, Sweden), and it is obvious that more feedback mechanisms would be identified by broadening the scope of the research to other area of VET such as VET in HE or VET programmes as part of labour market policy.

5.1.3. Regional and national feedback mechanisms interact

There is a variety of aspects of formalised VET labour market feedback mechanisms at regional and subregional levels and the interrelations between those levels are important. The trend towards increasing regional inequality in VET following the economic crisis raises important issues for policy and research.

The makeup of regional VET labour market feedback mechanisms is likely to differ from those that operate nationally. For example 'less favoured' regions, where economies are already characterised by low skills levels, will inevitably influence actor behaviour, including employers.

The case studies of Germany and Spain show that formalised approaches to involving stakeholders (i.e. social partners) in the renewal of IVET at regional level follow one unique feedback model within the country – the 'participatory' model in Spain and the 'coordinated' model in Germany's dual system. Challenges to this may emerge as austerity and economic inequality impact on regional labour markets. It is possible to argue that, as geographically uneven development persists and deepens, 'regional solutions' become more prominent as part of the policy landscape.

5.1.4. Feedback mechanism type more decisive than sector characteristics

Differences between sectors are visible, but within the prevalent type of feedback mechanism they are only marginal. Differences between types of feedback mechanism are more decisive for the way VET is renewed than sector characteristics. Sector skills councils are not an exclusive feature of a particular type of feedback mechanism, but have been identified in diverse country settings.

The study examined occupations in different sectors (such as lorry drivers, bricklayers, or welders), but has identified no major differences with regard to the characteristics and functions of current feedback mechanisms. Nevertheless, differences were identified in the influence of EU policies on particular occupations which are more subject to EU standardisation (e.g. lorry drivers). However, the fact that only minor differences were identified between sectors within this study should not be regarded as definitive evidence: fundamental differences in more disparate sectors with genuinely developed VET systems are expected. Different models of feedback mechanism could be studied in selected public sectors where the state plays a double role, as both employer and education provider (e.g. military, parts of the health sector).

5.1.5. Feedback mechanisms vary according to object of change

There are fundamental differences between feedback mechanisms regarding their objects of change. Although information on this issue is limited, it became clear that it is very unlikely that a single feedback mechanism covers such diverse objects as VET provision, design, resources and media.

Not only do formal feedback mechanisms vary between countries, within countries and between parts of the VET system, they also vary according to their particular object of change, i.e. VET content in terms of qualifications, standards, curricula, or teaching materials. Even in state-regulated VET systems with feedback mechanisms characterised as ‘statist’, there are different processes in place to renew curricula content or, for example, textbooks. In many ‘statist’ and ‘participatory’ feedback mechanisms social partners are able to contribute to design (of standards, curricula), but when it comes to provision and resources, the state is the exclusive decision-making body (this is well illustrated in France, Hungary and Finland). This aspect illustrates an example of the risk of conducting very broad analyses of feedback mechanisms: it can lead to over-complexity. That is why this study had a clear focus on change of VET design.

Another challenge relating to complexity was the differentiation of the various levels (supranational, national, sectoral and local), which is crucial to developing a full understanding of the function of the mechanism. When focusing on VET design, the national level stands out in all countries investigated. The regional level may process adaptations in implementation (in most countries), but has little impact on the general design of VET content in any more than a consultative capacity (well illustrated in Germany and Spain).

5.1.6. Social partners increasingly included in VET renewal

The role of social partners in renewing VET is increasing in most countries, with an increasing number of ‘participatory’ types of feedback mechanism also observed.

While the main aim of the study has not been to identify ‘preferred models’ of VET, a recurrent topic has been the role of social partners among those involved in feedback mechanisms. The strategies and interventions of organised interests (trade unions, employer organisations) will determine their relative strength or weakness and inevitably influence the nature of links between VET and the labour market. A key factor that influences the role of the social partners is state regulation.

The operational role of the social partners has been a significant factor in the development of a typology of feedback mechanisms. There is a significant

difference between a 'coordinated' mechanism, in which the social partners sustain the systems, and 'participatory' systems, where their support depends on the resources provided by the state. The inability of employer organisations to fulfil this role – due to a lack of capacity in terms of structure and personnel – was reported at all levels in Hungary, Slovenia and Sweden. However, in some countries the increasing influence of social partners, in particular of employers, was evident (e.g. in Hungary) and supported by the political agenda. There are also considerable differences in the levels of participation of other stakeholder groups such as teachers or students.

In general, the empirical findings suggest that the present economic crisis has led to a reinforcement of social dialogue in VET in many countries (Spain, France and Sweden). However, there are also indications that the economic crisis and austerity has undermined and challenged relationships, for example in, Ireland, the Netherlands and the UK-England. In some countries the crisis has coincided with the introduction of new systems of apprenticeship (England and Sweden) which have been accompanied by new feedback mechanisms that include greater social partner participation. These activities do not yet appear have resulted in a new form of VET governance in the respective countries (although it may be too early to make this judgment).

Changes in VET governance structures can also be observed in central and eastern Europe countries that, in their transition processes, have adopted different models (e.g. Estonia heading towards the 'liberal' model and Slovenia towards the 'coordinated' model). The different tracks these countries have taken can be explained by path dependency (history matters), as their individual education systems and institutional frameworks differed even during the socialist period. Feedback mechanisms in these countries, as well as liberal feedback mechanisms (Ireland and the UK), seem to be more susceptible to EU influence, either because they already follow similar approaches or because the transition processes leave more room for change (unstable VET structures are more exposed to external influence).

5.1.7. A need to capture the incremental change of VET systems

Although the regularity and speed with which the various systems adapt to change is a clear concept, in practice this proved to be difficult to grasp. In many countries major VET system reforms have either recently taken place or are continuing and this makes it difficult to determine a benchmark against which renewal of IVET can be measured.

Many countries (Bulgaria, Estonia, Ireland, Hungary, Sweden and the UK-England) have recently reformed their VET system in part or entirely; it may be

too early to assess the outcomes of new feedback mechanisms. Even in countries with traditional and stable VET systems, figures on the renewal of VET are unavailable as this method of measuring change of VET systems is not yet an established common practice.

Changes are more frequent and more short-term in feedback mechanisms of the 'liberal' type, less so in the 'coordinated' type, and take the most time in the 'statist' type. For example, in the German dual system, which is the prototype for the 'coordinated' type, the renewal of a VET qualification takes on average between one-and-a-half and two years and less than 5% of all occupational profiles are adapted each year. These figures allow for the development of rough estimates on the pace of change but cannot express, and should not be used as, an indicator of the need for change.

There is a need for further development methodologies that can capture the incremental change of VET systems in a systematic, continuous way.

5.1.8. It is early to assess quality of feedback mechanisms

Although there is a wide range of quality concepts, e.g. efficiency, effectiveness or adaptability, it is unclear how to apply them to feedback mechanisms as defined in this study and if they are adequate. Therefore, feedback mechanisms cannot be reliably assessed at this stage.

It is not possible to make a reliable assessment of feedback mechanisms even in comparable countries or within one type of feedback mechanism (e.g. comparing VET in Denmark and the Netherlands, or feedback mechanisms in the dual systems in Germany and Austria). Such mechanisms are strongly embedded in economic, social and institutional settings that create boundaries which prevent simple fast change and hamper transferability. This is also the reason why there is no simple procedure for evaluating the potential and achieved outcomes of the various types of feedback mechanism. This makes it particularly difficult to provide clear policy recommendations in a normative manner at this stage. Nevertheless, some policy considerations are presented below.

5.2. Issues for policy consideration

This study has shed more light on the VET governance and actor constellation so far neglected by the most recent VET research and policy discourse. Individual governance structures cannot be separated from historical developments and wider socio-economic contexts, which make it difficult to provide any general

recommendations on how to intervene and improve individual feedback mechanisms. It is not only the number of influencing factors that presents difficulty, but also a paradox: ensuring the legitimacy of renewal processes tends to impact on the responsiveness of systems. On the one hand, there are signs that strengthening participatory elements in existing feedback mechanisms and the effort to increase and balance stakeholder involvement (in particular through the integration of so far underrepresented groups such as teachers, students, trade unions) is clearly beneficial. On the other hand, the addition of more stakeholders and consultations may slow down renewal processes and reduce their overall responsiveness. This context explains why, for example, German stakeholders complain about the length of time it takes to update the content of occupational profiles and training regulations, while simultaneously acknowledging the good functionality of the existing renewal processes (compare case study 2, Annex I).

The research points to the need for policy-makers constantly to revise the relationship between VET and the labour market taking into account three main issues:

- (a) inclusiveness and collaboration: it is important that policy-makers verify whether existing feedback mechanisms include all relevant stakeholders able to aid the communication between VET and the labour market. The following questions may guide this task: are particular groups missing or under-represented? Do stakeholders have sufficient infrastructure to support consultation processes? Are particular interests given more consideration than common interests? Is the renewal process supported by evidence and research?
- (b) openness and responsiveness: to design feedback mechanisms that allow VET systems to respond to the labour market needs it would be necessary to investigate whether the flow of information between the labour market and VET could be improved. Policy-makers could take as a basis the following guiding questions: what is the average time to issue an occupational standard? Is the renewal of IVET hampered by time-consuming consultations that could be undertaken by other VET institutions (e.g. those in charge of labour market information)? Is the renewal process itself subject to reflection and discussion and continuously improved (e.g. through external evaluations or open conferences discussing results)?
- (c) transparency and communication: for an inclusive and responsive feedback mechanism, it is crucial that the roles of IVET institutions are clear in relation to information, consultation and decision-making. Questions which could guide this process include: does the communication run according to formal procedures or premises (e.g. composition of boards, nomination of board

members)? Is there a clear and accessible plan of the processes which allows stakeholders to prepare their interventions (e.g. roadmaps for the implementations, deadlines for consultation)? Is documentation on consensus-building and decision-making publicly available? Are these processes supported by evidence and research and are results publicly available?

The proposed four models can provide a first framework to place and map those involved. They also provide a tool for basic characterisation of the interaction between the actors and to determine their roles and responsibilities: this will necessarily depend on previous history and tradition of industrial relations and skills formation. This should provide a better understanding of the functioning of VET and its renewal, to provide more targeted interventions to allow for a more adequate renewal of VET.

While constant revision of individual feedback mechanisms may be desirable, it is important to note the difficulties in changing established systems. Feedback mechanisms are complex and embedded in a particular context and tradition. This research provides ways to understand how feedback mechanisms act upon the renewal of VET; without understanding the institutional context, it will be impossible to establish new ways of VET provision.

This may be particularly relevant for current discussion on the dual system within the context of the European alliance for apprenticeship. The dual system is presently perceived to be the 'golden standard of VET to fight youth unemployment' ⁽²⁴⁾. The study has shown that the dual system follows a coordinated model of feedback mechanism deeply rooted in the German tradition. Policy-makers are aware that 'copy and paste' solutions are not viable (Rachel, 2013). The characterisation of IVET subsystems in this study can provide an initial understanding of the challenges ahead to transfer successfully the dual system to other European countries.

The conclusion cannot be drawn that the coordinated type of feedback mechanism as described in this study (in Denmark, Germany, the Netherlands and Austria) is inherently more successful in preventing youth unemployment

⁽²⁴⁾ The heads of employer and employee organisations from Germany, Austria and the Netherlands have frequently been invited by other Member States to present their apprenticeship system as answer to youth unemployment in the last year. Various bilateral memoranda and agreements have been signed in this respect. See for example: <http://www.bmas.de/EN/Our-Topics/Social-Europe-and-international-Affairs/Europe/germany-and-italy-agree-close-cooperation.html> [accessed 13.8.2013].

than other types; nor can one argue that the provision of a dual VET track alone is an appropriate method of doing so. On the contrary, aside from the wider economic contexts discussed in this study, there are indications that it is the provision of extensive support systems and 'safety nets' for young people unable to find apprenticeships that accounts for low youth unemployment figures in these countries. There is a danger that corners will be cut and there is a tendency for VET researchers and policy-makers to pay more attention to the type of VET provision (how are learning sites interlinked and how is instruction organised?) than to the institutional settings (how is the system governed and VET standards renewed? How is the labour market structured?).

This study aimed to examine institutional settings that can better guide the implementation of different forms of VET provision. A more targeted method of policy learning would not select isolated solutions, but also attempt to consider contextual factors; it would not just compare the form of VET provision, but also the processes governing this provision. The typology of countries and the typology of feedback mechanisms developed in this study provide a good starting point for this and could be taken into account when organising any follow up (European) peer learning activities on this topic.

5.3. Research challenges and lessons learned

Throughout the research the team came across a number of practical and methodological challenges. The four which follow appear to be the most challenging in terms of conducting the research and answering its questions. They are presented here as important lessons learned that should be taken into account by those wanting to revise feedback mechanisms.

5.3.1. The challenge of identifying formally institutionalised feedback mechanisms as study objects

Despite the efforts to define and develop a common understanding of formal feedback mechanisms to renew VET, identification was challenging. This study attempts to explain a phenomenon that encapsulates a highly complex process involving a number of stakeholders and various institutions that are typically responsible only for certain steps in an overall feedback mechanism. Consequently, the study of feedback mechanisms will require experts with a comprehensive knowledge of the entire process and with a holistic perspective. A thorough analysis of just one type of feedback mechanism in one country, for example the dual system in Germany or Austria (see Figure 4) would require

many interviews to include all the organisations involved. This could only be done partially in this explorative study and further research is desirable.

Previous research on this phenomenon is generally scarce and comprehensive descriptions of feedback mechanisms do not exist. While the study could draw on national legislation and definitions of the roles of actors, descriptions of communications between the various actors, which is at the heart of this research, are limited. The analyses of feedback mechanisms require extensive consultation with different stakeholders to obtain an unbiased picture of their function.

There is also the risk that existence of a central actor (the main institution or body involved) is mistaken for a feedback mechanism, when a feedback mechanism is in fact a process. Institutions or bodies are usually named, while the feedback mechanisms in question are still to be labelled. While SSCs in England might be seen as a particular feedback mechanism, since they have a label, they are just one – undoubtedly important – body among a number involved in the respective feedback mechanism assuring the renewal of VET provision in the UK.

When studying such mechanisms, it is challenging to maintain a focus on the main process, as any side processes can also be interpreted as a feedback mechanism. Side processes include the consultation an employer organisation carries out among its members to develop a common opinion on a new VET programme, or the commission of a research study which asks employers about their future skill needs to evaluate a new occupational standard; these are ways of organising feedback that could be interpreted as mechanisms. Consequently, the object under scrutiny appears as a number of small feedback mechanisms contributing to one major feedback mechanism.

Analysis requires a very clear focus within a specific VET subsystem and national level. Without this, there is a risk of becoming lost in a multitude of potential small feedback mechanisms in each country.

5.3.2. Determining the influence of specific actors

The role of the social partners and their influence in renewing VET was identified as decisive both for the characterisation of feedback mechanisms and the broader institutional settings of VET. It is crucial that any assessment of this influence is adequate and robust. Although recognising the importance of this aspect, there is a need for the development of common instruments in determining the comparative influence of social partners. This is difficult to achieve.

A series of studies, which build upon one another, somehow arrive at different conclusions in their assessment of the extent of social partner influence

in VET. For example, on the institutionalised involvement of social partners in defining qualifications standards, Cedefop (2009a, p. 45) claims that Austrian social partners have only an advisory role, but sees a decision-making role for employer and employee organisations in Bulgaria, Estonia or Spain. This contradicts the findings of Winterton (2007) and this study. Cedefop (2013b) views Sweden as close to the Netherlands in that they are both 'based almost entirely on corporatist structures, [...] with a high degree of social dialogue between the state on the one hand and the social partners on the other'. Again this is inconsistent with the findings of Winterton and the present study. Further, the two Cedefop studies mentioned (2009a; 2013b) are also inconsistent in their opinion on social partnership in Slovenia. This denotes the need for a more unified view of social partner influence and a robust measurement of it.

It is possible that these inconsistencies are due to a difference in scope or a different definition of social partner influence. Previous studies do not distinguish between VET subsystems and their focus addresses IVET only, the entire VET system, or the lifelong learning system as a whole. This makes difficult to build on the existing literature and to contribute to a growing, consistent and robust body of knowledge of VET systems in Europe.

5.3.3. Finding adequate indicators for feedback mechanisms

The potential assessment of feedback mechanisms became the most challenging issue in this project. How and to what extent is it possible to evaluate the potential and achieved outcomes of various types of feedback mechanism to improve the coordination of vocational education and the labour market?

There is neither a single nor a composite indicator available to measure the relative influence of a feedback mechanism. Creating a normative framework on what a feedback mechanism should produce is complicated and would require a consultation process with all stakeholders in the renewal of VET. Also, any outcome can be influenced by diverse contextual variables due to the complexity of the interaction between VET and labour market.

However, rather than examine structural or outcome quality indicators, it seems legitimate to focus on process quality and to use general quality criteria when assessing feedback mechanisms. This is because those mechanisms analysed in this study can be interpreted as both quality cycles (Deming, 1982) and policy cycles (Lasswell, 1956), while a third way of looking at them is as continuous innovation processes.

These approaches provide not only an analytical tool to describe better the stages of a feedback mechanism, but also, if used in a normative fashion, offer a starting point for the assessment of such mechanisms. As indicated above, and partly build on previous research (Henkel and Markowitsch, 2005, pp. 66), the

study suggests the use of the following quality criteria for analysing feedback mechanisms. Within each of these criteria, indicators would need to be developed together with the social partners:

- (a) transparency and communication: well structured, effective and transparent communication processes;
- (b) inclusiveness and collaboration: broad participation and mutual engagement of stakeholders, research-based decision-making;
- (c) openness and responsiveness: open for change and continuous improvement, adaptability and flexibility.

As long as robust indicators to measure renewal of VET are not in place, it will not be possible to determine and compare efficiency and outcome quality across different types of feedback mechanism or the same type of feedback mechanism in different countries.

5.4. Issues for further research

From the key findings of this research and the lessons learned during the process, ideas for further activities in this field can be offered to both policy-makers and researchers.

Although any of the topics already investigated in this study deserve further and more detailed research, there are three fields in particular which stand out and promise more interesting insights. All three fields, however, demand a different research design to achieve a higher level of detail.

First, the role of intermediary actors or actors on the meso-level, such as regional or local social partners, or regional school administrations, deserves more attention. Although their relevance to the development of standards and curricula is restricted, their role in implementing and inspecting changes, as well as in assessing skills, is unquestionable. A study on feedback mechanisms which shifts the focus from design to implementation of VET would have to concentrate on this level.

Second, the potential variations of feedback mechanism in different sectors could be explored taking a research approach that deliberately avoids traditional and principal VET areas, but which focuses on exceptional sectors or occupational fields such as military services, arts and music, sports, air traffic and so on. Their specific institutional logics and genuine traditions of organising VET would suggest a rich variety of different feedback mechanisms which could also contribute to the main areas of VET.

Third, and in a similar vein, it would be beneficial to explore the feedback mechanisms of 'non-regular' IVET, or IVET in terms of training measures as part

of labour market policy. This could be illuminating not only because completely different mechanisms might be expected, but also because this sector has developed tremendously in Europe in the last decade.

Recent changes and continuing reforms in VET should not divert attention from studying incremental change over long periods of time (10 years minimum). It is a common misconception in VET research and policy that one can learn more from the most recent past and short periods of time than from the distant past and longer periods of time. It is important to develop a better understanding of the relationship of (radical) reform to (constant) change. Which systems are more adaptive in this respect? What are the turning points? At which point is incremental change insufficient?

To gain more insight into these issues it would be necessary to complement existing statistics with an indicator to measure the renewal of VET. This is undoubtedly a challenging and complex task, but without this information an assessment of the efficiency of various feedback mechanisms is a distant prospect. The EQF and the establishment of national registers of qualifications will certainly help in this task.

The potential for further research on formal feedback mechanisms should not result in the neglect of study on informal feedback mechanisms. Although there is an extensive body of knowledge on individual instruments (e.g. research on work-based learning, internships, and local school-enterprise partnerships) supporting informal feedback mechanisms, there is a lack of systematic research bringing them together in the context of VET and labour market cooperation. It would be beneficial to commission a collection of good practices for 'informal' cooperation between VET and the labour market to complement and provide balance to the findings of this study. Another rich area of research – despite the difficulties that conducting research into this topic presents – is the 'informal' aspects in formal feedback mechanisms. A few examples found in this study indicate the importance of this dimension. One would expect it to become even more relevant when focusing on the implementation of change, and differences between 'written' and 'taught' curricula (see also Cedefop, 2012b). The relationship between the informal aspects in formal feedback mechanisms and other objects of renewal neglected in this study, such as textbooks (often regarded as the 'hidden curriculum') ⁽²⁵⁾, could become more relevant. The distribution and allocation of power resources among actors depends on informal

⁽²⁵⁾ See, e.g. Dreeben, 1968; Kuhn and Rathmayr, 1977, p. 9; Euler and Hahn, 2004, p. 477.

interchanges and informal feedback mechanisms. Without understanding the formal and informal communication structures of organisations, the power of an actor cannot be evaluated. In future, much more attention could be paid to identifying and describing both informal feedback mechanisms and informal processes within formal feedback mechanisms.

The importance of the social partners should not diminish the relevance of other stakeholders. Only occasionally did this research come across other interest groups such as teachers or learners, and the findings are not sufficient to assess their impact. Aside from the question of whether additional stakeholders could increase the efficiency of a feedback mechanism, another potentially fruitful topic of inquiry is the legitimacy of a feedback mechanism and the democratic values that it embeds. Further work should seriously consider the potential and actual imbalances of representation within feedback mechanisms and its effects on processes. Relevant groups include students, graduates, parents and teachers, employees in some countries and micro and small firms or foreign owned enterprises in post-socialist countries, which are rarely represented in employer associations.

Finally, this study suggests the promotion of specific VET research as an important additional leverage to improve cooperation between VET and the labour market and to ensure the allocation of adequate resources. This should not result in more general and aggregated skill forecasting research (which is necessary for other purposes), but in very specific research designed to assist in the renewal of occupational and educational standards and curricula.

List of abbreviations

AMS	Arbeitsmarktservice Österreich [Public Employment Service Austria]
BBAB	Bundesberufsausbildungsbeirat [Federal Advisory Board on Apprenticeship]
BBiG	Berufsbildungsgesetz [Vocational Training Act]
BIBB	Bundesinstitut für Berufsbildung [Federal Institute for VET]
CAP	central analysis and prognoses
CAS	centre d'analyse stratégique [strategic analysis centre]
CGFP	Consejo General de Formación Profesional [General Council on VET]
CME	coordinated market economy
CNCP	Commission Nationale de la Certification Professionnelle [National Commission for Vocational Certification]
COLO	Association of Knowledge Centres for VET and Trade and Industry
CPC	commission professionnelle consultative [professional consultative committee]
CVET	continuous vocational education and training
ECVET	European credit transfer system for vocational education and training
EQA	Kutsekoda [Estonian Qualification Authority]
EQF	European qualifications framework
ETUC	European Trade Union Confederation
EU	European Union
FETAC	Further Education and Training Award Council
HVAC	heating, ventilating and air conditioning

HE	higher education
IGBAU	Industriegewerkschaft: Bauen, Agrar, Umwelt [Industrial Union: construction, agriculture and environment]
ILO	International Labour Organisation
Incuail	Instituto Nacional de las Cualificaciones [National Institute of Qualifications]
ISCED	international standard classification of education
IVET	initial vocational education and training
KBB	kenniscentra beroepsonderwijs bedrijfsleven [knowledge centre for VET trade and industry]
KMK	Kultusministerkonferenz [standing conference of the Ministers for Education and Cultural Affairs]
LME	liberal market economy
MKIK	Magyar Kereskedelmi és Iparkamara [Hungarian Chamber of Commerce and Industry]
MoER	Haridus- ja Teadusministeeriumi Kutse- ja Täiskasvanuhariduse osakond [Estonian Ministry of Education and Research]
NQF	national qualifications framework
OECD	Organisation for Economic Cooperation and Development
Ofqual	Office of Qualifications and Examinations Regulation
OKJ	Országos Képzési Jegyzék [national qualifications register]
OMC	open method of coordination
PQF	Polish qualifications framework
ROC	regionaal opleidingscentrum [regional training centre]
SASE	specification of apprenticeship standards for England
S-BB	Samenwerking Beroepsonderwijs Bedrijfsleven [Foundation for the Cooperation on Vocational Education, Training and the Labour Market]
SDG	standards development group

SMEs	small and medium-sized enterprises
SSA	sector skills alliance
SSC	sector skills councils
UK	United Kingdom
UKCES	UK Commission for Employment and Skills
US	United States
VET	vocational education and training
ZDB	Zentralverband Deutsches Baugewerbe [German Construction Confederation]
ZRP	Związek Rzemiosła Polskiego [Polish Craft Association]

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ANNEX I.

Case studies

This annex presents five case studies conducted after the country overviews were completed, in order to investigate specific issues that would allow better understanding of feedback mechanisms. They also helped build the four models of feedback mechanism presented in Chapter 4.

The first case study attempts to identify sector specificities within national feedback mechanisms by examining, Estonia, France the Netherlands and the UK-England. These countries have been selected because they all have established SSCs.

The following case study investigates regional aspects of feedback mechanisms on the bricklayer occupation to provide a more nuanced understanding of the relationship between regional development and IVET. Germany and Spain were selected as case studies due to their diverse IVET systems and the relative importance of regional governance in economic development and vocational training in these countries.

Case study 3 examines whether changes in the VET system have the potential to influence or transform prevailing types of feedback mechanism. It investigates whether the (re-)introduction of a Swedish apprenticeship scheme has modified how social partners influence the state-centred model of feedback mechanism. This is contrasted with recent changes in the governance of apprenticeship in England.

Case study 4 investigates change over time by exploring how changes in broader economic and social settings may influence national feedback mechanisms to renew IVET. Estonia, Poland and Slovenia are compared to provide examples of three types of transitional context emerging in central-eastern Europe: Estonia the Baltic nation, representing a neoliberal type; Poland the Visegrád state, representing an embedded neoliberal type; and Slovenia representing a neocorporatist type.

Case study 5 explores the role of research, in terms of skills forecasting, in national feedback mechanisms. While it is evident that there are different roles for research in different models of feedback mechanism, it is less clear what the differences are in the way research is organised within the same model. The Danish and Austrian apprenticeship systems were identified as appropriate research subjects as both utilise a 'coordinated model'.

Case study 1.

The role of SSCs in feedback mechanisms

Since skill shortages have become a serious problem in many economic sectors, the European Commission strives to improve the match between skills demand and supply by promoting sector skills alliances (SSAs) at European level ⁽²⁶⁾. SSAs are understood as transversal partnerships which promote cooperation between VET partners: VET providers, social partners and state authorities. It is anticipated that SSAs will design and deliver joint curricula and methods which provide learners with the skills required by the labour market and consequently, through this ‘upskilling’, improve economic competitiveness.

The OECD, ILO and European Commission recognise that, nationally, SSCs play a key role in the identification, analysis and forecasting of skills needs, and are crucial to national VET strategy. SSCs should improve the function of the labour market and the competitiveness of the economy. They focus on one specific sector of the national economy, work in a structured and continuous way, provide a platform for cooperation between stakeholders in the sector, gain insights on planning and forecast the sector skill needs and make a contribution to policy-making in this regard (European Commission and Ecorys, 2010, p. 12).

This section explores how national SSCs have shaped or corresponded to VET developments, depending on the dominant model of feedback mechanism in a particular country. Key questions and issues to be addressed are:

- (a) how do sectoral approaches towards the renewal of VET differ between types of feedback mechanism?
- (b) do certain types of feedback mechanism exclude or hamper the emergence of SSCs?
- (c) is it possible to identify similarities, or even convergence, of sectoral approaches across types of feedback mechanisms?

⁽²⁶⁾ A recent call for proposals by the European Commission provides and directs support for testing SSAs to draw lessons for future implementation. Call for proposals EAC/S01/2012 – pilot project for the development of SSAs.

To explore these issues, countries that possess strong sectoral approaches in VET ⁽²⁷⁾ but that possess different types of feedback mechanism have been chosen for further investigation:

- (a) the UK-England, representing countries with liberal feedback mechanisms;
- (b) Estonia, which appears to be moving from a statist model towards a liberal model;
- (c) France, representing state-led participatory feedback mechanisms;
- (d) the Netherlands, representing coordinated feedback mechanisms with strong social dialogue (see Table 6).

⁽²⁷⁾ Cedefop (2013b) identified the following functions of sectoral organisations:

- (a) social partners, professional organisations or sectoral federations play a technical role in determining the content of occupational standards and qualifications within the NQFs (as in the case of the UK-England and the Netherlands);
- (b) professional organisations play a role in advising government, lobbying for the protection of their occupational group (Greece, Spain, but also Lithuania);
- (c) sectoral organisations implement international qualification standards, thus organising their own process of training, examination, qualification and certification (such as in the welding sector);
- (d) sectoral organisations organise structures of voluntary quality assurance and self-management to provide more structure within the sector (the Netherlands).

Table 6 **Characterisation of SSCs as feedback mechanisms**

Characterisation of the renewal of IVET	UK-England	Estonia	France	Netherlands
National feedback model	Liberal	Statist	Participatory	Coordinated
SSCs	20 SSCs	16 SSCs (Kutsenõukogu)	14 CPC	17 knowledge centres
Established in	2002	2008	<ul style="list-style-type: none"> • 1972 • Since 2006 also National Joint Committee on Employment-Vocational Training. • National Commission for Vocational Certification. 	In its present form in 2012, but building on a long tradition
Transversal council	Sector skills alliance	The board of chairmen of SSCs	Regional Coordination Committee of Employment and Vocational Training	<ul style="list-style-type: none"> • Foundation for the Cooperation on Vocational Education, Training and the Labour Market. • Also role for regional training centres.
Composition of actors	Employer representatives and experts	<ul style="list-style-type: none"> • Employer organisations. • Trade unions. • Professional associations. • Education and training institutions. • Responsible ministries. 	<ul style="list-style-type: none"> • Employer associations, trade unions and expert consultative bodies. • State representation on Regional Coordination Committee of Employment and Vocational Training. 	Equal representation of social partners from VET and from labour market
Involvement of teachers and trainers	Weak	Link via schools and VET experts representing the Ministry of Education in SSCs	Through informal bodies and respective trade unions	Strong link with sector councils via VET schools

Characterisation of the renewal of IVET	UK-England	Estonia	France	Netherlands
Nature of cooperation	Employer-led board with nominal trade union representation	<ul style="list-style-type: none"> • State-led process with strong mainstreaming of employer-involvement. • Unions act in the form of professional representatives. 	Strong social partner involvement mainly for building consensus under state supervision	<ul style="list-style-type: none"> • Social partner setting rules semi-autonomous. • Strong link with regional training centre in planning vocational development.
Relationship with EU	Ad hoc weak involvement with EQF	<ul style="list-style-type: none"> • Through the Estonian Qualification Authority, national contact points for EQF. • Sectoral EU-level cooperation. • Sector bodies involved with EQF alignment. • Relevance of European Social Fund for joint funding regional initiatives. 	<ul style="list-style-type: none"> • Sector bodies involved with EQF alignment. • Importance of European Social Fund for joint funding regional initiatives. 	Knowledge centres involved with EQF monitoring.
Research and intelligence	SSC combined with UK Commission for Employment and Skills	<ul style="list-style-type: none"> • Mostly ad hoc. • Importance of European Social Fund in research initiatives. 	<ul style="list-style-type: none"> • Through the Centre for Studies and Research on Qualifications representation on boards. • Through prospective study contracts and 90 joint commissions for collective training (<i>organisme paritaire collecteur agréé</i>) – of which 42 sectoral. 	Foundation for the Cooperation on Vocational Education, Training and the Labour Market and regional training centre collaboration.

Characterisation of the renewal of IVET	UK-England	Estonia	France	Netherlands
SSC connection to CVET	SSC – mainly CVET, with no alternative body For IVET – labour market feedback mechanism	Cooperation of IVET and CVET	Cooperation of IVET and CVET	Knowledge centres – IVET, alternative bodies For CVET
SSC direct role in NQFs?	Yes	Yes	Yes	Yes

Source: Cedefop.

The emergence of SSCs

SSCs were identified in most EU Member States, (European Commission and Ecorys, 2010, p. 22), but as the case studies of, Estonia, France the Netherlands and the UK-England demonstrate, there are differences with regard to the contexts in which they developed.

SSCs in the Netherlands are centred around strong social partnerships that build on extensive long-term cooperation between social partners in the design and funding of various CVET schemes. Only recently (2012) did the S-BB, replace the now defunct COLO as the transversal organisation that coordinates and supervises the work of the KBBs.

There is also a decades-long tradition of cooperation in IVET and CVET in French SSCs, springing from extensive social bargaining. However, the specific body responsible for the French NQF was only established in 2006.

English SSCs, although frequently made reference to as notable examples of this kind of institution, are actually quite new. They originate from employer interests and respond mainly to CVET issues, since IVET generally only plays a minor role in England. In these three countries (France, the Netherlands and the UK-England) SSCs act as the principal feedback mechanism bridging the gap between labour market skills needs and VET provision.

The foundations of the Estonian SSCs (Kutsenõukogu) were framed by legislation passed in 1993 and were finally established through the joint effort of social partners (trade unions, employer representatives and state). They operate under the auspices of the Ministry of Education and observe the legal regulations of the Estonian NQF which was established in 2008. The role of SSCs in Estonia is similar to that of SSCs in France in terms of defining qualification standards, with a separate body responsible for defining curricula. However, the Estonian

system is still emerging and the proactive participation of employer or employee organisations is currently not universal and differs considerably between sectors.

The role of SSCs in IVET and sector social dialogue

In all countries examined, SSCs had the effect of stimulating research and labour market intelligence to support links between VET and the needs of the economy. In England, information and intelligence is used in shaping qualification standards. However, this has only an indirect influence on VET provision. Compared to the other European countries, English SSCs do not have a great deal of control over substantial funding for training and therefore are less able to identify and close skills gaps directly. In France, the CPCs have greater ability to shape VET as they can channel funding collected through a levy on employers. However, in both countries the focus is on CVET. In the Netherlands, the KBBs have a remit to shape VET standards both on the job and in schools, something that English SSCs lack. In all three cases employers take the lead, but in the Netherlands there is far more cooperation with trade unions.

In England, the presence of trade union representation in SSCs is very uneven as the councils are designed primarily as employer-led bodies (although there are also huge differences between SCCs in terms of employer engagement). As a consequence of the marginalisation of social partnership, trade unions have engaged with the skills agenda through their own government funded training schemes, such as UnionLearn. In Estonia, trade unions participate in the SSCs. In practice, however, the extent of their influence is unclear. Interviews suggested that while there is participation, trade unions lack the resources to be more efficient and effective in this endeavour. The case studies reveal that in comparison to the UK-England, there is a better integration between national and regional levels of SSCs in France and the Netherlands.

In general, SSCs in France (state-led participatory VET labour market feedback model) and the Netherlands (coordinated model) seem to provide more decisive input in the shaping of the VET system than SSCs in the UK-England (liberal model). Further, the English system is more employer-led and therefore responds better to the short-term needs of some employers represented in the councils rather than to the medium-term strategic needs of the economy ⁽²⁸⁾. This

⁽²⁸⁾ The OECD has emphasised the need for publicly funded provisions 'to serve the interests of the whole society by balancing student preference and employers demand' (OECD, 2010, p. 15).

again contrasts with the more balanced representation of the social partners and government and sector experts in France and the Netherlands. In Estonia, where the participation of social partners, and especially of employers, has been an explicit aim of the state, the SSCs have an extensive role in defining and awarding qualifications in line with the EQF.

In general, the level of participation of social partners is highly dependent on (and crucially connected to) the role and nature of social dialogue in a country. Various previous studies (European Commission and Ecorys, 2010) indicate the difficulties in representing the interests of smaller enterprises, regardless of the system, and these trends are confirmed by country interviewees. For example, Estonian officials underlined the difficulties of attracting employer representatives. This is true to an even greater extent for trade unions, whose role seems to be overlooked, particularly in contexts in which the social dialogue is less pronounced at the national or sectoral level, such as in England and in Estonia.

Both England, with its clearly liberal model of voluntary and employer-initiated SSCs, and Estonia, with its state-initiated SSCs, experience difficulties in gaining employer attention and commitment to the SSCs, especially at a time of economic crisis. According to interviewees, the future of English SSCs is in doubt following the recommendations of the Wolf report and the shift towards a rationalisation of the councils. In both countries the company, and even the individual employment contract, is the unit of bargaining, rather than the sector.

Convergence of SSCs across national feedback mechanism models?

Previous research demonstrates that occupations in some sectors (for example health, lorry drivers, welders) are more influenced by general regulations (e.g. requirements for licences to practise) than by standards determined by the VET system (Cedefop, 2013b). Occupations in health and the work of lorry drivers, for example, are directly and universally connected to the potential danger to human health and safety. Therefore, existing regulations were established by institutions other than the SSCs.

Due to the transnational nature of work in some occupations (for example in the case of lorry drivers), some of these requirements are inevitably similar across a number of countries. This has consequences for the role of national level sector alliances. On the one hand, they may be more likely to participate in European rather than national discussions, but on the other hand they may wish to use national SSCs to ensure that locally provided VET is competitive.

Does this mean that the role of national SSCs in shaping VET is decreasing? Given the common European labour market and levelling of the technological bases of the economy, employer expectations will, at least in some fields, be similar across countries and their specific national feedback mechanisms. The driving forces here are the markets, technological development and free movement of people/labour supported by the various transparency instruments. There will still be a need to take account of local requirements for labour and the specific skills needed in the local workforce. These will continue to depend on the unique aspects of the employers and industrial relations in the sector and country. This is particularly the case for countries and sectors with relatively low wage levels and poor working conditions. The interviewees from Estonia admitted that some employers do not support VET students in taking final exams, since there is a risk they will be poached by foreign employers due to the international comparability of qualifications. Therefore, even if employers take part in NQF developments through participation in SCCs, in practice they may avoid actively using or encouraging the system. Such aspects of larger-scale cross-national inequalities may affect the efficiency of national feedback mechanisms and have to be followed closely in the future.

Key findings

SSCs have become integral to the VET landscape in most countries (see also European Commission and Ecorys, 2010) and, as the above analysis suggests, act as vehicles and conduits for social partnership and dialogue around the VET system (see also Table 6). The analysis demonstrates that SSCs have emerged in diverse contexts and at different times and do not necessarily correspond to a certain type of feedback mechanism. Further, SSCs do not in themselves constitute a particular type of feedback mechanism. The comparison reveals that the establishment of SSCs does not automatically guarantee improved cooperation between IVET and the labour market and most SSCs are primarily engaged in CVET. They do, however, reflect the particular nature of social dialogue in a country. There are significant divergences at national level in approaches to SSCs, which in themselves may present both barriers and opportunities to social partner participation in VET. In more market-based regimes such as England, priorities shift according to short-term market needs, and there is a lack of sector planning and social dialogue. In contrast, in countries with active social bargaining, the capacity for social partners to engage effectively with sector councils may be undermined by shifting priorities and internal conflicts (and policy debates) within trade unions according to Dutch interviewees.

At the same time, the case studies demonstrate the opportunities that the SSC model can offer. Innovative developments are emerging in feedback mechanisms with respect to connecting education and the labour market: for example the rationalisation of CPCs in France, to adapt to a rapidly changing occupational structure, and the planning of regional skills needs by ROCs in the Netherlands. SSCs in England have developed collaborative projects focusing, for example on the 'green skills' agenda through joint activity with trade unions. In Estonia, SSCs have the potential to encourage high-quality social dialogue as the NQF provides a safe forum for bargaining, and this can initiate more sector-level cooperation and consultations. It is unclear, however, if the human capital approach that the SSCs reinforce in accordance with EU educational policies is the best framework for a more cooperative approach on behalf of the social partners. It seems that alternative views on the aims of learning do not fit into SSC agendas and this may prove a weakness of the SSC system in the future.

Of the key categories identified in the current study, inclusiveness and collaboration appear to be the most important aspects of SSCs, defining their cross-sector as well as cross-country differences. Large-scale social change requires broad cross-sector coordination, but 'successful collective impact initiatives typically have five conditions that together produce true alignment and lead to powerful results: a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication and backbone support organisations' (Kania and Kramer, 2011).

It is clear that positive outcomes rely on the active and equal participation of stakeholders in SSCs, which is not always easy to achieve. The quality of participation becomes a key issue and more research is required in terms of monitoring on how this takes place not only at the level of the SSCs themselves, but also at the level of the various connected organisations interested in occupational groups within the sectoral organisation. The fact that SSCs are crucially involved in NQFs, also demonstrates the importance of their role as feedback mechanisms within the overall VET labour market feedback system.

Case study 2.

Regional dimensions of feedback mechanisms

Spatial inequality and the differential development of new spaces of production and welfare means that there are important local, subregional and regional variations in the management of local labour markets, forms of cooperation and governance dynamics as well as types of initiatives pursued (Etherington and Jones, 2011). The European Commission's employment report (European Commission, 2010b) highlights the unevenness between national states and across subnational territories and asserts that regional inequality raises challenges for, and barriers to, achieving national skills targets. The development of an open method of coordination (OMC) has been encouraged to promote both cooperation and policy learning and create a space for actors at different levels. OMC is emblematic of a governance ethos with both formal and informal arrangements and more actors and levels of organisation of authority than central governments alone (European Commission et al., 2011).

The country overviews display a variety of aspects of formalised feedback mechanism on national, regional, subregional and sectoral levels, with interrelations between them: regional social partner representatives are involved in national feedback mechanisms in both larger (e.g. Germany and Spain) and smaller countries (e.g. Ireland and Austria). Regional or subregional feedback mechanisms are found in small (Finland and Sweden), medium-sized (Hungary) and large countries (Spain and France). In Sweden, there are regional variations in feedback mechanisms, caused primarily by varying awareness among stakeholders of the need for up-skilling and competence development (see Sweden country overview). In Hungary, feedback mechanisms which involve social partners on a regional level shifted to a subregional (county) level in 2012. In Finland, local tripartite bodies and other labour market representatives help develop local curricula.

This chapter explores regional aspects of feedback mechanisms related to the bricklayer occupation as a way of providing a more nuanced understanding of the relationship between regional development and IVET (Rees, 1997). Germany and Spain have been selected as case studies due to their diverse systems of VET and the relative importance of regional governance.

The role of regions in renewing VET

To comprehend fully the regional dimension of VET labour market feedback, it is important to understand not only current VET labour market governance patterns, but also the dynamics of governance changes and the multilevel nature of interventions (Jessop, 2002). The regional dimension of feedback between VET and the labour market implies a 'dilemma of governance' (Saito, 2011) that is linked to any devolution of power from national to subnational/regional level. In the regional context, VET has been traditionally viewed as most relevant in the micro-setting, where workers engage with specific tasks in enterprises and services. However, increasingly the 'internationalisation of markets has gradually transformed VET into a system with a much stronger dependence on interacting with markets outside local communities and beyond national boundaries' (Coles and Leney, 2009, p. 424).

The shift towards regionalisation and localisation illustrates 'variegated' attempts to improve the effectiveness of policy and governance arrangements in employment. This is because institutions and actors are mobilised to intervene and plan at the spatial scale of local labour markets and economies (Peck and Theodore, 2007). State restructuring in the context of variegated capitalism is therefore explained by the longer-term shift towards more flexible patterns of governance involving a diverse range of actors and agencies, along with a significant 'rescaling of the state' that lead to new and reconstituted scales of governance (Jessop, 2002). These processes of state rescaling have further contributed to the development of an already highly complex set of governance structures and institutional arrangements relating to increasing emphasis on subnational economic development.

Despite these recent changes, what predominates under current governance arrangements in most EU states are considerable barriers to the integration of economic development and inclusion agendas (including vocational training) within and across different spatial scales. Following Peck and Theodore (2007), a focus for further research may be the conceptualisation of a region as an integral feature of a wider process of spatial uneven development comprising 'relational geographies of economic institutions'. In many respects bringing in a 'regional' perspective emphasises the 'policy silos' (Froy and Giguère, 2010) that exist in relation to EU policy. While the region is an integral part of the cohesion agenda (European Commission, 2010a), the role of IVET is slotted into a distinct employment and skills strategy.

Feedback between VET and the labour market relates to skill needs of enterprises that have regional and local specificities. However, since the EU strives to overcome regional disparities (European Commission, 2010a) and to

achieve economic and social cohesion, VET labour market feedback with a regional perspective should not be a simple reaction to employer demands, but also be proactive in shaping what those demands are. This is particularly relevant for 'less favoured' regions, where economies are already characterised by low skills levels and where enterprises tend to adjust to and accommodate such low skills (see Rees, 1997). The research outcomes of this study do not sufficiently demonstrate what kind of VET labour market feedback model best incorporates the following normative concepts: a proactive approach suitable to overcoming skill deficiencies rather than skill shortages (Rees, 1997) and a governance ethos with involvement of stakeholders from different levels.

Renewal of IVET for bricklaying in Germany and Spain at regional level

In investigating the renewal of IVET bricklayers, an important distinction must be made between bricklaying as a trade and as an occupation. This is due to differences in the governance of qualifications and the different modes of VET associated with each. A crucial problem in attempting to establish equivalence between bricklaying qualifications across Europe is defining precisely what bricklaying is, and reconciling different types of bricklayer within this definition (Brockmann et. al., 2008). Despite the many differences among bricklayers in Germany and Spain, stakeholder involvement and cooperation between social partners in the process of renewing IVET for bricklayers takes place in both countries at national and regional levels.

Spain has a complex VET governance system, characterised by a high degree of power decentralisation to autonomous communities. These communities 'drive the policy process in the absence of strong levels of associational membership'. It is therefore difficult for the central government to provide direction in VET (Souto-Otero and Ure, 2012, p. 107). Initial vocational training for the bricklayer occupation is carried out at middle-level specific vocational schooling (*ciclos formativos de grado medio*) and is primarily school-based. There are two formal feedback mechanisms for the renewal of VET, one at national level where qualification standards are defined and one at regional level for defining specific curricula. The CGFP, of which social partners are an integral part, aims to build consensus on VET policy between the national and autonomous community governments and between employers and unions. Locally, employers are engaged in the system, particularly through the provision of workplace training (OECD, 2012, p. 5).

IVET is modularised according to the CNCP, with descriptions of competence requirements, evaluation criteria and learning outcomes. Also included in these national standards are the minimum requirements for initial vocational training and qualification criteria for regional formulations of the curricula. The central government has measures in place to allow for some regional flexibility and adjustment of national VET standards. In Galicia, for example, the department of education allows for the analysis of existing vocational training by groups of experts (*grupos de trabajo*). Starting with the basic elements of the CNCP, these experts adjust the regional curriculum according to the specific geographical and sectoral environment of Galicia. Any changes must be approved by the tripartite Galician Council for Vocational Training, a consultative and advisory body of the regional government. The Council for VET in Galicia consists of representatives of employer organisations, trade unions, the administration of the autonomous community, and government delegates. The instrumental and executing body for the Galician Council for Vocational Training is the Galician Institute of Qualification.

For renewal of IVET, according to country interviewees, curricula in autonomous communities differ little from national standards. Differences may be found, however, between sectors and/or occupations that are subject to different sectoral regulations and norms (Cedefop, 2013b). It is currently difficult to assess the impact of regional feedback mechanisms on skill mismatch at regional and local levels, as the recent global economic crisis has had a severe impact on the Spanish labour market.

While IVET for bricklayers in Spain is school-based, in Germany it is offered only in the dual system in which apprentices undertake company-based training and part-time vocational education in IVET schools. The BIBB organises and supervises the renewal and development of training regulations on behalf of the federal government. This national mechanism is usually initiated primarily by leading organisations (*Spitzenorganisationen*) of the social partners. The competent chambers at regional and/or subregional level are supposed to ensure the correct implementation of training regulations and have the right to administer exams (Germany country overview and Germany case study). Concurrently, the office of the standing conference of the Ministers for Education and Cultural Affairs of the *Länder* (KMK, representing all 16 German *Länder*) is responsible for the organisation and supervision of the framework curricula. Although the *Länder* have constitutional independence in educational and cultural matters (*Kulturhoheit*), they usually agree to accept the framework curricula developed by the KMK. According to a KMK representative, *Länder* (i.e. the competent regional Ministries of Education) implement 99% of the KMK framework curriculum and make only marginal adjustments. There is no formal involvement of social

partners or enterprises in the parallel construction of framework curricula for dual part-time VET schools.

Box 11 Regional councils and plans for VET in Spain

In Spain, regional councils for VET in the autonomous communities have a heterogeneous character due to different sectoral specialisations, political ascriptions and legislations. They are composed of representatives from regional administration, trade unions and employer organisations. Representatives of the regional councils for VET play a major role in the work of the tripartite CGFP. A comprehensive evaluation of the function, composition and tasks of the regional councils for VET in Spain's autonomous communities showed that, by 2001, most of the regional councils for VET had taken responsibility for (jointly) elaborating regional plans for VET. Most councils also provided advice on the renewal of local curricula and some were responsible for curricula development (National Institute of Qualifications (Instituto Nacional de las Cualificaciones) (Incuat), 2001).

The regional plan for VET in the autonomous community of Aragón is described as the outcome of consensus between members of the tripartite Regional Council for VET (Consejo Aragonés de Formación Profesional). The regional plan in Aragón for VET 2009-12 included evaluation of the previous regional plan for VET, focusing on the involvement of social partners and enterprises in VET issues. The social partners were not only involved in developing and revising VET curricula, but also in identifying competence requirements for Aragón. Relations between enterprises and VET strengthened during the evaluation period due to a process of mutual recognition and the potential for the development of closer links. The plan anticipated revision and strengthening of the role of the Regional Council for VET between 2009 and 2012, despite a lack of technical support (Spain country overview).

Source: Cedefop.

Commenting on the practical training portion of dual IVET for bricklayers, the representative of the Industrial Union for construction, agriculture and environment (Industriegewerkschaft: Bauen, Agrar, Umwelt) (IGBAU) said that the design of national training regulations is becoming increasingly standardised. The result is that specific technical tasks are not formulated for bricklayers or other construction occupations. Task descriptions that use only keywords allow for interpretation, which enables company-based trainers to modify the training according to company needs. A representative from the Ministry of Education, Science, Continuing Education and Culture of Rhineland-Palatinate (Rheinland-Pfalz) stated that, once issued, framework curricula are incorporated into a regional curriculum; they are forwarded to the individual dual IVET schools and each school is able to adapt this regional curriculum to their own local needs.

Since the Vocational Training Act (*Berufsbildungsgesetz*) (BBiG) was adapted in 2005, the new framework curricula have been formulated in a more open and less subject-oriented way. This enables dual IVET schools, which tend to cultivate close relationships with enterprises that offer company-based training, to incorporate new vocational developments into their classes. At regional level, there are many informal feedback mechanisms for dual IVET curricula.

According to two interviewees ⁽²⁹⁾ the training regulation and framework curriculum will not be renewed in the near future. In this specific case it is very difficult to change a single training regulation for one occupation without renewing the entire ordinance, particularly when the first year of IVET, which applies to all occupations, will be impacted ⁽³⁰⁾. The interviewees ⁽³¹⁾, representing employee and employer perspectives, stated that the federal and regional authorities and the stakeholders involved in the renewal of dual IVET occupations, are not in favour of initiating a complete renewal process of construction industry regulation due to the vast workload it would entail. Another interviewee ⁽³²⁾ reported that developing the complete ordinance for 19 construction occupations and the ordinance for the 19 framework curricula took almost nine years. Most of this time, however, was spent establishing an agreement between the social partner organisations before the official development of the new training regulations/framework curricula began. The development of the new training regulations/framework curricula took approximately one year ⁽³³⁾.

The dual IVET system for bricklayers is described by interviewees as quite transparent. It encourages good communication between stakeholders: between the national/regional authorities and the social partners; between the social partners themselves; and between the dual IVET schools and the relevant local

⁽²⁹⁾ From IGBAU and the German Construction Confederation (Zentralverband Deutsches Baugewerbe) (ZDB).

⁽³⁰⁾ The training regulation for bricklayers belongs to an ordinance common to 19 construction occupations, which was last renewed in 1999.

⁽³¹⁾ Ibid.

⁽³²⁾ Federation of the German Construction Industry.

⁽³³⁾ There are three basic stages in developing new training regulations/framework curricula: the preliminary phase, where the social partner organisations have to come to a first agreement before contacting the competent ministries; the development and agreement phase, organised by BIBB/KMK; and the promulgation phase, with votes and control mechanisms before the official issuing of the new training regulation/framework curriculum. In this case, the construction experts talk about the preliminary phase which usually lasts the longest.

enterprises ⁽³⁴⁾. Many cooperative initiatives are traditionally developed and run on the basis of long lasting relationships between the stakeholders, but are completely informal. Three interviewees ⁽³⁵⁾ stressed that the process (from initial concept of an alteration to a training regulation to implementation) can take up to two years and sometimes even longer: they see this as too long. The time taken is caused by the involvement of a large number of committees, panels, boards or bodies that represent employers and employees in the preliminary phase. One BIBB representative described the whole development process as too slow to react to urgent labour market needs ⁽³⁶⁾.

Although most of the experts identified weaknesses within the formal renewal process of the dual IVET system for construction professions in Germany, they also emphasised its strengths. The renewal process is innovative and all stakeholders accept that it is able to produce qualifications and competences utilised directly by the labour market (see also Culpepper and Finegold, 1999). Relevant local parties (dual IVET schools and enterprises) have significant input into implementation of the framework curricula and the regulations for company-based training.

However, the renewal process is also characterised by uneven involvement of the social partners. It is dominated by officials drawn from bodies, chambers and associations, with company-based trainers or other experts from enterprise a marginal presence. Further, the company-based trainers and enterprise experts that do participate generally represent large enterprises; many small and medium-sized enterprises (SMEs) cannot spare their staff. The aims of large enterprises can differ vastly from those of SMEs.

The regional dimension in Germany and Spain

In contrast to the situation in Spain, the German VET system is generally well-resourced, combining public and private funding (Hoeckel and Schwartz, 2010).

⁽³⁴⁾ Five experts shared this opinion (from BIBB, the German Industry Board for Vocational Training, IGBAU, the chambers of commerce and industry and ZDB).

⁽³⁵⁾ From ZDB, IGBAU and BIBB.

⁽³⁶⁾ The interviewed BIBB expert dealing with construction occupations stated that many employers request that qualifications to be taught within the dual IVET system meet their specific needs, while the BIBB stresses that a dual IVET programme, such as that for bricklayers, must ensure that graduates can practise their profession everywhere in the market.

In Germany, social partners and enterprises at local level appear to play a significant role in providing direction in the renewal of IVET; dual IVET schools and enterprises are commonly responsible for education and training for apprentices (see also Busemeyer, 2012). In Spain, the devolution of power from the national level allows autonomous communities some flexibility in IVET development. Regional councils for VET secure the involvement of social partners and enterprises to develop regional IVET curricula. There appears to be more involvement of labour market stakeholders in operative tasks (e.g. providing training or assessing skills) at local level in Germany than in Spain.

In both Germany and Spain the regions have influence on the renewal of IVET. In both countries regional bodies perform an advisory role to central government institutions responsible for renewing IVET standards. Both countries have regional feedback mechanisms for the renewal of IVET with formalised stakeholder involvement, including social partners. In the 'coordinated' German dual system social partners have a strong formal presence in regional VET examination boards for assessing apprentice competences ⁽³⁷⁾. In Spain, the influence of social partners at regional level in the 'participatory' feedback system is less pronounced. Social partners do not determine operative tasks in IVET as they do in Germany, but do provide advice to regional decision-makers in the planning and design of VET provision.

⁽³⁷⁾ According to the BBiG, the examination board is run by the chambers (of craft, commerce and industry, etc.) and has to comprise at least three members: an equal number of representatives from employers, employees and vocational teachers. The BBiG also provides that all 16 German *Länder* and competent regional chambers have to run VET committees (*Bildungsausschüsse*), which also have to be composed of employers and employees in equal numbers. Their task is to strive for constant development of VET quality. The regional chamber committees can issue legal provisions for the implementation of VET, like examination requirements or the acknowledgement of prior knowledge. The *Länder* committees are supposed to advise the *Länder* governments concerning VET topics.

Table 7 **Regional feedback mechanisms in countries with different feedback models**

Characteristics of feedback mechanisms	Germany (dual system)	Spain
National feedback model	Coordinated	Participatory
Administrative divisions	<ul style="list-style-type: none"> • States. • Government districts. • Districts (at municipal level). 	<ul style="list-style-type: none"> • Autonomous communities. • Provinces. • Municipalities.
Importance of VET	Very high	<ul style="list-style-type: none"> • Weak. • Increasing due to EU influence and current economic and labour market crisis.
Responsibility for IVET at administrative levels	<ul style="list-style-type: none"> • Social partners (strong commitment of enterprises). • State. 	State (ministry and autonomous communities)
Involvement of regional stakeholders in formal feedback mechanism at national level	Involvement of stakeholders (social partners and experts) in renewing training regulations, no systematic considerations of regions.	Representatives from tripartite regional councils for VET involved in the tripartite General Council for VET.
Regional feedback mechanism	<ul style="list-style-type: none"> • Direct and formal involvement of firms in training. • Formal feedback mechanism for renewing training regulations and framework curricula only at national level. • Formal feedback mechanisms at regional level. 	Formal feedback mechanisms at national level (General Council on VET) and in autonomous communities (tripartite regional councils for VET).

Source: Cedefop.

Other objects of change in the renewal of IVET include teaching material and textbooks. In Spain the choice of teaching material is determined by schools. The situation is similar in Germany, where the creation of learning or teaching materials for bricklayers in dual IVET schools does not appear to utilise any formalised feedback mechanism between the labour market and the IVET system. In Germany, textbooks for IVET schools, including those that cover the theoretical background required for the practical company-based training, are produced mostly by commercial publishing companies; the decision to renew a textbook or create a new one is based on commercial considerations. One BIBB expert stated that publishers no longer require the consent of the relevant regional Ministry of Education to renew or create a textbook. Because the number of apprentices in construction industry occupations (such as bricklaying)

is large, publishing companies are more likely to keep teaching material relevant and up to date. However, in less popular job profiles with small numbers of students, books can be outdated. The development of teaching materials for IVET provision does not appear to be integrated into Germany's 'coordinated' and Spain's 'participatory' VET labour market feedback system, but instead adheres to a free market model.

The German and Spanish case studies show that the renewal of IVET at regional level currently uses one feedback model in each nation: the 'coordinated' model in Germany and the 'participatory' model in Spain. It remains to be seen whether VET labour market feedback mechanisms in different regions within one country will all use the same feedback model in the future. Some Spanish autonomous communities, for example, plan to introduce a dual apprenticeship based on the German or Austrian model (del Amo, 2012). The implementation of such a model may require revision to the typology of Spain's VET labour market feedback and separation into regions and VET subsystems (school-based versus dual system).

Case study 3.

Transforming feedback mechanisms in 'statist' and 'liberal' VET systems

Sweden and the UK-England provide interesting and contrasting examples of how feedback mechanisms are being transformed in recently established or renewed VET systems. England is classified as having a 'liberal' model with strong employer influence on feedback mechanisms, while Sweden possesses a state-centred ('statist') model with a balance of social partner influence on the feedback mechanisms.

This case study explores links between the formalisation of vocational and occupational regulations and stakeholder influence on feedback mechanisms. We refer to this as 'participatory elements in VET labour market interchanges' and present a hypothesis on how this link applies to Sweden and the UK-England. The two countries may also illustrate under which conditions feedback mechanisms and VET schemes can transform each other so this chapter investigates whether the (re-)introduction of a Swedish apprenticeship scheme has modified how social partners influence the state-centred model of feedback mechanisms.

VET labour market feedback for reform-induced apprenticeship in Sweden

In a white paper introducing the VET reform that paved the way for the apprenticeship scheme in upper secondary schools, the Swedish government referred to institutionalised interactions between labour market partners in IVET in other EU countries (Reinfeldt and Björklund, 2009). IVET programmes for apprenticeship training, comprising education and training provided in both VET institutions and enterprises, were subsequently introduced into the public education system at upper secondary level. These programmes are governed by institutionalised consultation mechanisms subject to regional and sectoral variations. This displays the characteristics of an emerging feedback mechanism; the introduction of an apprenticeship scheme in the public education system at upper secondary level with potentially closer links and relationships between schools and labour market practices (Olofsson, 2007; Olofsson and Panican, 2012; Olofsson and Wadensjö, 2012).

The 12 vocational educational programmes offered to students in upper secondary schools following the 2011 VET reform are part of governance structures around newly established programme councils ⁽³⁸⁾. At national level, there is one such council for each education programme, known as national programme councils. There are also local programme councils composed of representatives from local employers and employee organisations. Programme councils were established to advise the Swedish National Agency for Education, assist in the development of workplace training (as part of vocational education programmes) and provide assistance in the adaptation of VET to local labour market needs. Following implementation of the reform, central control is exercised on the VET system, but there are no clear mandatory guidelines and instructions on how local and national programme councils should function. Social partners and other interested organisations can request representation on the councils, but the National Agency for Education ultimately composes the National Programme Council as an assembly of individuals. It is unclear whether council members represent organised interests or are appointed in a purely personal capacity (see Sweden country overview).

The interviews for this case study revealed no signs of systematic interaction between national and local programme councils, to the extent that many of those operating at local level are unaware of the national councils. There are no indications of improved communication or interchanges between the labour market and vocational schemes/arrangements, but the communication pattern has been modified. Local programme councils promote collaboration between schools and enterprises to support placements for vocational students. The programme councils have, up to now, been allocated meagre resources and there are no signs that the old shortcomings of VET quality control (underscored by national investigations, see Reinfeldt and Björklund, 2009) are now being tackled by the new feedback mechanism. Variations in how local councils function have little to do with local labour market structures, but depend on the action by school principals and vocational teachers. The local programme councils are tied strongly to the agenda of the school system and are not particularly concerned about interactions with the labour market. However, councils now assist teachers and principals in obtaining some labour market

⁽³⁸⁾ During the 2008-11 experimental period leading up to the new schemes, interfaces between schools and labour market were assured via specific apprenticeship councils.

legitimacy through establishing workplace contacts, for example through vocational fairs and information days.

Despite the introduction of new programme councils, the older joint business-labour training boards continue to retain their importance. For example, the boards monitor the application of sector-specific rules for the number of training hours that must be undertaken before a trade can be practised (*färdigutbildning*). Such rules apply even to vocational students enrolled in the new apprenticeship scheme at upper secondary level and so undermine the importance of the new feedback mechanism represented by apprenticeship in upper secondary schools.

Joint business-labour training board activity varies greatly between branches. Interviews carried out for this case study reveal that the boards continue to define VET practices in painting and heating, ventilating and air conditioning (HVAC) trades ⁽³⁹⁾. In the IVET commerce and administration programme, there are still examples to be found of long-lasting placements for vocational students that surpass the minimum training period imposed by the new IVET law.

The social partners use the two feedback mechanisms in parallel as they work through both the joint business-labour training boards and the national and (partly) local programme councils (the other major feedback mechanism). In both cases, social partners can influence vocational programmes in schools. The two main feedback mechanisms for the apprenticeship scheme have a combined effect on the interaction between labour market and the VET system.

The in-depth study of Sweden revealed a number of conditions necessary for a feedback mechanism emerging from a reform-induced apprenticeship scheme to have an impact in transforming the national VET system. These conditions primarily relate to:

- (a) the degree of formalisation of the feedback mechanism;
- (b) the power attributed to institutions under the feedback mechanisms;
- (c) the quality and profoundness of interaction and communication within the feedback mechanism;

⁽³⁹⁾ As a response to the influx of foreign-registered building companies particularly active in the big cities, the employers' Swedish Construction Federation has removed the requirement earlier imposed on skilled labour of having passed a vocational competence test (*yrikesprov*), leading to a journeyman's certificate. However, other trades in the construction and building industry, such as painting and HVAC, maintain old skill standards, offering experienced workers from other countries the chance to take a competence test to prove their previously acquired competences.

- (d) the resources given to the institutions built around the feedback mechanism;
- (e) the visibility of these institutions and the resources mobilised to inform others about their purpose and work tasks;
- (f) efficient control of the quality of VET schemes within the feedback mechanism;
- (g) the relevance of new VET schemes for the labour market.

The ability of feedback mechanisms to transform established VET systems by facilitating interchanges between schools and enterprises also depends on demarcation from other feedback mechanisms. In Sweden such demarcation does not exist and the old feedback mechanism of business-labour training boards maintains an important role in:

- (a) mediating between schools and enterprises;
- (b) ensuring that vocational students obtain meaningful work experience;
- (c) training the workplace supervisors of vocational student;
- (d) controlling the quality and relevance of training courses.

These training boards are not integrated into the public VET system and so demonstrate that the state-centred (statist) VET system in Sweden is duplicated by a persistent non-state feedback mechanism. The new apprenticeship scheme and the business-labour training boards influence the same occupational standards and curricula, i.e. their functions overlap.

'Liberal' VET labour market feedback for apprenticeships in the UK-England

Apprenticeships in the UK-England are more employer-led than in Sweden and are not formulated by social partners as they are in Denmark, Germany or Austria. The apprenticeship scheme in England offers apprenticeships to young people (16 to 19) and combines employment-based training with that provided by a further education college. This is an option young people can pursue following the completion of compulsory education. 15% of all UK establishments offer apprenticeships (UKCES, 2012).

As an early adopter of NQFs, England established an institutional structure for the objects of change scrutinised in this study (i.e. occupational/educational standard and curricula). However, it is not evident that this structure alone aids systematic interchanges between the labour market and VET because balanced participatory mechanisms are not incorporated. When considering SSCs as a feedback mechanism, they appear to be employer-led within a streamlined framework for vocational and occupational regulations. However, there is some

debate about the extent to which SSCs are actually representative of the employers within their respective sectors ⁽⁴⁰⁾.

The role of SSCs ⁽⁴¹⁾ has recently changed. Following a parliamentary review (House of Commons: business, innovation and skills committee, 2012), their operations were rationalised and their authority diminished to the extent that they do not tally well with professional associations, awarding bodies and providers. This undermines the efficiency of interactions between stakeholders.

At the end of March 2012, the councils stopped offering grant funding to VET providers. This change was partly instigated by growing concern that education providers developed publicly-funded VET programmes which were not always demand-led ⁽⁴²⁾. Instead, employers are now increasingly paid for commissioning the provision of vocational education that they believe will meet their short- and long-term needs.

For this purpose, the 'Employer ownership of skills' initiative (2012-14) will allocate GBP 250 million to employers. This initiative assumes that employers are better placed to align skill needs with VET provision and will perform more effectively in this task than VET providers were able to before the policy shift in March 2012.

It should be noted that sectoral differences in England are primarily due to each SSC having a different constituency. In the construction sector, for example there are national skills academies, a construction industry training board, construction industry council and an apprenticeship managing agency. Each of these has some independence. In the construction sector alone, there are 20 professional associations with a variety of approvals for vocational provision and

⁽⁴⁰⁾ Information provided by a well-placed observer of VET in England.

⁽⁴¹⁾ SSCs act as the issuing authorities for apprenticeship frameworks in their sector. Their role is to ensure that the apprenticeship frameworks submitted to them comply with the specification of apprenticeship standards for England (SASE). The SSCs are crucial to both labour market intelligence and to the development of national occupational standards, as well as in providing the framework for VET qualifications (see England country overview). SSCs cannot reject an apprenticeship framework that is SASE compliant. SASE is the legal framework that governs the requirements for all apprenticeship frameworks across all sectors (UKCES, 2011). The Skills Funding Agency regulates the SSCs and secures qualification standards by setting their benchmarks. The National Apprenticeship Service, launched in 2009, works with the SSCs to identify the vocational qualifications needed by employers, before developing apprenticeship frameworks. The National Apprenticeship Service is pivotal to renewing the content of apprenticeships.

⁽⁴²⁾ Analysis provided by well-placed interviewee in England.

sites for delivery. With regard to trade unions, the UnionLearn network is important in developing work-based VET because of their close links to the SSCs. A key area of negotiation is around the barriers that workers face in accessing IVET (Etherington, 2010).

Payne and Keep (2011, p. 2) claim that UK skills policy is geared towards implementing more skill-intensive production strategies. They cite the UKCES, arguing 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'. The two ministries in charge of SSCs tend to regard them primarily as productivity instruments to achieve:

- (a) the reduction of skill gaps and shortages;
- (b) the improvement of business productivity and public service performance;
- (c) the improvement of the learning supply including apprenticeships, HE and national occupational standards (see websites of both ministries).

If this is their main function, there may be a danger that SSCs are tied up in strategies for individual firms and function less as skills and labour market instruments for groups of firms or for sectors as a whole.

Conclusions

The investigation into how interchanges between VET and the labour market are being transformed in England and Sweden leads to the following hypothesis on the link between formalisation of vocational and occupational regulations and participatory elements in feedback mechanisms (stakeholder influence):

- (a) in countries with a strong framework for vocational and occupational regulations, such as England, stakeholder influence on feedback mechanisms is not the primary concern when defining the interchanges. Institutions around this regulatory framework concentrate more on checks and balances, as well as quality control and auditing procedures typical for liberal VET systems;
- (b) in countries with a weaker framework for vocational and occupational regulations, such as Sweden, stakeholder influence on feedback mechanisms tends to be based on social dialogue and consultation. The ensuing participatory elements in feedback mechanisms may be moderately formalised in state-centred VET systems and with stronger formalisation in countries with a clear participatory model of feedback mechanisms.

The hypothesis on how regulatory and participatory VET frameworks relate to each other is visualised in Table 8.

Table 8 **Frameworks for vocational and occupational regulations versus participatory frameworks for stakeholder influence in feedback mechanisms**

		Participatory framework	
		strong	weak
Regulatory framework	strong		England
	weak	Sweden	

Source: Cedefop.

This case study also shows that there is a coexistence and dominance of models of feedback mechanisms. The analysis of apprenticeships in Swedish upper secondary schools and of the joint business-labour training boards revealed that these two mechanisms function in parallel. The introduction in 2011 of the apprenticeship scheme to the public IVET system did not replace or transform the older feedback mechanism (the joint business-labour training boards).

This raised the question of whether the introduction of this apprenticeship scheme has modified how the social partners influence the prevailing state-centred model of feedback mechanisms in Sweden. Social dialogue on labour market policies has traditionally been significant in Sweden (Tjeldvoll, 1998; Olofsson, 2007) and Nordic apprenticeship schemes are usually influenced or defined by the social partners. This question was further explored by the role attributed to the national and local programme councils during the 2009-11 VET reform: representatives from employer and employee organisations participate in these councils, but in a strictly consultative capacity and have no input on crucial issues such as resource allocation or quality assurance. Within the present framework of local and national programme councils, there is currently no institution dedicated to suggesting or issuing guidelines for exchanges between these councils and the labour market. This lack of formalisation appears to hamper the ability of councils to represent organised interests in the labour market. Transmission of social partner interpretations of labour market signals does not occur via the programme councils at national or local level; programme

councils tend to interact with branches and sectors through individual enterprises, rather than via sectoral organisations or social/labour market partners. This may reduce sectoral outreach and the relevance of the vocational training and cause further renewal of training to be more enterprise-specific (Sweden country overview).

While Swedish social dialogue on VET is marked by consensus (see Sweden country overview), there was a lack of new initiatives that aimed to use the introduction of programme councils as an opportunity to define and improve VET/labour market interaction. Social dialogue on education and training tends to adhere to the often school-driven consultation and mediation culture present in Swedish IVET. This appears to be a general feature according to available documentation from sources other than those used in this case study and was confirmed by interviewees.

One potential consequence of the 2009-11 VET reform, that gave birth to a new feedback mechanism institutionalised as national/local programme councils, could have been a transformation of Swedish IVET into a participatory model of feedback mechanisms. Participatory models are mostly found in statist IVET systems, focusing on schools, but with substantial contributions from the social partners in securing interchanges between schools and the labour market. This transformation has not occurred, so state-centred ('statist') model feedback mechanisms continue to dominate IVET in the upper secondary school system. However, these observations do not suggest that the Swedish state-centred feedback mechanism is a highly centralised policy tool. The feedback mechanisms of apprenticeship schemes and programme councils in upper secondary education operate with more decentralised and lighter management principles, and some interviewees expressed the wish for central authorities to provide clearer guidelines for interaction between schools and the labour market.

Case study 4.

Feedback mechanisms in transition

The study suggests that VET feedback mechanisms are deeply embedded in the larger economic and social settings in which they interact. In terms of the renewal of VET, central and eastern Europe countries are of special interest due to their status as newly emerging EU states and their particular economic and institutional legacies.

This chapter focuses on a comparison between Estonia, Poland and Slovenia, which provide examples of three types of transitional context emerging in central-eastern Europe: Estonia, as the Baltic nation, represents a neoliberal type; Poland, as the Visegrád state, represents an embedded neoliberal type; and Slovenia, a neocorporatist type (Bohle and Greskovits, 2007). Estonia and Slovenia are perceived by some authors as polar opposites among transition countries (Feldmann, 2006; Buchen, 2007; Adam et al., 2009).

In the typology of feedback mechanisms developed in the framework of this study, Estonia and Slovenia are classified as different models: IVET in Estonia is referred to as a 'statist' model and IVET in Slovenia as a 'coordinated' model. Poland, in addition to being a dominant 'statist' model in terms of school-based IVET, also still possesses a small traditional apprenticeship element.

Identical past and shared legacy?

Due to their socialist past, all central and eastern Europe countries are often grouped as having an identical 'pre-transitional' past with diversity emerging (at best) only after the end of socialist rule and the fall of the Soviet Union. These countries had a lot in common: they all inherited a highly centralised and state-controlled education system from the socialist period in which the school structure and curricula were divided between two tracks: the general and the vocational (e.g. Saar, 1997). The transition from VET school to work was therefore smooth, as state agencies, supported by employers, would often secure positions and assign a young worker to their first workplace, virtually irrespective of their level of education (see Saar et al., 2008). Despite a shared framework, there were important differences in terms of political environment for VET. Estonia is a former part of the Soviet Union and therefore was strongly impacted by the policies of the central Soviet government. Slovenia is a former part of the federal state of Yugoslavia, which differed from both the Soviet Union and other central and eastern Europe counties politically, economically and

ideologically. Poland was a wholly independent socialist state under the hegemony of the Soviet Union until its collapse in 1989 (see Nielsen, 2004).

Economic production was centralised to a greater degree in Estonia than in Yugoslavia, and particularly in Slovenia. In Soviet Estonia both enterprises and VET institutions were ruled 'from above', according to the vision of respective administrative/bureaucratic bodies (branch ministries for enterprises and, until 1998, the State Committee of Vocational Education ((Riiklik Kutsehariduse Komitee), see Ojasoo, 2005). In terms of decision-making, coordination between enterprises and vocational institutions was established by the 'top' administrative bodies. Links between VET and employment were underpinned by central planning and extensive regulation (Loogma, 2004, p.73). In socialist Slovenia, so called self-managing communities of interests were established in all public service areas, including education. These operated at national, regional, local and sectoral levels. All the main social actors – economic chambers, ministries, schools, socio-political organisations, administrative bodies – had representation in these self-managing communities (see Slovenia country overview).

Diverse trajectories of post-socialist educational institution building

During the transition years, central and eastern Europe countries restructured their education and training. The fundamental transformation of economic and social structures radically changed the function and the logic of the VET system and an urgent need for feedback between labour market and VET emerged in all these countries. However, the solutions developed to meet this need varied.

Pre-war VET traditions (particularly, geographic and historic proximity to Germany, see Roberts, 1998), the characteristics of the socialist period, and impact of the EU, have all contributed to the different ways in which VET is developed, structured and conducted in each country, and to the reputation of VET. In Estonia, vocational education has carried negative connotations since the Soviet period (Ojasoo, 2005) while in Slovenia the reputation of VET depends on the particular track. For example VET programmes that do not lead to tertiary studies have a bad reputation (see Slovenia country overview).

In Estonia, vocational education has increasingly come under the control of schools as enterprises have been unable to finance apprenticeships and maintain the infrastructure required for training (Saar et al., 2008). Only Slovenia and Hungary reintroduced the dual system of apprenticeship training in place before Soviet rule (Strietska-Ilina, 2001). Kogan and Unt (2005) show that, in contrast to Estonia (which had traditionally higher participation rates in general

education rather than in vocational education, see Saar, 1997), there was a strengthening of the of the dual system in Slovenia during the 1990s (Ivančič, 2000), with the intention of tailoring vocational qualifications to the needs of Slovenian employers (see Slovenia country overview). In Poland, elements of partial, enterprise-based apprentice training were preserved but continued to shrink (Saar et al., 2008). The Polish Ministry of Education has not played a very active role in VET reform and a complete decentralisation of the education system has taken place (Nielsen, 2004).

Initially, education reform in these three nations was more focused on 'de-ideologisation' than on 'Europeanisation' (Nielsen, 2004). Estonia, Poland and Slovenia took part in EU vocational reform programmes, but the specific priorities and blueprints for reform were identified and developed by each country. VET issues were not made a priority for education reform in Estonia or Poland, but were in Slovenia. Estonia looked for experiences and solutions in LMEs: at the initial stage of VET reform the curriculum model was based on the Irish labour market skills training system and the National Centre for Examination and Qualification was modelled on the British National Council for Vocational Qualifications (Parkes et al., 1998). Slovenia, in contrast, used Germany as its model for policy development (see Slovenia country overview).

Since joining the EU in 2004, all central and eastern Europe countries have adopted the OMC, under the influence of EU policies, mechanisms and tools (Toots, 2009; Slovenia country overview). Their VET systems emphasise the importance of transparency, comparability and compatibility of outcomes with European standards. In all three countries, current developments in VET are largely guided by the principles of lifelong learning and the outcomes-based curriculum. Structures and tools such as the EQF, the learning outcome approach and the ECVET play an important role in developments in VET systems. The European goals for 2020, together with the Lisbon conclusions (2000), the Copenhagen process (2002), the Maastricht communiqué (2004), and the Helsinki communiqué (2006) offer basic guidelines for the development of VET systems in these countries.

Feedback mechanism models: statist versus coordinated systems

Estonia and Slovenia differ in the way social partners cooperate in the education system. Before societal transformation led them to choose different models (Germany or the UK) on which to base their policies, Slovenia coordinated the interests of involved parties, while Estonia did not. Since the break with

socialism, Slovenia has moved in the direction of occupational markets, while Estonia has moved closer to an organisational labour market model (Saar et al., 2008). Trade union membership rates demonstrate this: the proportion of employees belonging to trade unions is relatively high in Slovenia at 30%, but is low in Estonia at only 10%. Similarly, collective bargaining coverage in Slovenia is 96%, while in Estonia it is only 33% (European Commission, 2009).

As a result, social partners in Slovenia seem to be in a stronger position than those in Estonia and their contribution to VET labour market feedback has a greater impact. In contrast to Estonia, social partnership is of basic importance at all levels of IVET in Slovenia, from decision-making and financing to implementation. It is also formalised and institutionalised to a large extent and representatives of employers and employees are part of both the most important decision-making bodies and of expert and working groups in the IVET area (see Slovenia country overview).

Poland falls somewhere between Estonia and Slovenia with regard to path-dependent cooperation between social partners and educational systems. During the socialist era, links between the labour market and VET were segmented: enterprise-based apprentice training survived, while bureaucratic school-based VET dominated. During the transition years, both segments developed in Poland and were accompanied by two different feedback mechanisms.

Apprenticeship, and its role as a link between the labour market and VET, reveals differences between the 'statist' and 'coordinated' systems. In Slovenia, with its dual VET system, apprenticeship is an important form of VET labour market feedback. There are three VET programmes at upper secondary level offering apprenticeship-type schemes: the vocational secondary education (ISCED 3C), the technical secondary education (ISCED 3B) and the vocational-technical secondary education (ISCED 3B). IVET at tertiary level is provided by higher vocational colleges (*višje strokovne sole*, ISCED 5B). Approximately 40% of each curriculum is devoted to practical training in firms (European Commission and IKEI, 2012). The new Vocational Education Act (2006) united the dual system and school education into a single form of IVET, where practical training is an integral part of programmes for vocational education. All students undergo a predetermined number of weeks of practical training. Key to VET labour market feedback in the Slovenian VET system are the committees for occupational standards, the Expert Council for Vocational and Professional Education and Training and the Centre of the Republic Slovenia for VET.

Apprenticeship training is relatively new to Estonian VET, beginning in 2002 with a Phare pilot project ⁽⁴³⁾. A European Social Fund pilot project focusing on the implementation of apprenticeship training in enterprises was carried out in 2008. This initiative has revolutionised the concept of learning at the workplace and has given employers an opportunity to see the potential benefits. The Ministry of Education prepared and set the legal framework, and identified key actors in enterprises and vocational schools. The Ministry also made state funding available to schools that are able to teach apprentices through a student scheme. This form of learning is, however, largely the exception to the rule. Apprenticeship training tends to be available in fields such as the retail sector, in which there are a number of retail chain stores with higher numbers of employees and the capacity to provide appropriate training. The specific features of apprenticeship in Estonia can be attributed not only to the novelty of the training but also to the liberal context, characterised by the high dependency of the small, open economy in which it has developed. Therefore, the effectiveness of apprenticeships and the readiness of employers to contribute appear to be highly market-dependent (influenced by the economic cycle and by the contingent demand for qualified workers). Since the onset of the economic crisis, it has become increasingly difficult to secure an apprenticeship in a company (Tamm, 2011). Estonian interviewees observed that in the sectors affected most severely by the crisis (such as construction), it was difficult to find companies interested in (or ready to accept) an apprentice for even a short period. Nevertheless, despite problems such as the paucity of apprenticeship places and the quality of training in enterprises, stakeholders regard apprenticeship in the workplace as important for the development of both generic and specific skills.

In Estonia, the characteristics of apprenticeships means that they are better suited to a coordinated system of VET labour market feedback. The central role that VET schools play in establishing links with the labour market (employers) demonstrates this effectively. The school is responsible for finding places for apprentices and ensuring that the practical learning is relevant and of high quality. On rare occasions an employer-agreement is established between employers in the sector, outlining what students should definitively learn during apprenticeships. Ultimately, however, the availability of apprenticeships is dependent on demand for VET students in specific areas, and on the activity of VET schools and their capacity to create informal 'supportive' networks.

⁽⁴³⁾ Development of work-linked training programmes and network in the north-east, south and islands regions in Estonia.

In Poland, apprenticeship exists as an alternative to the dominant school-based segment of VET. The Polish Craft Association (Związek Rzemiosła Polskiego) (ZRP) is the main actor in translating labour market needs into training provision and the development of learning content. ZRP is the biggest VET agency in Poland (Stępnikowski, 2008) and also the most active part of the tripartite Commission for Social and Economic Affairs (the main institutional platform for social partner involvement in VET). The ZRP has the potential to achieve a high degree of influence on the shaping of VET provision through advising on legislation proposals; its interests are also advanced through the Central Employment Board (Naczelna Rada Zatrudnienia), another body for social dialogue at national level. The Central Employment Board provides advice to the Minister for Labour, particularly on the distribution of the labour fund. Regional chambers protect the interests of the ZRP. The involvement of the ZRP in VET provision differs significantly from its role in school-based VET, where forms of stakeholder involvement are yet to be consolidated.

'Participatory' feedback mechanism in neoliberal contexts?

These developments in apprenticeship illustrate the challenge of finding solutions to participatory feedback mechanisms in a neoliberal context. While apprenticeship in Estonia may be viewed as an indication that the country is moving from a 'statist' model toward a more 'participatory' feedback version, this process has yet to be consolidated. Currently responsibility for apprenticeship programmes lies with individual VET institutions, while the involvement of employers depends on market signals. According to interviewees, there is a growing recognition of the need for coordination of apprenticeship (European Commission and IKEI, 2012), but not necessarily on a tripartite basis. In Poland, apprenticeship is based more on the active involvement of one segment of employers in traditional apprenticeships, rather than on employer-employee partnerships. This presents a structural problem for the future of apprenticeship which traditionally features primarily in the traditional (handicrafts) segment of the economy, which is shrinking.

All three countries anticipate that national VET development will embrace and maintain consistency with EU approaches. Accordingly, social partnership in VET is expected to intensify. The apprenticeship developments described occur in transition countries commonly striving to create participatory feedback mechanisms, whether they are neoliberal (Estonia and Poland), or are acquiring features of a liberal economic model (Slovenia). Eventually Slovenia may face

the same challenge of adjusting cooperation-friendly VET solutions to the liberal socio-economic context that Estonia and Poland have faced.

At the time of writing, the liberalisation of the socio-economic context is regarded in Slovenia as an obstacle to an effective cooperation of the main social actors. But analysis of the feedback mechanisms is similar to that found in Estonia and Poland: employers are not yet ready to take their share of responsibility for the quality of qualifications, while the role of unions in the VET system is undervalued. Even 'participatory' feedback mechanisms (let alone 'coordinated' ones) are regarded as challenging in Estonia and Poland, more so than in Slovenia, due to the overall weakness of social partnership and more unequal power positions of main actors in those two countries.

Further research, aiming to develop better understanding of the changing contribution that apprenticeship makes to the cooperation between VET and the labour market in different socio-economic contexts, should take into account the particularities of interaction between apprenticeship and other feedback mechanisms in these contexts. The new members of the EU offer interesting case studies in terms of their dynamic economic and institutional/governance changes.

Case study 5.

The role of research in interactions between VET and the labour market

Research can play multiple roles in supporting the renewal of VET: indicating potential needs, aiding implementation, and evaluating policy outcomes. Research into forecasting and anticipation of skill needs and supply is particularly relevant this study.

To understand the role of research, it is important to distinguish between research activities that have a clearly determinant role within the respective feedback mechanism (e.g. regular reports that actors depend on, obligatory evaluation or studies) and research in general. We can distinguish three roles for research on feedback mechanisms between VET and the labour market:

- (a) research that is systematically used in the VET system and is recognised by the stakeholders, to the extent that research activities in themselves constitute a separate feedback mechanism. This occurs either at national level or in an interaction between national structures and sectors/branches and regions;
- (b) research that is regularly used in one or several feedback mechanisms to convey information to or from the labour market;
- (c) ad hoc research focused on a particular feedback mechanism (or on the VET system as such), with the aim of providing background information to support various interactions between the labour market and VET institutions.

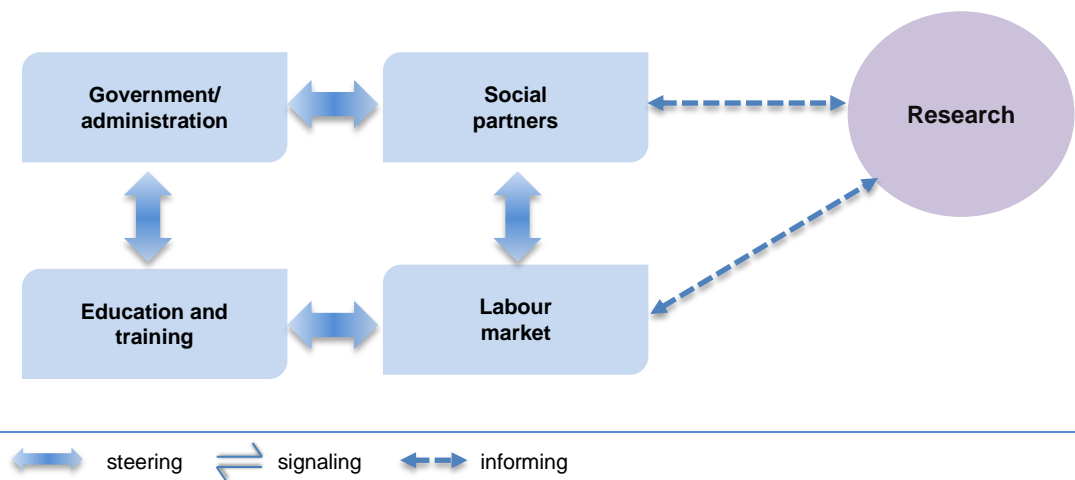
The majority of the countries for which information was available in this study use research in an ad hoc fashion or not at all (Bulgaria, Estonia, Hungary, Sweden) when renewing IVET. In some countries research is used regularly, but conducting it is optional rather than mandatory or institutionalised (Germany, Ireland, France). In few countries does research form an integral part of the feedback mechanism (with restrictions in Denmark, the Netherlands, Finland, and for VET and HE, in Austria).

Research has different functions in the diverse models of feedback mechanism. One can also assume that research has various roles within these models. In the 'statist' model, the government usually commissions research. In the 'coordinated' model, research is most often initiated by the social partners. In the 'liberal' model, research can be commissioned either by the state or by education and training providers themselves (see Figure 5 for an illustration). The involvement of this additional 'actor' has the potential to strengthen the liberal

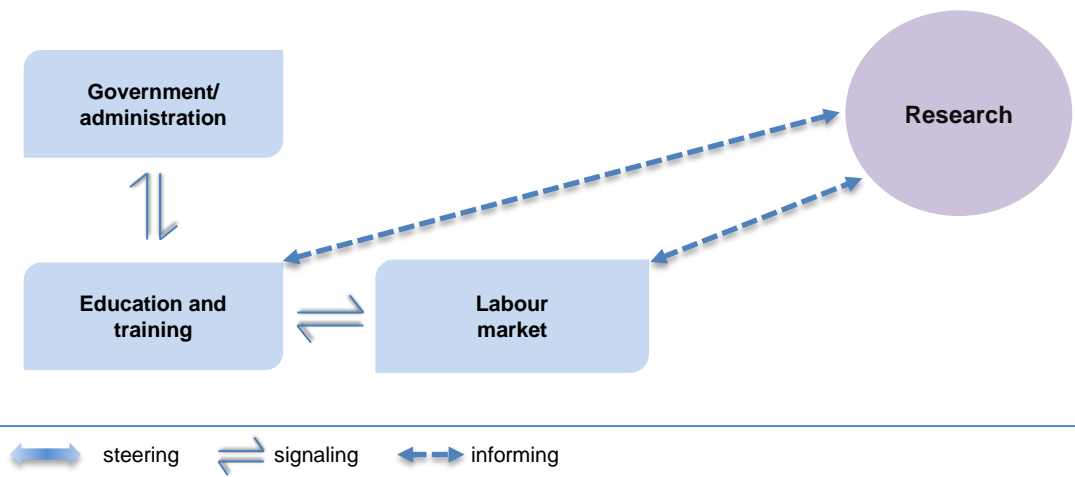
model, as a kind of additional quality control (evidence-based) is introduced into a market-led system, making it more accountable. This is illustrated by Austrian polytechnics, where the education and training providers are required to call on an independent research organisation to provide evidence of the demand for a new study programme.

Figure 5 The role and position of research in feedback mechanisms

The role of research in Danish VET



The role of research in the Austrian HE VET system



Source: Cedefop.

It is evident that there are different roles for research in different models of feedback mechanism. But can differences also be identified in the way research is organised within the same model? The Danish and Austrian apprenticeship

systems were identified as appropriate research subjects, as both utilise a 'coordinated model' ⁽⁴⁴⁾.

Research in the Austrian apprenticeship feedback mechanisms

In a 2008 study, Lechner and Wetzel (2008) found that Austria did not have a systematic and integrated framework for discussing the matching of skill demand and supply. They pointed out the need for an 'integrated institutional framework for labour market and skills requirements, which would include all relevant institutions (labour market and educational actors, social partners, etc.) at different regional levels' (ibid. p. 4). However, this statement was made from the perspective of labour market policy formulation with a focus on forecasting, rather than on the renewal of VET provision. Lassnigg (2009) found that qualitative analyses have identified functioning governance systems for qualification policy in regional settings. These are organised jointly by regional policy-makers and regional social partners. Although research-based projections of differing types were conducted at regular intervals, they were not used to adjust teaching programmes, and some of them were unsuitable for that purpose (ibid).

The BBAB is the key national body for the renewal of occupational profiles of apprenticeships. The BBAB may take into consideration results of VET research when providing recommendations to the government so in the Austrian feedback mechanism for this portion of VET, which is just one part of the dual system, research provides information on an ad hoc basis.

Either the BBAB subcommittees or the education research institutes of the social partners (for example the Institute for Research on Qualifications and Training of the Austrian economy), can introduce proposals or obtain expert opinions on reform proposals, e.g. about the introduction of new apprenticeships or modernisation of existing ones.

⁽⁴⁴⁾ In Austria, three different types of feedback mechanism have been identified. A 'liberal' model exists for the Austrian HE VET system, in which research plays an integrated role and education providers (polytechnics) are obliged to commission research. A 'statist' model is in place in the school-based VET system, for which research is commissioned by the Ministry of Education on ad hoc basis. Finally, there is a 'coordinated' model of apprenticeship referred to in this chapter (see the Austrian country overview).

Among the other institutions that inform feedback in the dual system, the Public Employment Service Austria (Arbeitsmarktservice Österreich) (AMS) is also significant, particularly its AMS-skills barometer. Established in 2002 as the first comprehensive nation-wide online labour market information system in Austria, it includes information on jobs, and provides career guidance and counselling (Humpl and Bacher, 2012).

To strengthen the findings of the AMS-skills barometer, the AMS recently established the so-called AMS standing committee on new skills. This committee organises quarterly discussions between experts, company representatives and education providers in 10 different sectors and is designed to identify and anticipate new trends in the labour market. After three years (2010-12), the AMS has agreed to continue providing resources to the standing committee, so that it can prolong its work analysing skills needs in occupation areas ('clusters') and organising training activities for the unemployed based on recommendations drawn from these clusters.

Although originally established with the aim of producing recommendations on training for the unemployed, this committee is relevant to this study. Some interviewees expressed the opinion that the committee could develop further into a more structured information resource with a greater impact on the VET system: the committee should adjust its structure to become more of an 'integrated institutional framework for labour market and skills requirements' with repercussions for the design and adjustment of VET programmes. However, the standing committee cannot be subsumed under this part of the dual system in Austrian VET because it functions outside of the partisan politics of industrial relations, which dominates the exchange on IVET and CVET in Austria. Further, participation in the standing committee is voluntary; its recommendations have value only in terms of their power of persuasion and have no binding authority over any of the stakeholders. In this sense, the committee differs from various other bodies responsible for feedback between education and the labour market.

Central analysis and prognoses (CAP) in Danish VET

CAP was one of the initiatives developed that followed the Committee for Securing the Future of VET (Udvalget til Fremtidssikring af Erhvervsuddannelser). Since 2009, CAP has financed a series of research projects with the aim of studying important labour market tendencies which may be neglected by the existing feedback mechanisms that otherwise determine the shape of Danish VET. CAP primarily aims to produce evidence of the need to establish new VET programmes and make adjustments to existing ones. Each

year CAP – counselled by the National Council for Vocational Training – defines predominant themes ⁽⁴⁵⁾ that cut across the interests of specific trade committees, such as welders and lorry drivers ⁽⁴⁶⁾. This appears to be the reason why CAP research is primarily read and used strategically on an aggregated sector level. Given their cross-sectoral and cross-trade nature, CAPs do not inform any specific feedback mechanism in Danish IVET. Therefore, few CAP studies target the trade committees directly.

For individual specific trade committees, only research that is explicitly initiated by the committee itself has direct impact on its VET provision or on its handling of issues such as apprenticeship dropout, innovative competences and cooperation between enterprise and VET colleges. Research commissioned by the specific trade committees is used more systematically than the broader CAP projects, hence such projects are sometimes viewed as inconsequential for the challenges faced by a specific trade committee. As one interviewee commented ‘of course we read the CAP reports, but their importance to the lorry drivers is not always evident for us’.

These more tailored studies are typically commissioned when the trade committees discuss and draw up compulsory development accounts, which must be delivered each year to the Ministry of Education. Both CAP and specific studies commissioned by individual trade committees are discussed at joint meetings of representatives for employers’ associations and trade unions. Conclusions based on these studies are made jointly, with the emphasis on reaching consensus.

According to our interviews, at the end of its five-year trial period, CAP has now cemented a position as the only body conducting regular research in matters of VET anticipation and monitoring. All trade committees, however, are only

⁽⁴⁵⁾ Examples of studies conducted during the first four years include: *future training in IT, telecommunication and media (Fremtidens uddannelser i IT, tele og media)*; *the training capacity of companies in the mercantile area (Virksomhedernes uddannelseskapaletet på det merkantile område)*; *skills for growth: analysis of the administrative professional competences in the future (Kompetencer til vækst – Analyse af den administrative faglighed i fremtiden)* (Ministeriet for Børn og Undervisning, n.d.).

⁽⁴⁶⁾ The case study interviews revealed that VET for lorry drivers counts as one out of 10 national standards set by the Transport Training Board (Transporterhvervets Uddannelser). VET for welders is a short ‘step-out’ VET of one year and a half in the frame of the longer VET for smiths, which is covered by other VET schemes in the manufacturing sector under the responsibility of the Secretariat of the Industrial Vocational Educations (Industriens Uddannelser).

‘morally obliged’ to be acquainted with the previous year’s CAP studies before submitting their annual development accounts. Further a trade committee may submit applications to CAP to finance a specific analysis to inform its own strategy and, simultaneously, generate material for the annual development account. When a trade committee asks CAP, or any other research body, to conduct such studies, this is on an ad hoc basis. There is no requirement for trade committees to substantiate their development accounts by drawing on research (or anticipation/forecasting) reports.

The fact that the trade committees sometimes make use of CAP to finance such research and wish to bolster their development accounts through studies of any kind, leads to two general observations on the formality of CAP as a feedback mechanism in Danish IVET:

- (a) the trade committees consider CAP an appropriate institution for providing input on strategic development in trades;
- (b) the trade committees give importance to the development accounts submitted to the Ministry of Education by, if necessary, expanding the annual reporting with their own studies/analyses, i.e. on forecasting/anticipation.

Therefore, in spite of the voluntary and ad hoc nature of the research, it indicates institutionalisation of such activity within the Danish IVET system.

Key findings: comparing the Danish CAP to the Austrian AMS standing committee on new skills

Apprenticeship systems in Denmark and Austria have similar feedback mechanisms (see Section 4.4) characterised as coordinated models and, therefore, requiring comparable research needs. In both systems, research initiated directly by the trade committees (Denmark) or the BBAB (Austria), is perceived as relevant by major stakeholders and has a direct impact on VET content when related to specific occupation(s) or concrete issues, such as lowering drop-out rates during the apprenticeship period, cooperation between enterprises and VET colleges, stimulating innovative competences, etc. This sort of research is carried out on an ad hoc basis by the CAP in Denmark, or the education research institutes of the social partners in Austria.

In Denmark, CAP research is only dealt with systematically on an aggregate level, where all VET schemes and all trade committees for a particular sector are coordinated. However, CAP research is perceived as less influential in shaping the content of VET. In Austria, research at this level is less intensive and more occasional. This paucity is only partly compensated for by the AMS skills

barometer and its AMS standing committee on new skills (an initiative of the AMS). CAP and the AMS standing committee are characterised by a low degree of formality:

- (a) both are based on voluntary participation;
- (b) both propose rather than determine skills trajectories and policies;
- (c) both provide secondary source information to statutory bodies in the dual system;
- (d) both are consultative and do not issue binding recommendations;
- (e) both are more ad hoc than regular.

Neither 'institution' constitutes a separate feedback mechanism at national level in their current forms. However, in contrast to the AMS standing committee, the CAP is more focused on VET, more research-oriented, better resourced and has a stronger impact on the planning of IVET.

Nevertheless, CAP and the AMS standing committee could develop into providing research for VET planning if they focus strictly on a more factual insight into the labour market, rather than broad projections of skills trends and competence. If this could be achieved, these institutions may gradually contribute to determining skills trajectories and policies in their respective countries as separate feedback mechanisms, playing a role comparable to that which research plays in the renewal of the Austrian system of polytechnics.

A major conclusion from these observations is that research – if it is specific enough and directly related to the particular VET provision in question – has an impact on existing institutionalised feedback between VET and the labour market and improves the quality of change processes. While this type of research cannot be managed and financed by one central actor, investing instead in fewer, but broader and more general analyses, is not an ideal solution.

ANNEX II. List of interviewees

Table 9 List of interviewees

European level	European Trade Union Committee for Education	Roman, A.
	DG for Education and Culture	Scatoli, C.
Austria	Federal Ministry of Education, the Arts and Culture (<i>Bundesministerium für Unterricht, Kunst und Kultur</i>)	Horschinegg, J. Head of department strategy and quality development in vocational training
	Austrian Chamber of Commerce	Freundlinger, A. Officer for dual system, managing director of the grants committee
	Institute for Research on Qualifications and Training of the Austrian economy	Mayr, T. Director
	Austrian Institute for Research on Vocational Training	Löffler, R. Project manager
Bulgaria	National Agency for VET	Pushkarov, D. Managing director
	Ministry of Education, Youth and Science	Deykova, V. Head of the unit policy development, analysis and assessment
	Ministry of Labour and Social Policy	Petkova, I.
	Confederation of Independent Trade Unions of Bulgaria	Simeonova, U. Executive secretary
	Bulgarian Industrial Association	Simidchieva, D. Director for VET
Denmark	One representative of the Council for VET	Wished to remain anonymous
	Two representatives of local education committees	Wished to remain anonymous
	Two representatives of the Trade Committee	Wished to remain anonymous
	Two researchers in the department of education	Wished to remain anonymous
	The Transport Training Board	Wished to remain anonymous
	The Secretariat of the Industrial Vocational Educations	Wished to remain anonymous

England	UK Commission for Employment and Skills	Perryman, S. Executive director
	Trade Union Congress	Murray, I. Senior policy officer
	Institute of Education, University of London	Unwin, L. Professor
	Construction skills	Gooderson, N. Senior manager
	Institute for Work-based Learning, Middlesex University	Barrenboer, D.
Estonia	VET and adult learning department, Ministry of Education and Research	All, K. Advisor lifelong learning
	Foundation INNOVE, vocational education agency	Piiskop, K. Head of centre
	Estonian Trade Union Confederation	Toomsalu, K. Wage secretary
	Estonian Chamber of Commerce	Randma, T. Counsellor of education
	Estonian Employers' Confederation	Sepp, M. Lawyer
Finland	Ministry of Education, Science and Culture	Riihimäki, T. Counsellor of education
	Finnish National Board of Education	Kärki, S. Head of qualifications unit
France	Centre for Employment Studies [centre d'études de l'emploi]	Dayan, J. Interim director
	Independent consultant for VET	Charraud, A.
	Centre for Research on Qualifications	Lopez, A.
	Centre for Research on Qualifications	Padden, J.
	Education Commission	Petel, F. Member
Germany	Federal Institute for VET	Hippach-Schneider, U. Researcher and project manager
	Standing conference of the Ministers for Education and Cultural Affairs of the <i>Länder</i> in the Federal Republic of Germany	Päßler, S. Secretary
	Federal Institute for VET	Zinke, G. Researcher and project manager
	State Institute for School and Educational Research Munich	Renner, G. Department manager for VET

	State Institute for School and Educational Research Munich	Hochleitner, T. Deputy department manager for VET
	Department VII, 8, school laws for vocational full-time schools in Bavarian State Ministry of Education and Cultural Affairs	Brune, M.
	Federal Institute for VET, department for commercial and business services professions and media	Peppinghaus, B. Researcher and project manager
	Centre for Expertise in VET, department for education policy, strategy projects and initiatives	Ball, C. Researcher
	Ministry of Education, Science, Continuing Education and Culture of the Land Rhineland-Palatinate (Rheinland-Pfalz)	Oswald, D.
	German Construction Confederation	Vater, C. Responsible for the construction sector
	Standing conference of the Ministers for Education and Cultural Affairs of the <i>Länder</i> in the Federal Republic of Germany	Roser, G. Head of vocational education, training and sports department
	German Industry Board for Vocational Training	Rulands, H. Responsible for commercial and technical trade occupations
	Industry Union Construction, Agriculture and Environment	Zimmer, K. VET specialist in the executive board
	Federal Institute for VET	Padur, T. Research associate, industrial, technical and scientific occupations section
	Chambers of Commerce and Industry	Uflaker, V.
Hungary	Hungarian Institute for Educational Research and Development	Mártonfi, G. Expert and senior researcher in the field VET
	Szent László, regional integrated vocational training centre	Vida, L. Managing director
	Diószegi Sámuel vocational school, Debrecen	Biri, S. Educational director
Ireland	Economic and Social Research Institute	O'Connell, P. Research professor

	Further Education and Awards Council	Sweeney, R. Head of migration awards and standards
	Irish Congress of Trade Unions	Rigney, P. Head of research
Netherlands	Centre for Expertise in VET	Van der Meer, M. Senior researcher
	Royal Association MKB-the Netherlands	van Erp, G. Secretary for general economic policy, education and innovation
	Dutch Trade Union Federation	Coenen, I. Senior policy officer
	Chamber of Commerce of the Republic of Slovenia	Dekleva, J. Head of the expert committee for occupational standards at the Expert Council for VET
	Knowledge centre	Jensen, J. Consultant
	Knowledge centre	Van Wezel, R. Manager
	Foundation for Cooperation on Vocational Education, Training and the Labour Market	Plijnaar, S. Senior manager
Spain	Canarian Service of Vocational Training	Rodriguez, J.
	National Institute for Qualifications	Barahona, R. Head of information and resource management
	Galician Institute of Qualification	Fernandez, M.M. Director, Galician education department in the General Council of Vocational Training
	Trade Union Confederation of Workers' Commission (Confederación Sindical de Comisiones Obreras)	Dongil, J. Responsible for vocational training
	Direction of Mobility of Galicia	Conde, D. Chief of studies and juridical support
	Foundation of Transport and Formation	Carron, I. Technician

Sweden	Swedish School Inspectorate	Holmberg, P. Responsible for quality assurance in apprenticeship in IVET
	Swedish National Agency for Education (Skolverket)	Nordlund, E. Director of the Swedish National Commission on Validation
	Swedish Painters' Union	Wished to remain anonymous, official
	Swedish Construction Industry Training Board	Wished to remain anonymous, official
	National programme Council for Building and Construction	Wished to remain anonymous, member
	National programme Council for Building and Construction	Wished to remain anonymous, member
	Swedish School Inspectorate	Wished to remain anonymous, official
	Vocational programmes in commerce and administration at upper secondary vocational school in Malmö	Wished to remain anonymous, rector
	Upper secondary vocational school in Malmö	Wished to remain anonymous, coordinating director

Source: Cedefop.

ANNEX III.

List of experts responsible for the country overviews

Table 10 List of country overviews

Country	Institution	Consortium responsible
Austria	Geiger, G., Kunz, S. (3s)	3s Research Laboratory
Bulgaria	Kirov, V. Institute for the Study of Societies and Knowledge	Tallinn University
Denmark	Clematide, B. Kubix Research and Development Workplace Learning and VET	Consultur
England	Etherington, D. Middlesex University	Middlesex University
Estonia	Helemäe, J., Tamm, A. Tallinn University	Tallinn University
Finland	Ure, O.B., Räisänen, A. Consultur	Consultur
France	Etherington, D. Middlesex University	Middlesex University
Germany	Schwenk, S., Geiger, G. (3s)	3s Research Laboratory
Hungary	Lannert, J. Tárki-Tudok, centre for knowledge management and educational research Inc.	Tallinn University
Ireland	Etherington, D. Middlesex University	Middlesex University
Netherlands	Etherington, D. Middlesex University	Middlesex University
Poland	Helemäe, J. Tallinn University Rybińska, A. Instytut Badań Edukacyjnych, Warsaw	Tallinn University
Slovenia	Ivančič, I. Institute for Developmental and Strategic Analysis	Tallinn University
Spain	Dick, D., Bacher, T. (3s)	3s Research Laboratory
Sweden	Olofsson, J., Ure, O.B. Consultur	Consultur



CEDEFOP

European Centre for the Development
of Vocational Training

Renewing VET provision

Understanding feedback
mechanisms between initial VET
and the labour market

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Renewing VET provision

Understanding feedback mechanisms between initial VET and the labour market

TI-BC-13-008-EN-N

A strong VET system is increasingly seen as essential to overcoming the current economic crisis in Europe. VET is seen as a powerful tool to assist in balancing labour market inefficiencies, increasing youth employment possibilities, and reducing skills mismatch. Its inherent flexibility and closeness to the labour market place VET in a good position to contribute to a faster economic recovery and long-term sustainable development. However, crucial for this role is continuous and systematic VET renewal that assures its relevance for the labour market. This publication explores 15 European national approaches to feedback mechanisms between VET and the labour market. It illustrates the diversity of solutions currently applied across Europe and how they are embedded in national traditions and education philosophy. The study asks three fundamental questions: how inclusive are national mechanisms for feedback between the VET system and the labour market; how responsive are existing mechanisms; and how transparent?

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