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The role of  
qualifications in  
governing  
occupations and  
professions





# The role of qualifications in governing occupations and professions

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# Foreword

Numerous European politicians, in their efforts to overcome the current economic crisis, have stressed the need to deregulate labour markets. Excessive regulation, it is claimed, limits the ability of society to adapt to new economic, technological and social realities and risks ‘locking’ countries into outdated models of development and growth. The need for deregulation has been stressed in particular for southern European Member States and is a core element of the conditions set out for economic rescue in some of these countries.

The Cedefop study presented in this publication is relevant to this debate. It analyses how qualifications are used to regulate access to occupations in 10 countries and five economic sectors.

First, the study confirms that qualifications play a critical role in determining the minimum level of knowledge, skills and competence required for an occupation or job. This central role of qualifications in regulating labour markets has been partly overlooked by policy-makers and researchers. While the debate on labour market flexibility has been primarily linked to individual job-protection (how easily can somebody be fired?) and salaries (what is the minimum pay?), little attention has been paid to the conditions for entering an occupation. The steady growth of formal education and training in all European countries has increased the importance of qualifications. Despite the critical role played by personality and experiences gained outside formal education, requirements for qualifications represent a first (and increasingly higher) hurdle for access.

Second, the study illustrates that countries pursue different national strategies in using qualifications to regulate the labour market. For instance, Sweden is the country (among the 10 studied) with the most liberal approach, regulating entrance to only 30 occupations. Countries like Lithuania and the UK are also characterised by a low degree of regulation. At the other end of the scale we find countries like Greece where the intensity and complexity of regulation is much stronger.

Third, several countries are undertaking political reforms aimed at deregulation of entry requirements. It might still be too early to conclude whether actual deregulation will follow; in some countries processes seems to focus on clarifying existing regulations rather than reducing them.

Fourth, and critically important for future strategies in this area, governance decisions at national level seem to matter less than those at sector level. The comparison of the five sectors (health and social work, electricity, gas and water, chemistry, transport and sports) indicates important differences of intensity and

form of regulation. A strong influence of public authorities (nationally and internationally) prevails in health and social services and transport and logistics. However, little intervention from public authorities in the case of the other sectors covered does not mean that there is a lack of regulation. Both in electricity, water, gas and waste, and in chemicals, rubber and plastics, sectoral players impose strict regulations on the qualifications required to access and practise a job. In some cases these are linked to health and safety issues but, increasingly, we can observe that qualifications requirements are introduced with reference to competence and quality assurance.

Fifth, international agreements influence the way qualifications regulate labour markets. For example, EU Directive 2005/36 plays a crucial role in the health and social sector. In transport and logistics, European and international agreements related to aviation and merchant shipping define in detail what is required for somebody wishing to enter or practise an occupation. There are indications that sectors are increasingly seeking international agreements, often not involving (national) public authorities. An interesting case is the sports sector, where international agreements on qualifications are, in some cases, challenging efforts to protect national labour markets from foreign workers.

Cedefop has systematically analysed the changing character and functions of qualifications in recent years. The current study draws attention to the 'currency' character of qualifications, which reflects whether a qualification can be exchanged for a job. This partly depends on the form and intensity of regulation, with health and transport occupations inaccessible without a qualification. Decisions to use qualifications to regulate the labour market are only exceptionally decided 'top down' by national authorities. The examples from electricity, gas and water and chemistry show that regulations are more likely to be introduced 'bottom up', e.g. by sectoral stakeholder initiative. This underlines the need to apply the term regulation with care, considering that regulation practices operate at different levels (international, national and sector) and reflect the interests and decisions of different stakeholders.

Discussion on deregulation of the European labour market should include the issue of qualifications:

- (a) there is a need to develop and protect the use of qualifications as a way to regulate health and safety;
- (b) there is a need to question the use of qualifications as a means to protect particular interests, creating barriers to innovation and the use of new but relevant knowledge, skills and competences.



The discussion on deregulation has to strike a balance between these two concerns. The shift to learning outcomes for defining and describing qualifications is important; better judgement on the content and profile of a qualification can allow newcomers and outsiders to enter. Qualifications provide important information and a further strengthening of their role may help to open up the labour market to wider qualifications scope.

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## Executive summary

Qualifications are commonly seen as one of the core instruments for governing and regulating the labour market. By being linked to access to occupations and professions, qualifications define what a person needs to know and be able to do to carry out a certain activity. As the likely result of continuing professional development, qualifications act as stepping stones for individual career paths. Various reasons, from health and safety to consumer protection and quality assurance, are given to justify the use of qualifications in the governance of occupations and professions. In addition to public interest motivations, they might also be used to defend the private interests of professional groups and bodies.

Depending on the sector and occupation, national legislation, regulation or other kinds of agreements determine which qualifications are required to practise specific occupations. Traditionally, governments entrust the responsibility for defining the regulatory function of qualifications to centralised competent bodies, supported by social partners and professional associations. Such delegation and cooperation help build trust in the value (currency) of qualifications. However, evidence from Cedefop's research highlights that direct regulation of occupations and professions through qualifications seems to be diminishing, being replaced by a weaker and more fluid relationship between qualifications and the labour market. Some aspects underpinning this development may include:

- (a) the emergence of new awarding bodies at sector and international levels, challenging the traditional gatekeeper role of national governments;
- (b) rapid technological and economic change, requiring constant modernisation of qualifications and occupations;
- (c) the growing importance of transversal skills, emphasising cross-sectoral and intra-occupational competences and challenging the one-to-one relationship between qualifications and occupations;
- (d) the emergence of new occupations and the constant redefinition of existing occupations and professions;
- (e) growing resistance to legal or administrative regulation of the economy in general and of the relationship between qualifications and occupations more specifically.

By analysing current developments and emerging trends in 10 European countries and five sectors <sup>(1)</sup>, the study contributes to increased understanding of how the relationship between qualifications and the labour market is changing and, more specifically, the role of qualifications in governing access to, and practice within, occupations and professions. This study also aims to contribute to the European Commission's work on the European multilingual taxonomy of skills, competences, qualifications and occupations (ESCO) <sup>(2)</sup> by looking into the impact of qualifications on occupations and professions in the labour market.

## Key findings

The study presents a picture of national regulatory frameworks in the 10 countries examined, as well as examining the current situation at sectoral level for selected occupations and professions. While common trends and differences across countries and sectors are identified, efforts are also made to point towards factors explaining these differences and commonalities.

The general regulatory context of the countries examined differs significantly in intensity of labour market regulation and the role of social partners in the governance framework. For example, the United Kingdom (UK) generally imposes little binding public regulation on labour market actors, while in Greece regulation is stronger. In Lithuania, structures of social dialogue are weaker and social partner influence in policy making processes lower. The system in the Netherlands is largely based on corporate structures, similarly to Sweden, with clearly defined division of labour and a high degree of social dialogue.

There are also similarities. In all countries examined, overarching qualifications frameworks have been set up or are under development, as a result of the implementation of the European qualifications framework (EQF) (European Parliament and Council of the European Union, 2008) <sup>(3)</sup>. Most countries are also

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<sup>(1)</sup> Countries: BE, DE, EL, ES, FR, LT, NL, SI, SE, UK. Sectors: health and social work, electricity, water, gas and waste, chemicals, rubber and plastic, transport and logistics, sports.

<sup>(2)</sup> ESCO will help to describe qualifications in terms of learning outcomes in line with the EQF and the national qualifications frameworks (NQFs) which are being developed in all European Union (EU) countries.

<sup>(3)</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF> [accessed 17.7.2013].

increasingly focusing on the labour market relevance of qualifications, using learning outcomes to describe the content of qualifications for occupations and professions. This increasingly supports the feedback loop between labour market and education and training by using occupational profiles as the basis of qualifications portfolios and school curricula. Finally, several countries are undergoing reform, e.g. Greece, Spain and Slovenia, aiming to align their qualifications systems better with labour market needs and to reduce the intensity of labour market regulation.

While these national characteristics are important in understanding regulatory traditions, Cedefop's research suggests that often the characteristics of regulation at sectoral/occupational level do not correspond to the national picture. The study clearly shows that sectoral factors such as the nature of the work, sectoral traditions and organisational structures are better predictors of the regulatory situation in a sector than national differences. Acknowledging some country differences, the sectors covered in this study can be characterised from an overarching perspective across the different countries.

The health and social work sector, studied by looking at the professions of general practitioner (GP), clinical nurse and social worker, is characterised by the following aspects which apply more or less to all countries examined:

- (a) strong regulation at macro (national and EU) level, determining qualification requirements for entry into the profession, categorised as licensing systems;
- (b) comparatively strong systems of continuing professional development, enshrined in legal and professional obligations for practising professionals;
- (c) considerations of patient safety and quality of services prevailing in all countries as a motivation for regulation;
- (d) strong role for sectoral organisations, e.g. medical orders and professional associations, in the management and administration of national licensing and continuing professional development;
- (e) strongest framework applying to doctors, regulation of social workers more milder;
- (f) some changes in qualifications and task reallocation taking place, but no deregulation or decreasing importance of qualifications.

The electricity, water, gas and waste sector, which is not always defined in this way at country level, was examined by looking at the occupations of plumber, heavy press worker and welder. Based on the information collected at country level, the following aspects can be defined as key characteristics of the sector:

- (a) relatively low intensity of regulation on labour market entry, as no qualification requirements are stipulated;



- (b) high importance of general regulation, e.g. occupational safety and health (OSH), in determining access to the labour market, as liability plays a role in the importance of qualifications;
- (c) general qualifications framework applies, with specific qualifications existing for the occupations examined, albeit with some different definitions and unclear delineation among occupations;
- (d) strong role of sectoral organisations in both regulation and qualification management;
- (e) pragmatic use of qualifications at micro level among employees and employers contributes to a well-functioning system of labour market and education;
- (f) the welding sector developed an international qualification and training infrastructure.

The chemicals, rubber and plastic sector, in which we examined the regulatory framework for pharmaceutical and toiletry products machine operators, chemical engineering technicians and, again, welders, has the following characteristics:

- (a) relatively unclear pattern of regulation and education provision, no unitary model of governance;
- (b) weakly regulated by licensing systems, overarching national regulatory and educational frameworks determine content and role of qualifications;
- (c) qualifications are considered important because of the high knowledge-intensity of the work;
- (d) continuing professional development is important in supporting further specialisation;
- (e) the welding sector has a strong sectoral framework in place, this time applicable to plastic (polythene) welding.

In contrast to chemicals, rubber and plastic, the transport and logistics sector, examined by looking at the occupations of heavy truck driver, air traffic controller and ship's engineer, has strong sectoral characteristics, determined by the following aspects:

- (a) strong regulatory framework, defined through European or international legislation;
- (b) strict licensing requirements for entry into the occupations, including demands on practical training and experience as well as additional criteria such as age and health;
- (c) strict requirements regarding continuing professional development;

- (d) strong role of sectoral organisations in implementing the regulatory framework, under the auspices of national authorities, in some cases entirely separate from public vocational education and training (VET) structures;
- (e) little room for national and sectoral actors to influence or change the international framework of regulation;
- (f) strong trust in qualifications at micro level, motivated by enforcement and concern for safety and security;
- (g) all occupations are subject to change triggered by legislative and technological developments, addressed by continuing professional development.

In the sports sector, the occupations of ski instructor, fitness instructor and referee were analysed. This is, in many ways, an emerging sector, its level of organisation often at an early stage of development. As a result, the sector does not display a unified picture, though the following aspects can be identified across countries and occupations:

- (a) either having regulating procedures and structures (i.e. fitness instructor) or governed by sectoral organisations themselves (i.e. referee);
- (b) education largely left to private actors, as public systems are only starting to provide courses;
- (c) safety concerns and international competition leading to strict entry requirements for ski instructors;
- (d) opportunities for sectoral actors to develop own initiatives, including international ones, such as the European Health and Fitness Association (EHFA);
- (e) increasing trend towards official qualifications available to employees and trainees;
- (f) possible deficit of compliance with regulation (national and sectoral) at micro level (i.e. fitness instructor due to the absence of consumer pressure).

## Systems of governance

The empirical information collected supports some overarching conclusions on the role of qualifications in the governance of occupations and professions. The overall conclusion is that sectoral factors pre-empt national factors when explaining differences in regulatory frameworks. Departing from this position, the study further identified four general types of governance:

- (a) traditional sector-based licensing,
- (b) international sector-based licensing,
- (c) generic national governance,
- (d) independent sectoral governance.

The first type, traditional sector-based licensing, can be found in the health care sector of most countries. It is characterised by strict labour market entry requirements, backed up by official registration of professionals and demands for employee continuing education and training. The requirements are in line with those of European legislation but the system is organised nationally and professional organisations are involved in its management and implementation and have been so traditionally in sectoral self-management. At micro level, the compliance is high, backed up by both professional internationalisation of the licensing system and enforcement.

The second type, international sector-based licensing, uses similar principles but lifts these to the international level, as in occupations in the transport sector. In this system, international agreements determine demands on occupational practitioners in the sector, regarding initial and continuing education, possibly registration, and physical fitness or age restrictions. Since these are international agreements, they also specify the way they need to be implemented nationally through institutional arrangements. The core objective of international sector-based licensing is to create a minimum level of service quality in the sector, motivated by considerations of safety and security.

The third type, generic national governance, is an umbrella term for cases in which no specific regulation applies to the occupation or sector in question, but the national VET system provides education and training which mirrors occupations in the sector. National differences are most pronounced in this system, since the outcome depends on the qualifications structure and the way the labour market is organised. Such a situation is found in the sector covering electricity, water, gas and waste. As national governments do not see a need to regulate entry to, and practice in, a specific occupation, market mechanisms determine whether trainees should follow a specific educational route or whether occupational learning and on-the-job training are preferred. The importance of formal education is determined by the quality and trust in the education system, the economic situation and the resulting labour supply and demand.

Finally, the fourth type, independent governance, can be found in a sector which is usually governed by a national system with low intensity regulation. In this case, sectoral actors may decide to take initiative to set up an additional, international system of training, backed up by national institutional structures to increase the quality of occupational practice. Independent private structures of training and certification are set up and coordinated across the participating countries. Welding is a good example: national public and international private structures coexist in an environment of low regulatory intensity, so sectoral actors can choose which training routes they prefer.

Another important element in the governance of occupations and professions is the role of Directive 2005/36/EC (European Commission, 2013a) <sup>(4)</sup> on the recognition of professional qualifications. The directive forms part of the legislative context within which qualifications are used in Member States and covers the mutual recognition of qualifications that give access to occupations and professions. Implementation of the directive has led to more structured approaches to occupational regulation as the need for several countries to compile a list of regulated professions produced a more systematic approach to the labour market regulation.

EQF developments and the implementation of NQFs had a strong structuring influence on countries' qualifications systems, showing how qualifications relate vertically and horizontally. By introducing learning outcomes as the main principle for defining and describing qualifications, NQFs help clarify what employers can expect from somebody holding a particular qualification. This contributes to strengthening the connection between qualifications and occupations.

## Developments and changes

While these systems of governance allow us to categorise sectors or countries, they do not yet say much about the developments and changes taking place in the use of qualifications. The central question is whether qualifications are losing importance due to changes in society, economy and the labour market. This study confirms the general trend towards increasing labour market focus on qualification governance. One key aspect is the varying involvement of labour market actors in the governance systems. Employer associations and professional groups are involved in both the design and management of qualifications and in the set-up and implementation of labour market regulation structures. By drawing up occupational profiles and formulating corresponding learning outcomes, labour market actors can contribute actively to connecting qualifications to occupational practice. Further, their involvement increases the acceptance of regulatory requirements, embedded in systems of self-governance and collective bargaining.

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<sup>(4)</sup> [http://ec.europa.eu/internal\\_market/qualifications/policy\\_developments/legislation/index\\_en.htm](http://ec.europa.eu/internal_market/qualifications/policy_developments/legislation/index_en.htm) [accessed 17.7.2013].

At the same time, input from educational institutions and reliable quality assurance and certification bodies is important for upholding the value of qualifications. Even in the case of independent systems of self-governance, e.g. in the UK or in the welding sector, these aspects continue to play an important role. As these systems are even more dependent on the value attributed to qualifications by end users, the quality and public image of the structures supporting them are of even greater significance. The fact that these alternative systems continue to be based on qualifications structures confirms the continued relevance of qualifications in labour market governance.

While the labour market orientation of qualifications can be confirmed, their diminishing use as an instrument of governance and their decreasing importance for employees in the workplace are not supported by the evidence collected for this study. Although in several countries the policy debate supports deregulation of occupations and professions, the cases examined in the study do not show strong signs of decreasing levels of deregulation. Fundamental reforms are under way, for example in Germany, Greece and Slovenia. While the general direction of these reform projects points towards deregulation of occupational entry and practice, it is not clear what the actual outcome will be. Especially in Greece, it seems the central objective of policy reform is more a clarification and cleaning up of the existing regulatory system than a purposeful reduction of regulation, though the removal of clearly unnecessary regulations is an important part of the process. Slovenia is also in discussion on the need for better rather than less regulation. Sweden is characterised by a more liberal approach: the Swedish constitution lays down the principle of freedom to pursue a certain profession and/or to engage in an economic activity, and holds that prescriptions and limitations to this right can only be set where this is necessary to protect public interest. Only some 30 professions are considered regulated (*skyddade yrken/reglerade yrken*) and are subject to legislation regulating entry. In Germany, the system of recognition of foreign qualifications (Cedefop, 2012e) <sup>(5)</sup> has recently been changed, trying to open up the German labour market to qualified employees from countries outside of Germany and outside of the European Economic Area (EEA).

Even where the use of qualifications for regulatory purposes is diminishing, this does not automatically lead to a less important role for them. As has been demonstrated, the importance of qualifications as actual proof of competence

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<sup>(5)</sup> <http://www.cedefop.europa.eu/EN/articles/19977.aspx> [accessed 17.7.2013].

which can be used on the labour market is not dependent on the level of regulation, but on the level of trust in the qualifications structure and the connected educational provision. Private initiatives aimed at improving service provision through systems of registration and certification can also take the place of official licensing, which might lead to the same amount of occupational restrictions as government licensing. In some sectors and occupations there has been a move from national to more international regulation, raising the question of what we mean by deregulation and what the alternative to regulation can be.

Another development that is thought to add pressure is the influence of technological and scientific change on the content of occupations and professions. However, this study does not confirm the picture that technological and scientific developments are changing occupations to an unprecedented extent. On the contrary, technological change has always been an important factor influencing occupational practice and the current rate of change does not exceed earlier experiences. Actors at all levels, from the national to the sectoral and including actual employers and employees, are used to integrating new technologies and scientific practices into both governance frameworks and daily practice at the workplace. The feedback loop between labour market and education allows qualifications to be used as a strong and flexible tool despite technological and scientific developments which may lead to changes in the occupations and professions. Further, frameworks of continuing professional development ensure that practitioners keep up to date with new professional practices and technologies.

The growing importance of transversal skills, e.g. the ability to learn, cultural awareness or creativity, may diminish the significance of specific qualifications linked to occupations. However, both at policy level and among end users of qualifications, research shows the emphasis on transversal skills comes as an addition to, and not in place of, the traditional emphasis on specific skills. The same is true for curricula, where transversal skills are added to specific skills as targets of learning. Occupational profiles and qualifications portfolios, along with general formulations of transversal skills, are also filled with detailed, technical descriptions of the core activities of the occupational practitioner.

## The role of qualifications

The main role of qualifications is as an instrument of communication, signalling a person's knowledge, skills and competences in a particular field and with regard to a specific occupation. A qualification shows an employer that a person is able to carry out specific activities needed for the task. By setting up functional

qualification systems linked to trusted educational structures, in which labour market relevance is guaranteed by using instruments such as occupational profiles set up by social partners, countries can support a good balance of qualitative and quantitative labour supply and demand.

In addition to this general system, qualifications are used as regulatory instruments. In several occupations, strict entry requirements are set to ensure that only people who have acquired the specific qualification (including diplomas, certificates, licences) may work in this occupation. In these cases, qualifications are seen as necessary, though not always sufficient, criteria for selection of employees and so determine a minimum level of competence for all occupational practitioners. Where the licence to practice is also connected to obligations for continuing professional development, the appropriate qualifications can also play the role of ensuring the continued relevance of workforce skills.

Qualifications can only fulfil this labour market role if the institutional structure supporting them elicits trust among the end users. In some situations, qualifications are trusted to such an extent that labour market actors actively support strong licensing systems, as they see these systems as providing the basis for a strong professional environment. In situations where strict regulation is combined with weak institutional structures, qualifications might be seen as legally necessary but practically irrelevant, and requirements may be disregarded after all. In situations where the trust in qualifications is high, however, strict licensing is not even necessary for micro level actors to acknowledge the importance of qualifications in assuring the quality of staff and services.

Overall, there is no alternative to the use of qualifications in the specific role they play in translating occupational activities into learning outcomes and vice versa.

## CHAPTER 1.

# Introduction

Modernising lifelong learning (LLL), and especially VET, is important for Europe to recover from the current economic crisis. An important challenge is how better to coordinate and govern education and training to ensure quality, relevance and inclusion.

Cedefop is increasingly concerned with the changing role of qualifications and how VET systems are governed and interact with other parts of education and training systems and the labour market. Insights gained through its activities allow Cedefop to support the debate on VET governance in Europe.

This study, on the role of qualifications in governing occupations and professions, builds on comparative data from several countries and occupational sectors. It provides a review of the different forms of regulation, how these are changing in the current economic and political situation – also due to technological and labour market developments – and discusses the implications for VET.

Qualifications are important in modern societies as carriers of information and value (currencies), extensively influencing the way occupations and professions are defined and regulated. By defining the minimum level of knowledge, skills and competence required by somebody holding a particular position, qualifications regulate access to, and conduct of, an occupation or profession. They also define, indirectly and/or directly, the status and/or entitlements of the existing members of the occupation or profession. Qualifications can thus be seen as an important instrument of governance, attributing substantial influence and power to those stakeholder(s) controlling them.

There may be many reasons for using qualifications as regulatory instruments, with health and safety as the most common. The professional conduct of pilots and medical doctors may easily affect the lives of their passengers and patients and it is widely accepted that regulation is needed. In areas where health and safety issues are less pronounced, concerns regarding the overall quality of products and services are common, frequently presented as being in the interest of consumers and customers. Sometimes we can observe that this concern for the general good is mixed with the more limited interests of particular stakeholders. This is an issue much discussed in relation to the



(relative) monopoly of some public sector professions in regulating and controlling access to, and conduct of, particular tasks.

The use of qualifications to govern occupations and professions is a highly politicised area with high levels of stakeholder involvement and potential conflict. This gate-keeping function has traditionally been upheld by national governments, strictly regulating the award of qualifications through delegation to designated institutions and systems. Such delegation of authority implies that professional associations (e.g. in medicine, psychology and aviation) and social partners (in VET) are given substantial influence over design and award of qualifications. This is the usual approach to guaranteeing the value of a qualification, the way their currency is underwritten. The extent to which qualifications directly govern and regulate occupations and professions is demonstrated by the EU directive on recognition of professional qualifications (2005/36). This directive covers more than 800 professions which Member States regulate and which can be pursued only if certain professional qualifications have been acquired.

By setting up functional qualification systems, linked to trusted education structures in which labour market relevance is guaranteed by using instruments such as occupational profiles set up by social partners, countries can support the balance of qualitative and quantitative labour supply and demand. Qualifications are also used as regulatory instruments. In several occupations, strict entry requirements are set to determine that only people who have acquired the specific qualification (including diplomas, certificates and licences) may work in this occupation. In these cases, qualifications are seen as necessary, though not always sufficient, criteria for employee selection and so determine a minimum level of competence for all occupational practitioners. Where the licence to practice is also connected to obligations of continuing professional development, appropriate qualifications can also ensure the continued relevance of workforce skills.

Qualifications can only fulfil this labour market role if the institutional structure supporting them elicits trust among end users. In some situations, qualifications are trusted to such an extent that labour market actors support strong licensing systems, as they see these systems as providing the basis for a strong professional environment. In situations where strict regulation is combined with weak institutional structures, qualifications might be seen as legally necessary but practically irrelevant, and requirements may be disregarded. In situations where the trust in qualifications is high, however, strict licensing is not even necessary for micro level actors to acknowledge their importance in assuring the quality of staff and services.

Depending on the sector and occupation, national legislation, regulation or other kinds of agreements determine which qualifications are required for practice in which occupations. Traditionally, governments delegate responsibility for defining the regulatory function of qualifications to centralised competent bodies, supported by social partners and professional associations: this engenders trust in the value (currency) of qualifications. However, Cedefop has noted the direct regulation of occupations and professions through qualifications seems to be diminishing, being replaced by a weaker and more fluid relationship between qualifications and the labour market. Several aspects might give rise to this development:

- (a) the emergence of new awarding bodies at sector and international levels, challenging the traditional gate-keeper role of national governments;
- (b) rapid technological and economic change, requiring constant modernisation of qualifications and occupations;
- (c) the growing importance of transversal skills, emphasising cross-sectoral and intra-occupational competences and challenging the one-to-one relationship between qualifications and occupations;
- (d) the emergence of new occupations and the constant redefinition of existing occupations and professions, again challenging the direct relationship between occupations and professions;
- (e) growing resistance to the legal or administrative regulation of the economy in general and of the relationship between qualifications and occupations specifically.

Within the framework of this research paper, the situation in 10 European countries and five sectors is examined to provide a perspective of the current state of affairs.

## 1.1. Methodology

To benefit from and build upon previous research on the topic of this study, extensive desk research was carried out that provided the conceptual basis for further analysis.

Following the desk research, case studies of 10 EU countries were carried out to collect empirical data on the current state of affairs. Using specified formats for data collection and interviews, the research team collected information on the general regulatory context of each country and on the situation in a selection of three sectors per country, focusing on three specific occupations per sector. Across the countries, five sectors were studied in detail. The selection of sectors, occupations and countries studied is presented in Table 1.

Table 1 **Sectors, occupations and countries analysed in the study**

<b>Sector</b>	<b>Occupations</b>	<b>Countries</b>
Health and social work	General practitioner Clinical nurse Social worker	Belgium-Flanders, France, Germany, Lithuania, Netherlands, Sweden
Electricity, water, gas and waste	Plumber Heavy press worker Welder	Germany, Greece, Lithuania, Netherlands, Spain, UK-England
Chemicals, rubber and plastic	Pharmaceutical and toiletry products machine operator Chemical engineering technician Welder	Belgium-Flanders, Greece, Slovenia, Spain, Sweden, UK-England
Transport and logistics	Heavy truck driver Air traffic controller Ship's engineer	Belgium-Flanders, France, Greece, Netherlands, Slovenia, UK-England
Sports	Ski instructor Fitness instructor Referee	Germany, Spain, France, Lithuania, Slovenia, Sweden

Source: Cedefop.

Interviews with stakeholders were carried out in all countries and sectors to get a good picture of the governance framework at national and sectoral level determining the content and role of qualifications on the labour market.

## 1.2. Definitions and key concepts

Defining the key concepts of the study is not an easy task, since the different conceptualisations of the key terms lie at the core of the research.

### Qualification

A qualification is defined by the European Commission as 'a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to a given

standard' <sup>(6)</sup>. According to this definition, a qualification is awarded by means of a certificate, diploma or other record. The term can apply to all kinds of attestation of competence at all levels, from initial to continuing education, and covering both entire courses of learning as well as partial or modularised outcomes.

A qualification is distinctly different from the concept of qualification that is adopted in different countries. It refers to a person being competent to carry out a certain activity but reflects a tangible formal document, not a person's state of being, and refers to the formal outcome rather than the process of becoming qualified. Only defined in this way can a qualification be seen as a regulatory instrument.

## Occupations and professions

Occupations are defined as 'a job or grouping of jobs involving similar content in terms of tasks and which require similar types of skills and competences' <sup>(7)</sup>. Profession is a professional activity or group of professional activities, access to which, the pursuit of which, or one of the modes of pursuit of which, is subject, directly or indirectly, by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications (European Parliament and Council of the European Union, 2005a). The term profession has been the starting point for important research addressing the relationship between education and training and the labour market.

In the most basic sense of the term, occupations are the equivalent of professions; an occupation can also be a profession. In common use, the term profession refers to a specific kind of occupation, one that distinguishes itself through a supposedly higher degree of specialisation, professional training and professional identity.

The degree of regulation or entry requirement cannot be used as a distinguishing feature, since occupations can certainly also be subject to regulatory provisions without necessarily being referred to as a profession. While it is the case that most so-called professions are subject to regulatory requirements, the use of the term profession is more of a social construct than a clear definitional distinction. This is made even more obvious by the fact that

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<sup>(6)</sup> Defined by the European Commission in its recommendation *The European qualifications framework for lifelong learning (EQF)*, 2008.

<sup>(7)</sup> Adapted from *Skillsbase*, 2010.

some European languages do not distinguish between occupations and professions at all. The difference between an occupation and a profession is not always absolutely clear and, in some countries, non-existent.

It seems advisable not to ascribe too much importance to the distinction between the terms occupation and profession. It may, however, be supposed that practitioners of a profession, where the term is used, have gone through a period of specialised training, often embedded in higher education structures, that they are part of a strong professional group of practitioners, and that they often attach a strong identity to their work. Socio-economic status and class distinction are also historically embedded in the definition. Following the same route, we only speak in this study of professions where the sector of health care and social work is concerned. In the other sectors, we do not make a distinction between an occupation and a profession, using occupation as a generally applicable umbrella term.

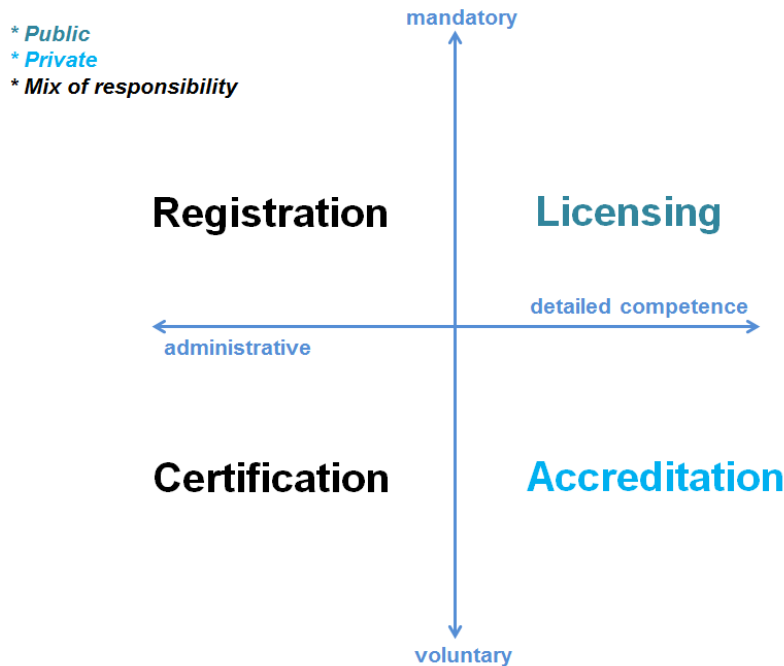
## Regulation, licensing, certification, accreditation, registration

The starting point of this study is the hypothesis that qualifications, in whatever form, are used as policy instruments to govern occupations and professions. First we are looking for relevant pieces and practices of regulation which have an impact on the way that people enter and practice in specific occupations. Regulation hereby refers to all 'actions taken on behalf of governments in the public interest to steer events and behaviour, rather than to provide or distribute goods or services' (Kogan and Unt, 2008).

However, it is not only the government that manages occupations. Professional organisations, economic sectors and companies themselves can influence the way that occupational practitioners enter and advance in their occupation. Many different terms are used for these practices, ranging from licensing to registration, to approbation and certification. Some of these are more mandatory and exclusive, others are based on voluntary commitments and market-based mechanisms. Some of them are based on public regulation, others on private actors, but most on both. Some specify detailed competence conditions, while others have a more administrative nature.

By using these three dimensions as defining axes, we can make a sound choice of distinguishing concepts, as depicted in Figure 1. We use the terms licensing, certification, accreditation and registration as they have been applied in a recent study in the UK (UK Commission for Employment and Skills (UKCES), 2011).

Figure 1 Regulation and governance instruments



Source: Cedefop (based on UKCES, 2011).

Using this two-dimensional model, we adopt the following definitions, based on the work of the UKCES:

- (a) licensing refers to situations in which it is unlawful to carry out a specified range of activities for pay, i.e. an occupation or profession, without first having obtained a qualification which ensures the practitioner meets the prescribed standards of competence;
- (b) certification refers to situations in which there are no restrictions on the right to practice in an occupation, but job holders may voluntarily apply to be certified as competent by a state appointed regulatory body;
- (c) registration refers to situations in which it is unlawful to practice without having first registered one's name and address with the appropriate regulatory body. Registration provides some form of legal barrier to entry, but an explicit skill standard is not provided;
- (d) accreditation refers to situations in which an individual may apply to be accredited as competent by a recognised professional body or industry association. Accreditation is distinct from certification in that the criteria governing accreditation and the procedures regarding enforcement are entirely the responsibility of the accrediting body rather than the state (UKCES, 2011).

Though we also encounter other terms in the empirical work, these should usually fit within the framework provided above. Once again, we try to look at the concept behind the terms rather than the label used, applying our own categorisation. We are looking at these terms in a labour market context and not in relation to the qualification process. This is especially important for the term certification, which is described in the context of qualifications in the following chapter. We need to be aware of the context within which we use these terms.

## CHAPTER 2.

# Conceptual basis

Cedefop has carried out extensive research into the way qualifications are defined, signalling the relevance of important changes in the conception of qualifications. Learning outcomes approaches, occupational standards and qualification frameworks are contributing to increased transparency, coherence, reliability, flexibility and relevance of qualifications and qualifications systems. The internationalisation of education and labour markets, with its consequences for qualifications systems, is a recurring theme in both triggering and promoting change. Developments in the manner in which qualifications are shaped are of great importance to how they are used. While the research so far has mainly focused on the influence of different tools on structuring qualifications, it is also interesting to examine the use of qualifications as tools to influence other areas.

Qualifications have many roles and meanings ascribed to them. Their obvious purpose is the documentation of outcomes, e.g. of skills or knowledge or competences. However, the practical role of qualifications can vary strongly. The Cedefop study *Changing qualifications* (Cedefop, 2010a) <sup>(8)</sup> identifies 40 different specific functions of qualifications. They can have societal roles in segmenting society into different groups on different levels. They can have individual roles by providing status to the holder of a qualification, but also in providing a sense of purpose and personal gain for learners and orientation for work and study. They can have economic roles in signalling levels of competence and skills in connection with the labour market. They can also play a role in policy making, as a tool to influence education systems and labour market management. This study focuses on the economic functions of qualifications.

In a rapidly changing economy, the link between education/training and work is an essential challenge for European countries. As is the case with qualifications systems, labour markets and education systems in different countries need to be transparent and coherent to make international mobility possible. Technological and scientific developments create a situation where not only those entering the labour market, but also those in steady employment, need

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<sup>(8)</sup> [http://www.cedefop.europa.eu/EN/Files/3059\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/3059_en.pdf) [accessed 17.7.2013].

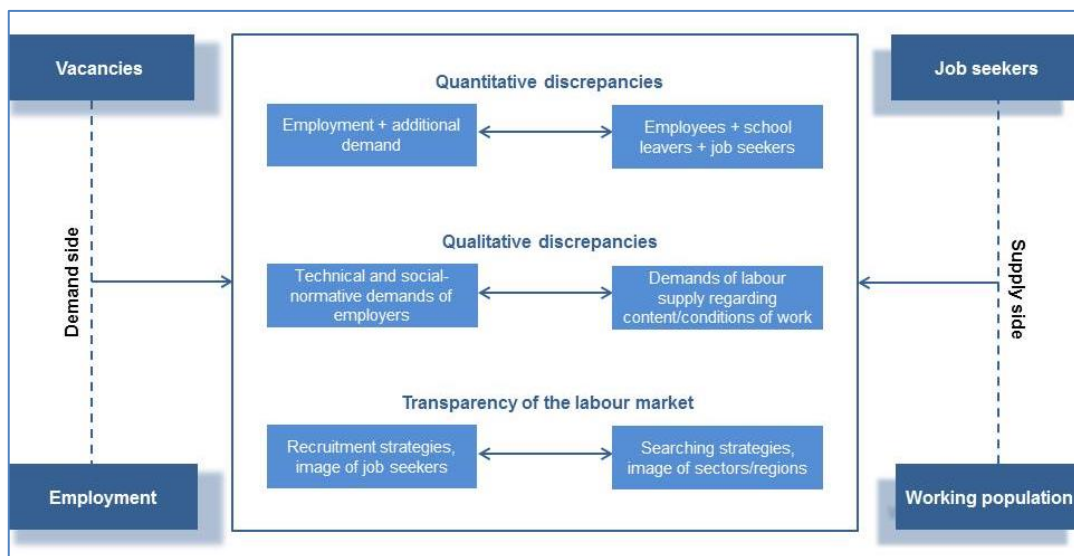


to keep learning to be able to carry out their work, introducing the need for flexibility in all areas.

Many countries are facing quantitative and qualitative discrepancies between labour market supply and demand. In some cases, the number of vacancies that need to be filled does not correspond to the number of people entering the labour market, resulting in high unemployment or labour shortages. In others, vacancies cannot be filled by those people looking for a job: sectors needing workers cannot find people who have acquired the necessary skills and competences. Sectors where there are no vacancies may have too many qualified workers, leading to unemployment, labour shortages in specific sectors, and an inefficient economy (Cremers et al., 2011). Cedefop investigates skill mismatch and skills obsolescence in Europe to help policy-makers detect such problems and prevent them (Cedefop, 2012c) <sup>(9)</sup>.

These dynamics are shown in Figure 2.

Figure 2 **Labour market discrepancies**



Source: Cedefop (based on Panteia/Research voor Beleid, 2011).

Because of the potentially adverse effects of these discrepancies, efforts are made to coordinate labour supply and demand (Wieling and Borghans, 2001). Understanding the dynamics of skill mismatch is a crucial pillar of Cedefop's work

<sup>(9)</sup> [http://www.cedefop.europa.eu/EN/Files/9070\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/9070_en.pdf) [accessed 17.7.2013].

on skills in the European labour market (Cedefop, 2012d) <sup>(10)</sup>. Operating at the interface between education/training and work, qualifications play a crucial role in these efforts. An employer who is looking for employees needs to target his search; a labour market which has been structured along levels of qualification enables the employer to preselect the pool of potential applicants. Job seekers need to be able to apply the same logic the other way around. Looking at the employment options available they can match their own level of qualification with the corresponding segment of the job market. Qualifications frameworks help both employers and employees structure the otherwise overwhelming labour market. The demarcations can be flexible, but qualifications divide the supply and demand into different segments.

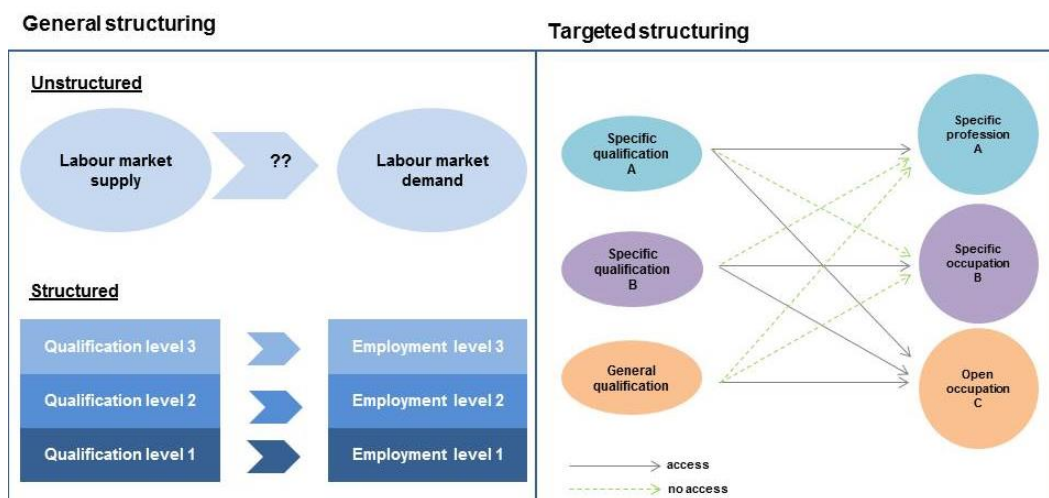
However, a qualifications framework only specifies the levels of competence. In some cases, certain jobs require specific skills and competences so that general distribution of qualifications levels is insufficient. In these cases, employers only want applicants with the specific skills and job seekers only get access to the jobs if they have attained a specific qualification that is geared towards the job in question. In this context we speak of professions and occupations; the qualifications lead not to a general segmentation of the labour market, but to an individual granting of access to specific (groups) of qualified applicants. Figure 3 demonstrates how qualifications may influence the structure of the labour market.

It is this model that seems to have been challenged in the last few years. The borders between qualifications and occupations have become much more fluid, as people are encouraged to move across occupations, add to their level of qualification and follow their own personal educational career. Qualifications do not only play a role as entry requirement, but also during different career phases (including attesting initial training, recruitment and selection, introduction, induction, in-service training and continuous professional development). The validation of non-formal learning or additional qualifications requirements for the renewal of licences to practice also plays a role in this regard. As the economy changes, demands on professions and occupations change as well, and so do the corresponding qualifications.

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<sup>(10)</sup> [http://www.cedefop.europa.eu/EN/Files/5521\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/5521_en.pdf) [accessed 17.7.2013].

Figure 3 Two ways of labour market structuring



Source: Cedefop (based on Panteia/Research voor Beleid, 2011).

Labour markets themselves also change in terms of content, as developments in the economy have an effect on the skills needed to carry out certain occupations.

Within the flagship initiative 'New skills for new jobs' the EU is following these developments closely (European Commission, 2010) <sup>(1)</sup>. The initiative aims to modernise labour markets and empower people by developing their skills throughout the life cycle with a view to increasing labour participation and improving the match between labour supply and demand, including through mobility. Flexibility in the labour force and LLL, lifelong upgrading of skills and competences are seen as essential in securing the welfare of Europe in the future.

Key words in the future labour market are flexibility and mobility. The sectoral studies that underlie the agenda for new skills and jobs (European Commission, 2010) <sup>(2)</sup> emphasise the ability of workers to adapt to contextual changes. This means a shift from job security (workers are secure that they carry out a certain job) towards employment security (workers are secure that they are employed). The question is whether and how recognition structures are changing such that recognition of professional qualifications throughout Europe can be guaranteed and at the same time a flexible labour market can be sustained,

<sup>(1)</sup> <http://ec.europa.eu/social/main.jsp?catId=784&langId=en> [accessed 17.7.2013].

<sup>(2)</sup> <http://ec.europa.eu/social/main.jsp?catId=784&langId=en> [accessed 17.7.2013].

giving room for professions that have no strictly defined educational pathway and competences obtained elsewhere throughout the working career and life.

It is within the framework of the use of qualifications as a structuring tool that we examine the empirical role of qualifications in governing occupations and professions. The most recent Cedefop publication on the topic 'Changing qualification' raises important questions about this topic. On the one hand, the report states that 'the function of qualifications as the principal means of securing progression on work or study has weakened with other factors becoming more prominent' (Cedefop, 2010a, p. 201). This statement echoes development of deregulation and liberalisation of the economy, including access to the labour market. At the same time, however, the report describes how occupations can start taking control of qualifications and, through them, influence the form and content of education and training.

This points to a shift taking place within the triangle of education, work and qualification. It appears the dimension of the labour market is becoming more important, or at least the dimensions of work and education are moving closer together. In this connection, the involvement of social partners in standardisation processes is growing. Qualifications frameworks, credit-based systems and partial qualifications can be used to open up the access to the labour market, securing skills supply and maintaining the coherence of the feedback loop between the economy and education. While formal qualifications may decrease in importance in recruitment processes, they are beginning to encapsulate precisely those aspects that are growing in importance, such as transversal skills and future potential of candidates. Finally, the international dimension of qualifications and of the European labour market has an important impact on the dynamic between the two. As the report on changing qualification states, 'qualifications, especially the large and popular ones, will now be bridges between countries in terms of the outcomes of significant parts of education and training' (ibid., p. 201).

At the same time, researchers warn us not to expect too much of qualifications in labour market management, as the change they identify is slow and by no means universal. When we come to the empirical part of this report, it will be important to elaborate on these signals and to see how labour market actors conceptualise and make use of qualifications in occupations. It is important to understand what the literature says about the general regulation of economic processes, including access to occupations and professions.

Described in the definitions are many ways in which public and private actors can use qualifications to govern occupations. Some of these are more binding and connected to public regulation while others are more fluid and

privately organised. The scientific literature on this topic mostly focuses on the more restrictive measures of regulation and the consequences this can have for specific aspects of the economic performance in particular occupations. In this section, we describe what is known about regulatory use of qualifications and its consequences for the functioning of the economy.

## 2.1. An economic perspective of qualifications

The literature on the need for professional regulation starts from the perspective that regulatory intervention by the government can only be justified if the market system does not function well. In other words, regulation may help to deal with market failures.

In the context of occupations and professions, this implies that licensing is a potential remedy for specific market failures such as information asymmetry between professionals and clients which lead to deterioration of service quality<sup>(13)</sup> and negative externalities (negative effects of low quality services on third parties or society)<sup>(14)</sup>. Restricting competition – by limiting entry into the market only to people with certain qualifications – may then be justified to ensure a reasonable quality of products or services. However, economists generally stress that competition should not be restricted more than necessary by setting quality standards that are too high. They also argue that certification, as a voluntary measure, is superior to licensing, provided that it can deal sufficiently with the market failure at hand<sup>(15)</sup>.

This economic theory – the public interest approach to regulation – assumes that regulators always strive to serve a public interest goal. It is assumed that governments, by correcting market failures (note that they may also have other goals related to distributive justice, fairness or paternalism), attempt to maximise

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<sup>(13)</sup> In economic language, information asymmetry leads to the problems of adverse selection and moral hazard.

<sup>(14)</sup> Other potential economic justifications for regulatory intervention include undersupply of public goods and the presence of market power. The literature also suggests a paternalistic argument for licensing, which is that some people need to be guided by the state in making choices.

<sup>(15)</sup> It should be noted that some regulatory instruments (e.g. regulation of advertising, mandatory provision of information, ownership rules) or liability rules may provide an additional or better solution. For a discussion of conduct and price regulation in the professions, see Philipsen, 2003, Chapter 2.

social welfare <sup>(16)</sup>. The private interest approach to regulation is more sceptical. It stresses the role of specific interest groups in the formation and enforcement of regulation. Stigler argued that there is a market for regulation, with its own demand and supply characteristics (Stigler, 1971). The government represents the supply side, while industry (and other special interest groups) represents demand, which is mainly interested in protective regulation such as regulated prices, advertising restrictions and strict licensing requirements <sup>(17)</sup>. From a private interest perspective it can be argued that politicians themselves are utility maximisers and the private interests of politicians – just like those of special interest groups – do not always correspond to the interests of the public at large. For example, politicians are likely to strive for a maximisation of votes, budgets or prestige. This may give rise to inefficient regulation, especially when lobbying is concerned <sup>(18)</sup>.

## 2.2. The public interest approach applied to licensing

The economic argument for licensing (defined as a set of regulations that limit service provision to individuals who meet certain government-established criteria) suggests the average quality level of services is raised by eliminating lowly-educated suppliers. Licensing may therefore serve to solve problems of adverse selection <sup>(19)</sup>, moral hazard (e.g. demand generation by professionals) or negative externalities. The validity of this argument depends on the relationship between the educational level of a practitioner and his or her cost of providing high quality. Shapiro shows that if the relationship between human capital and high quality is positive, and if suppliers can build reputations over time by providing high quality, consumer welfare can be enlarged by licensing (Shapiro, 1986). However, according to Shapiro's model this holds only if consumers value high quality significantly compared to the costs of providing quality for suppliers.

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<sup>(16)</sup> If these attempts at correcting market failures are unsuccessful, economists speak of 'government failure'.

<sup>(17)</sup> Stigler's theory has been termed the Chicago theory of regulation. See also Philipsen, 2003, pp. 25-26.

<sup>(18)</sup> This perspective is central in public choice theory.

<sup>(19)</sup> Leland (1979), following Akerlof, argues that information asymmetry between practitioners and clients results in quality degradation. Without some form of regulatory intervention, such as licensing or certification, only the low quality providers would remain in the market.

Further, licensing will never lead to a situation where everyone benefits, because there will always be consumers who would rather have bought low quality services at a lower price (ibid., p. 856).

There is a risk that licensing incites this last group of consumers to substitute the relatively expensive licensed services with cheaper alternatives, do-it-yourself remedies <sup>(20)</sup> or services offered on the black market. For example, Carroll and Gaston (1981) found that stricter entry requirements for electricians in some United States (US) states, leading to lower per capita availability of electricians, were significantly associated with a rise in the rate of death from accidental electrocution (Carroll and Gaston, 1981). Examples can also be found in the professions. Suppose that more stringent educational requirements are introduced in the pharmaceutical profession, leading to a higher mark-up on the cost price of medicines in a pharmacy. Such an increase in educational requirements may be the result of a policy that aims at improving the advice given to patients by pharmacists. The resulting higher price may cause some consumers to refrain from buying particular medicines or to look for substitutes at the drugstore, where they do not obtain medical information about interactions of this medicine with other medicines, but where the price is lower. In such cases it is doubtful whether licensing will raise the overall quality level of services, or reduce it because of this substitution effect.

### 2.3. The private interest approach applied to licensing

There are other considerations when discussing the pros and cons of licensing. Politicians, bureaucrats and incumbent professionals all derive benefits from the administrative requirements set out in licensing systems (Zhang and Ogus, 2005, pp. 138-141). It is also clear that incumbent professionals benefit from a limitation of the number of new entrants (Friedman and Kuznets, 1945; Stigler, 1971, pp. 5-6). According to private interest theories of regulation, therefore, it is not surprising that professional associations actively promote and support licensing. The more conditions potential market entrants have to fulfil to gain their licence, the higher the entry costs. If competition is restricted, service providers' earnings rise and consumers are left with fewer options and higher prices. Professional

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<sup>(20)</sup> Carroll and Gaston (1981) found that stricter entry requirements for electricians, leading to lower per capita availability of electricians, are significantly associated with a rise in the rate of death from accidental electrocution.

groups are likely to set quality standards too high from a social welfare point of view (Leland, 1979) <sup>(21)</sup>.

It should be noted that licensing regimes can also be used to raise government revenues, particularly in developing countries. The fees payable for a licence can be set at a level above that necessary to cover the costs of administering the licensing system. This is particularly common at the level of local governments, e.g. in some African countries (Devas and Kelly, 2001, p. 383; Zhang and Ogus, 2005, p. 138). If used in this way, entry controls are mainly an instrument of taxation, although the mode of extracting revenue (i.e. using licensing rather than taxes) may seriously distort the economy.

## 2.4. Certification versus licensing

Considering the heterogeneous nature of consumer preferences, the advantage of certification (voluntary) over licensing (mandatory) is that consumers have a choice between certified and uncertified services. Certification serves as a signal of good quality, provided that consumers can recognise its value <sup>(22)</sup>. However, it has been pointed out that suppliers may be inclined to overinvest in education in order to signal high quality levels through certification (Shapiro, 1986, p. 855). In these cases total consumer welfare may decrease if many consumers consider professionals overtrained and their services overpriced. Consumers should also be smart enough to make the right choice between certified and non-certified practitioners. If the damage caused by low-quality services is large or widespread (e.g. a wrong diagnosis by a GP in case of a contagious disease) certification would be less suitable than licensing.

The overall effect of licensing and certification depends on the heterogeneity of consumer preferences for quality, even if educational level (human capital) and quality are positively related. Licensing intervenes further in the market process than certification, but risk-averse consumers are better insured by it against possible harmful consequences of bad services. Drawbacks of licences are that they can be used as entry barriers by interest groups and may incite consumers to substitute licensed services by alternative services.

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<sup>(21)</sup> His analysis was extended by Shaked and Sutton (1981), who addressed the specific problem of the suppliers excluded from the primary market by licensing.

<sup>(22)</sup> Dingwall and Fenn (1987, p. 55) argue that it is also important that consumers can determine which of the private organisations setting up certification systems they can trust. If this is impossible, the problem of information asymmetry is shifted rather than abolished.



## CHAPTER 3.

# Policy context: regulation at EU level

### 3.1. The professional qualifications directive

Access requirements for the labour market are seen at European level from the perspective of the internal market, emphasising mobility. The original European Economic Community (EEC) Treaty already contained a legal base for the legislative institutions to create secondary legislation on the mutual recognition of diplomas for those who sought to exercise their occupation or profession in another Member State (Garben, 2011, p. 59). The actions taken by legislative institutions on the basis of what is now Article 53 of the Treaty on the Functioning of the European Union (TFEU) have evolved into Directive 2005/36/EC (European Parliament and Council of the European Union, 2005c); this covers mutual recognition of qualifications that give access to occupations and professions. The directive forms part of the legislative context within which qualifications are used in Member States.

#### 3.1.1. History

Rules that deal with professional qualifications can be some of the most restrictive across Member States. If a Member State has the right to decide that certain professions or occupations may only be exercised when a person possesses a diploma that was awarded in that Member State, it can be virtually impossible for people from other Member States to enter that profession or occupation. The legislative institutions employed their first efforts to create secondary legislation in this area, beginning in 1961 with the adoption of the Council's general programmes to abolish restrictions on the freedom of establishment (European Commission, 1962). During the 1960s, some transitional directives were adopted that governed the recognition of professional experience in several sectors such as commerce, industry and small crafts industries. In the late 1990s, these transitional directives were consolidated in Directive 99/42/EC (Schneider and Claessens, 2005, p. 136), which was later replaced by Directive 2005/36/EC (European Parliament and Council of the European Union, 2005a).

Between 1975 and 1985 the institutions of the European Community issued several directives which were meant to lay down minimum harmonisation of education and the mutual recognition of diplomas for certain regulated professions. These professions were:

- (a) doctors (Council of the European Union, 1975a; 1975b),
- (b) nurses (Council of the European Union, 1977a; 1977b),
- (c) dentists (Council of the European Union, 1978a; 1978b),
- (d) veterinarians (Council of the European Union, 1978c; 1978d),
- (e) midwives (Council of the European Union, 1980a; 1980b),
- (f) pharmacists (Council of the European Union, 1985b; 1985c).

A directive was issued for architects on the recognition of diplomas, yet no minimum harmonisation of education was laid down (Council of the European Union, 1985a). It was completely impossible to create harmonisation measures for professional engineers and for lawyers. Through this so-called vertical approach, the institutions tried to accommodate free movement in specific regulated professions. In principle the approach had to be successful since adopting common standards for education would take the sting out of mutual recognition and open the professions to those who had not enjoyed the national qualification process previously. However, problems remained in that negotiating minimum educational standards (and common recognition) proved to be a cumbersome and an enormously time-consuming task that eventually proved impossible for certain professions, such as lawyer (Schneider and Claessens, 2005, pp. 136-139).

### **3.1.2. The diploma Directive 89/48/EEC**

A new approach was laid down in Directive 89/48/EEC which started from the premise that qualifications giving access to a certain regulated profession, a diploma in the terminology of the directive, would be mutually recognised. This meant that if a person was allowed to exercise a regulated profession in one Member State, they would also be allowed to exercise the corresponding profession in any other Member State. Only in circumstances where there was a considerable difference in the regulated profession between the country where a person obtained his qualifications and in the Member State he sought to go, could the latter require compensatory measures to cover the difference.

The adoption of Directive 89/48/EEC was heralded as a great achievement at the time, the developments in the recognition of diplomas did not stop here. It became the first of three directives which would cover the recognition of professional qualifications: this has been named the general system.

### **3.1.3. The general system directive**

1992 saw the adoption of a second general system Directive 92/51/EC (Council of the European Union, 1992). This was aimed at creating a system for the recognition of qualifications for regulated professions that had qualification tracks of less than three years' duration. It also covers vocational training certificates.

The system of Directive 92/51/EC is identical to the system of Directive 89/48/EEC. People who seek integration in a profession that is regulated under Directive 92/51/EC benefit from the general rule of mutual recognition laid down in that directive. Where substantial differences exist between qualifications, the host Member States may impose compensatory measures. A third general system directive was adopted in 1999 (European Parliament and Council of the European Union, 1999). Directive 1999/42/EC did not create new rules, but merely consolidated the transitional directives which had been issued in the 1960s. It was already established that these directives dealt with the recognition of professional experience in various sectors, such as commerce and industry.

A second consolidation operation was undertaken in 2001. Directive 2001/19/EC (European Parliament and Council of the European Union, 2001) was adopted in the light of the simpler legislation for the internal market (SLIM) strategy. It affected the three general system directives to a small extent (the Vlassopoulou ruling was incorporated in Directive 89/48/EEC among other smaller adaptations) but had a major impact on the systems of the vertical directives.

#### **3.1.4. The professional qualifications directive**

A major adaptation to the diploma recognition system was achieved in 2005 with a new directive which replaced all the vertical directives and the three general system directives. Since the Lisbon summit the European Commission had been preparing a new directive for recognition of professional qualifications <sup>(23)</sup>. The main objective was to 'create a clear, secure and quick system for the recognition of professional qualifications in the field of regulated professions' (European Commission, 2002a, p. 3).

The new directive makes several changes to the system as it was laid down in Directive 89/48/EEC and the two other general system directives. First, the scope of the application of the new directive is considerably broader than Directive 89/48/EEC and 92/51/EC. Every regulated profession or regulated professional activity that is not covered by Parts II and III of the new directive (professions traditionally governed by the third general system directive and the sectoral directives respectively) is now covered by Article 10 of the new directive.

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<sup>(23)</sup> In the past, Directive 89/48/EEC had already undergone a considerable overhaul in the context of the SLIM initiative by Directive 2001/19/EC, that, among other amendments, saw the codification of the Vlassopoulou-doctrine in Article 4 of Directive 89/48/EEC.

### **3.1.5. The functioning of the new directive**

In discussing the impact of Directive 2005/36/EC on access to professions and occupations in Europe it is important that the directive (and its respective national implementations) only applies to restrictions imposed by the government, i.e. to those professions and occupations to which access is regulated by legislation or regulation. In principle, the directive is designed to remove barriers or restrictions that would hamper the full functioning of the internal market: it is not designed to regulate the free market of supply and demand in professions and occupations throughout the EU <sup>(24)</sup>. This limitation is laid down in Article 1 of the directive.

The directive has several systems for mutual recognition of qualifications in different situations. First is the major distinction between the role the recognition of qualification plays with regard to the provision of services (Title II) and the rules for regulated professions and occupations where the person involved seeks to establish him/herself in another Member State (Title III). The system for establishment is divided into three:

- (a) the general system (Chapter 1 of Title III);
- (b) the system for recognising professional experience (Chapter 2 of Title III);
- (c) the system for recognition on the basis of coordination of minimum training conditions (Chapter 3 of Title III).

The name of the title 'freedom of establishment' is misleading in that the scope of the directive does not only cover self-employed activities, but also those exercised in employment (European Parliament and Council of the European Union, 2005b). The systems are described in the following paragraphs.

### **3.1.6. Free movement of services**

The basic rule for regulation of professions or certain professional activities with regard to service providers from other Member States is laid down in Article 5 of the directive. The article states that, without prejudice to the exemptions made in Articles 6 and 7 of the directive and without prejudice to other possibilities under EU law (mainly referring to exceptions laid down in the TFEU and additional exceptions accepted by the European Court of Justice), no restrictions may be imposed on the service provider for any reason that relates to professional

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<sup>(24)</sup> The European Court of Justice has awarded 'horizontal direct effect' to the treaty articles on the free movement of persons, meaning that an individual can also invoke these articles in a legal dispute with another individual. This does not mean that the directive would be applicable in horizontal situations since its scope of application is limited to those professions and occupations that are regulated by the Member States.

qualifications if two conditions are fulfilled. First, the service provider must be legally established in a Member State where the service provider is entitled to pursue the same profession there. Second, in the event the profession concerned is not regulated in the Member State from which the service provider comes (dubbed the Member State of establishment by the directive), he must be able to show that he has pursued the profession in the Member State of establishment for at least two years during the previous 10. Article 5 states further that the rule is only applicable for activities performed in other Member States that are of an occasional and temporary nature. It also states that, when performing services in another Member State, the service provider is subject to the professional rules of the host Member State <sup>(25)</sup>.

Articles 6, 7, 8 and 9 specify further the requirements and exemptions for migrating service providers and recipients of the services regarding administrative matters such as registrations and accounts.

### **3.1.7. Freedom of establishment <sup>(26)</sup>**

Taking away barriers imposed by Member States on people who exercise regulated professions and professional activity is a more intricate exercise than that of the freedom to provide services in other Member States. The provision of occasional and temporary services in another Member State is much less intrusive for a national system of regulating one's professions and occupations than the (more or less) permanent establishment of a member of a regulated profession or occupation who has received his/her education and/or access to that profession or education in another Member State. The directive provides for three different systems for recognising professional experience or qualifications obtained in other Member States. Besides the general system, that also provides a safety net for professions that do not fall under the other two systems, the directive provides for two existing systems:

- (a) recognition of professional experience (that was established in the 1960s and consolidated in Directive 99/43/EC);
- (b) recognition based on minimum coordination of training standards (the so-called sectoral or vertical system that was established during the 1970s and 1980s).

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<sup>(25)</sup> In stark contrast with Directive 77/249/EEC on the provision of services by lawyers that introduces an intricate system of accumulation of both home and host Member State rules (the so-called *Kumulatzionsprinzip*).

<sup>(26)</sup> Activities in employment fall under this definition.

### 3.1.8. The general system

Article 10 of the directive sets out that, in situations not covered by any of the other systems in Chapter II, the general system will apply. The underlying core of the general system is a list of levels of qualifications that will determine whether diploma recognition is available under the general system in a given situation. The different levels <sup>(27)</sup> are laid down in Article 11 of the directive:

- (a) attestation of competence issued by a competent authority in the home Member State, attesting either that the holder has acquired general knowledge corresponding to primary or secondary education, or has undergone training not forming part of a certificate or diploma, or has taken a specific examination without previous training or has three years' professional experience;
- (b) certificate corresponding to training at secondary level of a technical or professional nature or general in character, supplemented by a professional course;
- (c) diploma certifying successful completion of training at post-secondary level of a duration of at least one year or professional training that is comparable in terms of responsibilities and functions;
- (d) diploma certifying successful completion of training at higher or university level of a duration of at least three years and not exceeding four years;
- (e) diploma certifying successful completion of training at higher or university level of a duration of at least four years.

Recognition of professional qualifications in a host Member State is dependent on the level of qualification that is required in the home Member State. According to Article 13 of the new directive, recognition of professional qualifications is required when the level of qualification in the home Member State is equal to the level immediately prior to that required in the host Member State. Articles 13 and 14 further clarify the requirements for recognition of professional qualifications. Article 13 begins with the general rule that professional qualifications from another Member State will be recognised only if certain criteria are fulfilled. These criteria are that the person concerned is authorised to exercise the corresponding regulated profession in his home Member State and he must be able to prove this authorisation with evidence of professional qualification (or an attestation of competence) issued by the competent authority of the home Member State. The proof must also show the

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<sup>(27)</sup> These levels do not correspond with the levels laid down in the EQF system.

qualification process in the home Member State is at least equivalent to the level (as identified in Article 11 of the directive) directly prior to the level required in the host Member State <sup>(28)</sup>.

The directive also permits the host Member State to require compensatory measures from candidates who seek to be integrated in the regulated profession. The system of compensatory measures is laid down in Article 14 of the directive. Member States may require compensatory measures where the training of the candidate is at least one year shorter than the training required in the host Member State, where the training covers matters that are substantially different from requirements in the host Member State, or where the profession in the host state includes activities which do not exist in the corresponding profession of the home Member State. Candidates can choose between an aptitude test and an adaptation period. Article 14 states that compensatory measures shall be applied with due regard to the principle of proportionality.

Article 15 provides for a method where compensatory measures can be avoided, allowing a form of self-regulation. If a certain regulated profession can come to a common platform (i.e. a set of criteria to counter substantial differences) for at least two thirds of the Member States (including all Member States that regulate the profession) such a common platform can be notified to the Commission. If a candidate then fulfils the criteria laid down in the common platform, the Member State concerned shall not implement compensatory measures.

Unlike Directive 89/48/EEC, Directive 2005/36/EC has a specific reference to language requirements. Article 53 states 'persons benefiting from the recognition of professional qualifications shall have knowledge of languages necessary for practising the profession in the host Member State' (European Parliament and Council of the European Union, 2005c). This is a strict reference to language restrictions that potentially leaves enormous leeway for Member States to impose language requirements. The Commission, in its explanatory memorandum to the original proposal, made a specific reference to the principle of proportionality (European Commission, 2002a). Time will tell how stringently Member States will adhere to this requirement, which could ultimately be a considerable hindrance to the free movement of professionals. It will not affect

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<sup>(28)</sup> The second paragraph of Article 13 also provides for a recognition procedure for those people who have pursued a profession regulated in the host Member State, but not in the home Member State. This exception will not be explored further since the profession of lawyer is regulated in all the Member States of the EU.

the situation of lawyers, however; language proficiency was already implicitly part of their integration since the aptitude tests are, both in written form and orally, conducted in the language of the host Member State.

### **3.1.9. Recognition of professional experience**

The second system of establishment in the directive deals with the recognition of professional experience, mainly for occupations industry and crafts. Article 16 of the directive prescribes a system of automatic recognition of professional experience of one of the professional activities mentioned in Annex IV of the directive, allowing the candidate in question access to the occupation or to pursue that occupation in the host Member State. Automatic recognition is dependent on fulfilment of the criteria laid down in Articles 17, 18 and 19 of the directive. Annex IV to the directive has three lists of occupations mainly centred on industry and crafts; the three articles in the directive correspond with these lists.

Article 17 states that experience in one of the occupations mentioned in Lists I, II and III of Annex IV will be automatically recognised if it fulfils one of the specified conditions regarding a specific combination of consecutive years of experience and training. This can vary from a requirement of six consecutive years of experience to two consecutive years of experience, dependent on the list of occupations and the level of experience. The requirements refer to both experiences in a self-employed or in a managing position, as well as experience in employment. For those members of professions or occupations caught by this system (i.e. those mentioned in Annex IV), but who do not fulfil, for the respective lists, the criteria of Article 17, 18 or 19, but who still want to gain access to or pursue such a profession or occupation in another Member State, the general system of Chapter 1 of Title III of the directive is applicable.

### **3.1.10. Recognition based on minimum coordination of training**

Chapter 3 of Title III governs the recognition of professional qualifications for a certain number of professions based on a minimum coordination of the training leading up to these professions. These professions are those that were subject to the vertical system (or sectoral system) used during the 1970s and 1980s: examples are doctor, nurse, veterinary surgeon, midwife, pharmacist and architect. This system constitutes a considerable part of the total length of the directive (which, including annexes, is 121 pages), but most of that length is on the regulation of the minimum coordination of training, rather than the actual recognition which is laid down in Article 21.

The basic system of Article 21 is one of automatic recognition. The article states that a person entitled to practice under one of the professional titles



mentioned in Annex V of the directive, and who satisfies the minimum training conditions for any of the professions, will be automatically recognised in other Member States for the purposes of access to and pursuit of the profession. The article specifies several situations based on different classifications in Annex V, but the result is automatic recognition. Members of these professions who do not fulfil the minimum training requirements (or who cannot benefit from so-called acquired rights) will fall under the general system of Chapter 1 of Title III.

Research has shown that implementation of the professional qualifications directive has significant impact on the education systems, labour market governance and qualifications structures in Member States (European Commission and GHK, 2011). The fact that certain qualifications from other qualifications systems have to be recognised, is of great significance for the coherence of national frameworks. More important, the directive, as a firm context variable, structures policy processes nationally. As aspects such as recognition of experience are firmly integrated into the international labour market governance structure, this can lead to pressures on national systems to adjust to the international environment. The professional qualifications directive also signifies a division of different kinds of occupations and professions: those included in Annex IV, those subject to the minimum coordination of training, and those not specifically included in the directive.

While the directive can be seen as a 'firm' measure, determining the European context for the governance of occupations and professions, the EQF represents a softer approach to international harmonisation. Nonetheless, its role in determining the European dimension of qualifications is also growing at national level and it is important to understand how the 'firm' directive and the 'soft' EQF relate to each other.

#### **3.1.11. Relationship with the EQF**

The EQF is a European reference framework intended to act as a translation device to make qualifications more readable across Europe. Its overall purpose is to promote mobility and support LLL. The EQF comprises eight levels, based on learning outcomes.

The EQF must be seen in the context of Chapter 1 (general system) of Title III of Directive 2005/36/EC. A Member State is only allowed to require a compensation mechanism when the professionals' education and training or the period in which the education and training were followed, differ substantially from those covered by the diploma required in the host Member State. It follows that the definition of substantial difference has become paramount to defining equivalence. As a result, a certificate of equivalence can be delivered even if the

qualification held by the migrant has a lower level than the national qualification. The EQF is helpful in this regard since it further specifies what may count as a substantial difference.

These requirements constrain significantly the reasons that may be given to justify not allowing a citizen from another Member State to practise a specific occupation or profession. Under Directive 2005/36/EC the national competent authorities have the obligation, when going through the process of recognition, to consider the curriculum of the migrant. The certificate of equivalence delivered under the directive attests that a professional of another Member State has a level equivalent to a host Member State professional, while the EQF is a reference framework – consisting of eight levels – intended to act as a translation device among countries. The EQF describes and compares qualifications by using learning outcomes, indicating the levels of knowledge, skills and competences to be expected from a holder of a qualification, supporting equivalence delivered under Directive 2005/36/EC.

On 19 December 2011, the Commission adopted a proposal to modernise Directive 2005/36/EC on the recognition of professional qualifications. In this proposal, and in order to apply the mechanism of recognition under the general system, it is necessary to group the various national education and training schemes into different levels. Those levels, which are established only for the purpose of the operation of the general system, should have no effect on national education and training structures nor on the competence of Member States in this field, including a national policy for implementing the EQF. This can be a tool to promote the transparency and comparability of qualifications and can be a useful additional source of information for the competent authorities examining the recognition of qualifications issued in other Member States. The levels established for the operation of the general system should, in principle, no longer be used as a criterion for excluding Union citizens from the scope of Directive 2005/36/EC when this would be contrary to the principle of LLL.

One of the key differences between the EQF and the professional qualifications directive is the emphasis the EQF places on learning outcomes; the directive is based on input descriptors. A recent study on the evaluation of the professional qualifications directive showed that it is still too early to say which perspective is preferred by national stakeholders, though there was a slight preference for the system used by the EQF (European Commission and GHK, 2011). The EQF and the directive have different key objectives, but the vision embedded in these policy processes will also be of importance for future policy development nationally.

Directive 2005/36 plays an important role in supporting the movement of citizens. This role needs to be strengthened and can be accomplished by considering recent European and national developments in learning outcomes and qualifications frameworks. Both the revision of the general system part of the directive (the five-level system) and Section 49 offer an opportunity for this. Not using this opportunity would undermine the credibility of European initiatives in this field.

## CHAPTER 4.

# A typology of countries and systems

### 4.1. Regulation of labour market entry: qualification requirements, certification and licensing

It is useful to start by assessing the general approach to regulating entry to occupations and professions. The central question is whether it is usually necessary for an individual to have acquired some form of qualification before being allowed to practice a specific occupation. This relates to the official framework and the legal necessity to possess a diploma, certificate or licence, not its practical relevance. We first present the different types of qualification-related regulation found in different countries and then move onto comparing the general intensity of regulatory requirements.

### 4.2. Types of regulation and their origins

In the countries covered by this study, direct regulation of occupations is more an exception than a rule; in most countries, most occupations are not subject to legally stipulated requirements. Nonetheless, labour market entry can be managed in different ways and by use of different instruments; direct entry requirements is only one. At sectoral level, just as common as direct regulation are industry-imposed standards or public regulation which have an indirect influence on the labour market.

Starting with the direct regulation, none of the countries analysed in this study has one centralised approach to the regulation of occupations and professions. Where occupations are regulated by the national government, this is mostly done by the departments or ministries concerned with the economic sector in question (e.g. the Ministry of Health for health care professions). This, for example, is the case in Belgium, France and the Netherlands. In such cases it is seen as necessary from a policy perspective to determine who can practice an occupation and how this should be carried out. The legislation is then specifically targeted at the occupation or economic sector, e.g. the Dutch law on private security firms and detective agencies.

In these cases a thematic, content-driven approach to occupational regulation is in place – rather than a harmonised or unified system – where regulation is triggered by practical issues, arising from the actual content of the

occupational practice, and not from a general need to regulate access or practice. This specific feature of direct regulation has implications for the international recognition of qualifications. As different ministries are responsible for the legislation regulating labour market entry for an occupation, the same ministries are also responsible for taking care of the inclusion of workers from other EU Member States in the restricted areas of work. Thus, in Belgium, for example, as in several other countries, different authorities are responsible for the recognition of foreign qualifications under Directive 2005/36/EC. At the same time, working according to the directive has, for example in the Netherlands, led to the creation of one unified list of regulated professions and occupations, leading for the first time to an overarching view of the direct regulation of labour market entry.

Legislation can also have a regulatory impact on labour market entry and activities in a more indirect way. In Spain, for example, only activities having health and safety issues are subject to regulation. This can be so at European level, as in the work with fluorine gas (F gases) which is reserved for practitioners with the right qualification.

While the paths leading to regulation may be different, in both cases the result can be described as licensing requirements in the broad sense. In all of these cases occupational practitioners are required by law to possess a certain qualification, ranging from educational diplomas to specific practical certificates of competence.

This leads us to the mechanisms of self-regulation, which can also be identified in most countries. Here the state does not issue binding legislation but allows professional associations and social partners to manage labour market entry within a specific framework. This can refer to mandatory registration of professionals within a professional registry which may, but does not necessarily, include qualification requirements. Another alternative is accreditation whereby practitioners have to subscribe to the rules and requirements of a professional organisation. These practices are seen in both traditionally liberal systems such as the UK, where the central government is hesitant to impose strict entry requirements, and in corporatist systems such as France.

In most countries, motivation for regulation of occupation of any kind is similar. The most commonly cited reasons for restricting entry to an occupation or profession are those of OSH and consumer or patient protection, upholding the quality of services and public health. Public safety and environmental protection can also play a role. External incidents can lead to stricter regulation, such as the financial crisis leading to calls for a tighter regulation of financial services in several countries (e.g. the Netherlands and the UK). In Lithuania, the setting of

entry requirements for some occupations is officially justified with the goal of raising the prestige of the occupation in question and creating a professional reputation, in this case for social workers. Other examples of self-regulation illustrate occupational groups sharing the desire to apply structure to its practice and create a level playing field for practitioners.

As may be expected, the countries examined combine all of the different kinds of regulation and management described above; the sector and the activities in question determine which approach is adopted, making it hard to come to a general typology of countries regarding regulation. Some aspects play a more important role in some countries than in others. In Greece and Spain, for example, direct regulation is said to be rare, though professional organisations play an important role in regulating access which has an impact on the openness of the labour market. In Belgium, ministries issue both direct and indirect regulation, but there is no centralised approach to the management of occupational entry. Lithuania has a liberal approach, with a combination of weaker tradition of social dialogue and little state interference regarding the regulation of occupations. France can be seen as a corporatist system, with shared economic management by state actors and social partners, organised on a sectoral basis. The Netherlands fall into the same category, as some direct and some indirect regulation is issued, but the system is essentially based on sectoral self-management. The most widespread approach in the UK is based on voluntarism and self-regulation, though examples of direct regulation also exist.

#### 4.3. Intensity of regulation: practical relevance of regulation and licensing

The type of regulation applied does not necessarily explain its intensity, which is the level (low or high) of existing direct regulation to access or practice a profession or occupation. Although state-sanctioned self-regulation appears less restrictive than a direct, top-down system, the level of intensity can be just as high in a voluntary system as in a state-led system as professional groups might even be more eager to regulate a particular occupation than the state would be.

Countries that describe themselves as taking a low-intensity approach to occupational regulation are what we can call the more liberal countries, e.g. Lithuania, the Netherlands, Sweden and the UK. However, only in Lithuania does the low-intensity approach feed through to the social partner level, meaning that neither the state nor social partners are very active in occupational regulation. However, where regulation exists, it can be intensive and strict, also in implementation. In the Netherlands and the UK, regulation is left to associated

social partners. The Netherlands and Sweden can be characterised more readily as a corporatist system, as they have a more elaborated structure of social dialogue. The UK can be seen as an industry-led system where self-regulation is applied where necessary.

Other countries are characterised by higher intensity regulation. France is an example, with the labour market in general highly regulated and employees enjoying high protection. Collective bargaining, overseen by the state and carried out by sectoral social partners, lies at the core of this high intensity approach to regulation. Belgium seems to fit the same category, though the resulting intensity of regulation is estimated as lower than in France, though still in a medium category. Greece and Spain are difficult to characterise, as both countries are often considered as highly regulated. However, both systems are undergoing profound changes which make it difficult to give a general impression of the intensity of regulation. The same is true for Slovenia where several new policies on professional qualifications are on the political agenda, though they have not led to actual new legislation.

At an overarching level, there are differences across countries regarding regulation intensity. Two aspects are important in qualifying this statement. First, these judgments of intensity are indicative as they cannot be based on specific measurements. Second, intensity of regulation does not necessarily imply that such regulation is implemented in a strict way: it is possible that a country has an intense framework of legal entry requirements for occupations, but that in practice these requirements are not applied or enforced. Conversely, it is possible that a country has little direct regulation, but that the occupational culture is one where qualifications are an absolute demand. We will see at sectoral level in what way national and sectoral entry requirements gain relevance in actual practice.

#### 4.4. **Developments in national regulatory context**

Though the regulatory context at national level can be seen as a strong determinant of the openness of the labour market, it is nonetheless changing constantly. One of the assumptions underlying this research, that the importance of direct national regulatory context can be seen as a strong determinant of national level regulation, is diminishing. In some countries processes of liberalisation are taking place. We have already mentioned Greece, Spain, and Lithuania, where labour market reforms are supposed to simplify regulation and open up occupations to new groups of workers, though it is not clear whether this is leading to deregulation. In the Netherlands, already quite a liberal system, the process of creating a list of regulated profession under Directive 2005/36/EC led

to a reassessment of the need for some regulation, resulting in the removal of some entry requirements. In Belgium, the number of professions falling under the law on establishments decreased significantly over the last years.

There are also examples of new regulation being added to the present system, particularly in the UK where legal requirements were recently introduced in the gambling industry, in the security sector and in manufacturing. In the Netherlands, new requirements for financial service providers are being designed. Conversely, countries seem to be constantly looking for the right equilibrium between regulation and openness. Moreover, steps increasingly are taken to regulate labour market entry at a European level or standardise requirements across the EU.

While several Member States are currently undergoing intensive change, a different kind of movement is seen in Germany where the system of recognition of qualifications from other countries has been evolving, especially for qualified employees from countries outside of the EEA. The objective of this legislative change is the opening up of the German labour market to this group of employees, as until now, only a limited number of people who came to Germany with foreign professional and vocational qualifications were entitled to apply for qualification recognition.

#### 4.5. **Governance of labour market supply: qualifications frameworks, VET structures and feedback loop**

##### 4.5.1. **Division of responsibility between public and private actors**

In most countries, qualifications are set in the framework of a general qualifications structure. In some this is called a qualifications catalogue (Spain), in others a qualifications structure (the Netherlands, Slovenia), a qualifications register (France) or simply a framework (the UK). While some countries have had a system for categorising qualifications for a relatively long time, as is the case, for example, in the Netherlands, in others such a system is still being given form (e.g. Lithuania and Slovenia, in the context of the creation of NQFs referenced to the EQF). The development of NQFs aligned to the EQF acts as a catalyst for the development or fine-tuning of such a structure.

There are different actors in the management of the qualifications system, both public and private, national as well as regional, depending on the country and the VET system in question. A good example of a structure governed by national actors in both the public and private domains is the qualifications



structure of the Netherlands. In this, the national Ministry of Education, Culture and Science has commissioned the public Foundation for the Cooperation of VET and the Labour Market (Stichting Samenwerking Beroepsonderwijs Bedrijfsleven) to set up and manage the qualifications structure of the VET sector across all fields of the economy. There is a national standard model for writing qualifications files. The specific design of qualifications and underlying standards is carried out by sectoral institutions, named centres of expertise. These centres also act at a national level, but based on sectoral expertise. The regional level only comes in where VET schools decide on the curriculum design and on the selection of courses which can be provided in a particular region.

Another example is Sweden where the development of relations between education institutions and labour market is emphasised at national level (Sweden, Ministry of Education and Research, 2000). There is a specific reference in the Higher Education Act (*Högskolelag*) and the law on higher vocational education (*Lag om yrkeshögskolan*) requires education institutes to develop relations with the wider community. As such, the state, the education institutes and the social partners exchange information and work closely together to manage supply and demand for particular professions.

In Spain, the qualifications structure is based much more on a regional distribution of authority. The autonomous communities of Spain, the federal substates of the countries, also have important powers regarding the design and allocation of qualifications. As a consequence, there is no single unified national governance system for VET qualifications, though there is a national catalogue of professional qualifications (*catálogo nacional de cualificaciones profesionales*) (CNCP) created by the National Institute of Qualifications (Instituto Nacional de las Cualificaciones) (In cual). In Germany, regional divisions of authority in different substates also play a role which can lead to a less homogenous system when compared to countries such as the Netherlands. Education in general falls under the authority of the German *Länder*, with diversity in the content and extent of regulation as a result. The same is true for Belgium, where education and training is regulated and financed by the respective communities (Flemish-, French- or German-speaking).

Also interesting is the division between public and private actors in the management of a qualifications structure. In the Netherlands and the UK, private actors, in this case sectoral organisations, play an essential role in setting up and managing qualifications. The Dutch Government plays a role in setting the framework and also controlling the work of the private actors; in the UK the responsibility of the sector skills councils (SSCs) is even greater, though the government also remains involved in approving qualifications. While these

systems are based on delegation, in France the structure is managed through cooperation between public and private actors. The national register of vocational certifications (*répertoire national des certifications professionnelles*) (RNCP) comprises public representatives of national ministries and regional authorities together with private partners from industry associations and occupational groups. In Germany, professional groups play an important role in managing public education and the qualifications structure. Depending on the sector, the chambers of the handicrafts, the chambers of industry and commerce, or the chamber of agriculture bear responsibility for implementing the regulatory framework.

There are countries where private actors only have an advisory role, such as in the ministerial working groups in Spain or in Slovenia. In these, stakeholders from the social partners are consulted throughout education development, but most initiatives and measures come from central government. This arises both from the institutional framework, which has to allow social partners the space to exert influence, and also from the strength of social partners themselves, which might not be sufficient to make use of the available space.

In many countries, unified qualifications structures have several objectives, though primarily making education and training, and the results thereof, more clear and transparent for stakeholders, from students to teachers to employers. It has both a structuring function and an informative role, signalling the position of a specific qualification within the entire structure. In some cases the existence and development of comprehensive NQFs is of essential importance. This is especially the case in countries where a new system is being set up, such as in Greece. Though most qualifications structures are essentially maps of the educational landscape, the labour market function is increasingly emphasised through the opening up of NQFs.

#### **4.5.2. Work and education**

The distinction between focusing on the education system and focusing on the occupational sphere is one of the key dimensions determining the role and relevance of qualifications for the labour market. One of the assumptions triggering this study is the idea that the labour market dimension of qualifications is becoming more important. There are two aspects to this dimension which we will explore in turn:

- (a) it is important to see whether labour market actors are involved in the creation of qualifications;
- (b) we need to examine whether instruments are used to increase the labour market relevance of qualifications.

Together, these aspects give substance to the feedback loop between the labour market and education.

Some forms of this involvement in the first aspect have already been mentioned in cooperation between public and private actors. In most countries, however, it is the Ministry of Education (or variants thereof) that is primarily responsible for the governance of qualifications. The UK differs, with the department for business, innovation and skills having responsibility, as the department for education is only responsible for primary and secondary education. At government level, it is unusual to treat qualifications from a business or even labour market perspective.

The situation is different for the involvement of private representatives from the labour market and work. Most countries have organised some kind of involvement of labour market actors, though there are still differences. In the UK, the SSCs are employer-led. More common is a social partner approach which also includes employees such as in Belgium-Flanders, where the Flanders Social and Economic Council develops the profiles of occupations which serve as a basis for qualifications. A similar situation exists in France, where representatives of social partners work together with national partners in managing the RNCP. Perhaps the best balance of representation is found in the Netherlands, where the central sectoral committees who decide on the content of qualification portfolios are made up of four education representatives and the same number of labour market actors, two representing employers and two for employees. Influence is divided across education and work, and employer and employee.

Other systems provide fewer opportunities for labour market input. Social dialogue structures are still only emerging in Lithuania; this also applies to governance of the qualifications structure. While responsibility for the development of the structure has been transferred to the sectoral committees coordinated by the qualifications and VET development centre, which includes representatives from labour market actors, this has only recently been extended to higher education. In Greece, efforts are being made to increase the labour market relevance of VET education, analyse labour market demands, and respond to them. However, governance of the system is in the hands of public actors, divided along regional lines. In Spain, social partners participate in ministerial working groups, but the main responsibility for the qualifications structure lies with Incual. We can therefore conclude that the involvement of labour market actors varies, depending on the strength of social partners and the location of qualifications in work and education.

Along with the involvement of labour market actors, the presence of demand-led instruments is possibly even more relevant to the question of

whether a qualifications structure responds to labour market needs. In a country like Spain, where social partners have a comparatively limited role, the CNCP is aligned with labour market needs as its first objective is 'to adapt the VET to the requirements of the productive system' (Incual, 2011). The CNCP is based on 26 professional families and on learning-outcome oriented units of competence. These units are connected to educational actions and criteria for assessment. We can clearly see the direction of the qualification set-up which moves from the occupational practice to the classroom.

Similar systems exist in Belgium, the Netherlands, Sweden and the UK. In Belgium, the most basic building blocks of the system are the occupational profiles. In the Netherlands they are defined as the professional competence profiles and in the UK qualifications are based on national occupational standards (NOS). All these documents describe, in one way or another, the skills or competences needed to carry out the occupation, either as a starting practitioner or as an experienced employee, though the precise categories differ. In Sweden, for example, the categories used are knowledge and understanding, competence and skills, and judgment and approach. On the basis of these profiles, the desired learning outcomes can be defined and fed through to the education side of the system. The structure of occupational building blocks increases the transparency of the qualifications systems, as it enables people to compare the basis of their qualifications with regard to the activities that need to be carried out.

In some countries, targeted efforts are being made to make education more labour-market-relevant. In addition to a labour-market-focused qualification system, in Sweden there is an obligation for education institutes to develop relations with the wider community for further (vocational) education. Such cooperation also takes place, although less extensively, between the advanced/higher vocational institutes and the social partners/the labour market (as, for example, in the profession of welder or ski instructor). This new strand offers an alternative to the traditional higher education sector by providing more labour-market-focused education, with a combination of theoretical and practically oriented learning.

Though such instruments seem to be in general use, in some countries they have not been adopted. In Greece, several efforts are being made to adjust the qualifications structure to labour market demands, but the formal feedback loop has not been given shape so far. In Germany, VET education is strongly embedded in the labour market, as practical experience plays a central role in the dual system of training provision.

In this context, the research and information resources and practices that are in place nationally are significant. Both social partners and governments are often active in exploring the demands of businesses and surpluses in supply. The SSCs in the UK and the centres of expertise in the Netherlands, for example, conduct in-depth research into the needs of employers, both qualitatively and quantitatively. This information should then be used in decisions about education provision within specific regions and sectors, something that is not happening according to Cedefop's *Trends in VET policy in Europe 2010-12* (Cedefop, 2012b) <sup>(29)</sup>.

What is crucial, however, is how the final step in the feedback loop, the step from a qualification system to the curricula of VET schools and actual teaching, is organised. In general, schools are required to follow the demands laid down in the qualifications systems and are bound to the occupational profiles. In some countries, schools work together with individual employers to set up their courses and curricula (Lithuania). Dutch VET schools enjoy formal autonomy, but are increasingly asked to justify their education provision with recourse to labour market data. However, they can develop their own approaches to curriculum content. In the UK, the role of private training providers together with independent awarding and examination bodies offers a different structure. These aspects will have to be examined in more detail at a sectoral level.

So what does this tell us about the different approaches to the governance of qualifications? The set-up and management of qualifications structures in several countries displays a clear move towards more use of labour-market-based instruments and higher involvement of private actors such as employer organisations and trade unions. This transition is currently taking place in Greece and Lithuania,. Other countries, such as the UK, are used to a business-centred approach, both in terms of instruments and actors involved. Mostly, there is a balance between education and work. In some countries, the regional aspect also plays an important role in the general governance structure.

Qualifications – at this level – are commonly perceived as an instrument for signalling or translating occupational aspects (skills, competences) into educational actors. In turn, at a micro level, they are supposed also to be relevant in signalling educational outcome to labour market actors. By looking closer at the situation in each of the five selected sectors, we will be able to say more about the practical use of qualifications in determining the entry and practice within occupations and professions.

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<sup>(29)</sup> [http://www.cedefop.europa.eu/EN/Files/6116\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/6116_en.pdf) [accessed 17.7.2013].

## CHAPTER 5.

# Sectoral analysis

In this section we discuss the situation in the five different sectors examined in the country research. By comparing the situations in the different countries, the key factors determining the role of qualifications can be identified and developments and changes explained.

In the selection of sectors and occupations, several factors have been taken into account: a focus on VET and occupations requiring sector-specific skills and knowledge. The occupation of welder is analysed in two different sectors as welding is a transversal activity carried out in several sectors. The selection aims to reflect the scope of the sector so we have, for example in the case of health and social work, chosen both medical and social professions (the latter in the form of social workers).

The degree to which national legislation plays a role in the governance of occupations was intentionally selected to be different among the selected occupations. This affects the freedom of companies to decide upon their own practice concerning the position of qualifications. Although significant differences exist across the Member States, occupations that are likely to be nationally regulated are those with a hazardous element or which are health-related. The selected occupations of doctor, machine operator and clinical nurse are examples of this category. Occupations that are included that are less likely to be nationally regulated are plumbers and fitness instructors.

We have aimed to make the selection of occupations as specific as possible, avoiding overall categories such as engineer or machine operator in favour of specific occupations such as forging press worker or pharmaceutical products machinery operator.

Our selection of occupations and professions, however, remains limited and cannot claim to represent the entire economy or even their own sectors. Because of our focused selection we are, for example missing more highly qualified occupations, as well as generic qualifications occurring across sectors. Since we are adopting an inductive empirical approach, aiming to gain an in-depth understanding of the mechanisms and structures behind the topic of our research, we are not aiming for a fully representative selection. Though the conclusions we draw from the information collected can be seen as generally applicable, it is possible that we are missing specific structures or developments taking place in other occupations, sectors or countries.

In the following, we present the empirical situation in each sector, paying attention to issues relevant to the topic of the study.

## 5.1. Health and social work

The situation in the health and social work sector was examined in Belgium-Flanders, France, Germany, Lithuania, the Netherlands and Sweden. The professions that were selected as cases were GP, clinical nurse and social worker.

### 5.1.1. Governance systems in the sector: the role of sectoral organisations

The health care sector is the only one in this study in which we speak of professions instead of occupations: medicine has traditionally been seen as one of the 'learned professions', implying a strong sense of professional identity. The term 'the profession' is sometimes also used to describe the group of professionals in, for example the medical area as a whole. One would therefore expect that the sector is characterised by a high degree of sectoral organisation. At the same time, we have seen that the government is also comparatively active in the sector, regulating entry and specialisation. It is therefore interesting to see how sectoral organisations have influenced the professions alongside government regulation.

Traditionally, the respective orders of medical practitioner play an important role in implementing the licensing systems in place in different countries. In both Belgium-Flanders and France, the orders are authorised to carry out the registration of professionals, thereby administering entry. They also have deontological powers in upholding the quality of practitioners, imposing sanctions in cases where practitioners do not adhere to their codes of conduct, including demands relating to continuing professional development. Sanctions can include reprimands, suspension from practice or even deletion from the list of professionals, implying a professional ban. In the Netherlands, the College of General Practice, Nursing Home Medicine and Medical Care for the Mentally Disabled (College voor Huisartsgeneeskunde, Verpleeghuisgeneeskunde en medische zorg voor verstandelijk gehandicapten) is authorised to maintain the register for GPs, which is a consequence of Article 14 of the individual professions in health care (*individuele beroepen in de gezondheidszorg*) (BIG) law determining that specialist organisations may be the ones managing the specialist register. In Germany, the association of doctors working with insurance companies (Kassenärztliche Vereinigung) organises cooperation between doctors and health insurance companies and also oversees the qualification of its

members, i.e. all GPs working with health insurance. It is only in Lithuania that sectoral organisations do not play a role at all in implementing national provisions pertaining to entry requirements for GPs.

In addition to the administrative role, professional organisations of GPs or medical practitioners also influence their education, both qualitatively and quantitatively. In Lithuania, professional organisations are involved in consultation on changes in medical norms governing the competences of GPs. Also, the Lithuanian Medical Practitioner's Association coordinates applications for continuing professional training and courses, advising universities and practitioners on the topic. In the Netherlands, several sectoral organisations are included in organising, financing and shaping GP education. All training GPs are formally employed by the sectoral organisation Foundation of Postgraduate Training in General Practice (Stichting BeroepsOpleiding tot Huisarts) financed by the Ministry of Health. The training objectives of GPs are defined by the Council for the GP Training, organised by the Dutch GP society. The capacity body, made up of professional representatives, health care insurances and educational institutes, publishes estimations of the required need for professionals, based on a projection of the demand in care and the supply in professionals. This demonstrates a clear case of public-private cooperation in the governance of the Dutch GP labour market.

The administrative role played by the orders of medical practitioners and other professional organisations is shaped differently in nursing. In the Netherlands, the Registration Commission for Nursing Specialists (Registratiecommissie Specialismen Verpleegkunde) is indeed authorised to maintain the registration of advanced nurse practitioners (ANPs), but not of general nurses, which are registered by the Ministry itself. In other countries, professional nursing organisations do not play a direct role in managing entry into the profession. The order of nursing in France could theoretically play such a role, but has been in serious financial difficulties since the trade union of nurses decided to boycott the membership of the order. It has administrative powers, but to what degree it is able to use these powers is questionable. The German Care Council does not play a managing role, but lobbies for the interests of nurses and carers.

Leaving the direct role of implementing the regulatory framework aside, professional nursing organisations play an active role in the shaping of national regulation and in influencing educational provisions in the sector. The Dutch Federation of Nurses (Verpleegkundigen & Verzorgenden Nederland, V&VN) has, for example, recently updated the professional profile on which the qualifications structure is based after the current distinction between different



educational levels of general nurses led to confusion. The Belgian Federal Council of Nursing Practitioners also has a formal role in advising the Minister in all nursing matters, specifically regarding the practice of the profession and required professional qualifications.

The Dutch V&VN is setting up a sector-specific quality register for nurses and carers that will allow nurses to register not only their qualification status, but also the amount and kind of continuing professional training they have completed, plus other relevant experience which cannot be registered in the official BIG register. At the moment, registration is voluntary and could therefore be seen as a kind of accreditation system. However, the question has been raised whether this system should be given legal status, though stakeholders agree that a voluntary system that has sufficient scope can develop a level of effectiveness that equals that of regulatory measures. No similar initiatives were found in other countries.

It is no surprise the situation is different in the case of social work. Without the formal structures in the other professions, the social work sector is more reliant on professional organisations defining their own role. In some countries Belgium-Flanders and Lithuania, professional organisations have an advisory function towards the Ministry on matters related to the profession. In the Netherlands, this function is more formalised, as the Dutch Association of Social Workers (Nederlandse Vereniging van Maatschappelijk Werkers) is represented in the organisation structure governing the qualifications structure. The association participated in discussions defining the content of qualification profiles in the sector, overseen by the centre of expertise in the health sector, Calibris. The association has also set up a professional code of conduct which registered members are obliged to follow.

#### **5.1.2. The role of qualifications in practice: what happens at micro level?**

The relatively strict regulation of health and social work limits the way people can enter a profession and partly determines the way they can practice. As was expected from the information collected at country level, this situation was confirmed by both professionals in the sector and employers, in all the countries examined. According to respondents, it is seen as highly important that competent staff is employed in hospitals and medical centres, due to the obvious risks associated with the tasks fulfilled by professionals in the sector. The situation is different with social workers, with requirements being less strict in some countries, though qualifications play an important role in signalling the competence and skills of social workers as well.

In several countries, e.g. in Belgium-Flanders and the Netherlands, a health inspectorate monitors the quality of health care provided by hospitals. In this context, the appropriate qualification levels of both GPs and nurses may also be checked, especially where there are shortcomings in the quality of care. However, this is not a priority since it is highly unlikely that professionals, at least in the case of doctors, practice without a licence. In Lithuania, this is pointed out in relation to the fact that unlicensed doctors would not even be able to carry out some of the basic tasks, such as issuing prescriptions. It appears that strict entry requirements and stipulations regarding further training add to the trust given to qualifications as a signal of competence and skills. This can, for example, be seen in France, where strict selection procedures underlying the education system lead to a situation in which considerable value is attributed to the qualifications.

The situation at the workplace also reinforces the use of qualifications to determine competence and skills. Even though doctors and nurses work in a multidisciplinary environment, daily work processes necessitate a clear distinction between the different tasks these professionals have, following a strong division of labour. This division necessitates high trust in colleague's competences, for example between nurses and doctors, and the qualifications provide a firm basis on which this trust can grow. At the same time, equal treatment of different levels of nursing qualifications in Belgium-Flanders and the Netherlands, where the qualifications level does not influence the tasks and authority of nurses at the workplace, shows the qualification only provides the basis of this trust. Aspects such as the attitude, learning skills and adaptability are more important than the level of qualifications. Also, the fact that there was initially substantial resistance by doctors to the reallocation of tasks and competences to the ANPs in the Netherlands shows that the division of tasks can sometimes be based more on the hierarchical tradition of professionals than on the actual task division necessary.

As the qualification requirements for social workers are more lenient, it is possible that, in some countries, there are professionals active who do not have the suitable diploma. However, there is no clear information that allows us to judge how often this is the case and whether it has a strong impact on the quality of services provided. However, because social work is projected to shrink rather than grow, employers can be strict in their selection of personnel, and see the required qualification as the basic condition for new employees. The accreditation system in Lithuania can help social workers distinguish themselves but it might also lead to higher salary levels which may not be acceptable to employers. The new legal requirements for social workers in Lithuania are too recent to show

effects, though it will be interesting what will happen to already practising social workers who do not fulfil these new requirements.

While it is confirmed that technological and scientific developments play an important role at micro level, i.e. in hospitals and medical practices, respondents in all countries question whether these changes are of a qualitatively different nature than before. The medical professions have always been subject to changes and have become used to adapting. As a consequence, continuing professional development plays an important role in the sector and contributes to the updating of knowledge and practices. In addition, the education and training underlying the qualifications include a strong practical element which increases professionals' trust in them. The importance of access to updated knowledge and skills increases the status of qualified personnel, as it is believed that they have been exposed to new developments during their training period (initial and continuing). As a result, we cannot confirm the hypothesis that qualifications are losing importance due to technological, economic or political developments.

Nonetheless, it can be confirmed that changes are taking place in the definition of the professions, which mainly applies to the task allocation between different kinds and levels of nurses and between nurses and doctors. The case of the ANP introduced in the Netherlands is an example of how the qualification system can lead to a new division of tasks in the workplace. Also, in other countries the need to open up some medical tasks to nurses or relocate responsibilities from doctors to nurses has been noted.

### **5.1.3. Conclusions: key factors making the difference**

In conclusion, the situation in health and social work in the countries examined can be characterised by the following aspects, which apply more or less to all of them:

- (a) strong regulation at macro (national and EU) level, determining qualification requirements for entry into the profession, categorised as licensing systems;
- (b) comparatively strong systems of continuing professional development, enshrined in legal and professional obligations;
- (c) considerations of patient safety and quality of services prevailing in all countries as a motivation for regulation;
- (d) strong role for sectoral organisations in the management and administration of national licensing systems and continuing professional development systems;
- (e) strongest framework applying to doctors, regulation of social workers more lenient;

- (f) some changes in qualifications and task reallocation, but no deregulation or decreasing importance of qualifications.

While these aspects can be found in all the countries examined, there are some exceptions and other aspects where countries differ in their approach:

- (a) in some countries (Lithuania, the Netherlands), public registers exist for the registration of professionals; in others, membership of the order of medical professionals is mandatory for professionals (Belgium-Flanders, France);
- (b) in Lithuania, the Minister determines skills and competence needs; in others, (Belgium-Flanders, France, the Netherlands), professional organisations play a much larger role in this process;
- (c) in determining entry into education and specialisation programmes, France makes extensive use of entry exams (*concours*) that do not exist in other countries.

There are differences in the regulation of social workers. In Belgium-Flanders the professional title is protected. In France and Lithuania both the entry and the practice of the profession are strictly regulated, while in the Netherlands no formal entry requirements have been set up.

Specialisation in nursing is carried out by employers (hospitals) themselves in Lithuania, while in Belgium-Flanders and France such specialisation is more formalised within education.

In the Netherlands, the profession of ANP has taken up a role in the professional field between doctors and nurses, a change which might also be introduced in other countries.

These commonalities and differences describe a situation clearly influenced by a strong sectoral dimension. However, national differences also play a role in determining the details of the governance and regulatory arrangements on the ground. Specific factors influencing the situation in the sector include the high risk and the connected responsibility of professionals related to the work giving rise to a strong need for good education and training and associated regulation. Excellent health care is seen as an important public good in all countries concerned and a strong professional infrastructure can support the creation of a working system. Further, the medical profession is traditionally a well-established professional group (hence 'the profession'), which explains the trust invested by public authorities in the sectoral management of the regulatory structures. This applies less to the profession of social worker which explains the smaller role professional bodies play in this area. The medical world is closely connected to the world of science and research, leading to new treatment methods and medical technologies. This factor can serve as an explanation for the high importance attributed to continuing professional development.

Despite these sectoral characteristics, which apply to all countries examined, the situation differs in some respects, explained by the following national factors. First, the role of professional organisations differs, as the government in Lithuania does not give social partners as much responsibility as in other countries. This has to do with the lack of tradition of social partnership in Lithuania, also seen in other sectors. The formal entry procedures in France reflect the country's education tradition in which, especially at higher level, entry exams play a more important role than in other countries. In social work, the Netherlands display their common approach of non-regulation, but with strong demands at micro level, while the strong regulation in France also confirms the general national trend. However, regulation in Lithuania goes against the general picture of the regulatory tradition in the country.

In conclusion, country differences are mainly to be found in the details of the governance systems and the regulatory frameworks, stemming from the national governing traditions and the roles the different actors are able to play. At the same time, the general governance systems of the sector and the requirements set regarding entry and practice display many similarities, so that the general picture of the sector in the different countries that emerges is the same: a sector with high level regulation, strong professional groups, and an important role for qualifications in governing access to, and practice in, the professions.

## 5.2. Electricity, water, gas and waste

The situation in the electricity, water, gas and waste sector was examined in Germany, Greece, Spain, Lithuania, the Netherlands and the UK-England. The analysis focused on the occupations of plumber, forging press worker and welder. In the following we present a review of the information that was collected at country level.

### 5.2.1. Governance systems in the sector: the role of sectoral organisations

In the UK-England, the social skills councils, representing the voice of employers, determine the content of the occupational standards. In the Netherlands, the social partners (employers and employees) are represented in the centre of expertise, Kenteq, in shaping the professional competence profiles of plumbers, welders and related professions. In Germany, regional chambers of handicrafts have a direct stake in the implementation of regulation. In Spain, the sectoral actors have more of an advisory role towards government, with both the welding and the plumbing federations active but less so for the organisations representing forging workshops. In Greece, professional organisations play an important role

as stakeholders advising and lobbying government, especially in the plumbing sector. In Lithuania, however, the influence of social partners is being institutionalised, but is still weak.

We can identify two different patterns: in one, sectoral actors have an autonomous stake in the process of shaping qualifications and entry requirements, such as in Germany, the Netherlands and the UK-England. In the other, sectoral organisations provide advice for the macro level where decisions are taken, such as in Greece, Spain and, to a lesser extent, Lithuania. However, this does not mean that the sectoral actors in the latter group are weaker than in the former: in both Greece and Spain, social partners lobby government in favour of their occupational group. In Spain, the social partners are calling for a stricter and more coherent regulatory system across the country as a whole, while in Greece the professional associations are demanding closer supervision and control of unlicensed and untrained workers. In the UK-England and the Netherlands, where the sectoral partners are involved at a more technical level, these issues do not arise to the same extent.

The situation in the welding sector is unusual in all countries. Due to the high degree of international organisation, sectoral organisations play a larger and more autonomous role than those in other sectors. This is a result of the organisational infrastructure set up to implement international welding standards developed under supervision of the European Welding Federation and the International Institute for Welding. Within this framework, national welding federations act as authorised national boards (ANB) that can authorise national training bodies providing the training of welders according to international standards. The national welding bodies, in their role of ANB, provide the examination, qualification and certification of welders under this system. In this way, an entirely sector-based governance system has been established which exists next to, and is intertwined with, national VET and qualifications structures.

As the regulation determining occupational entry and practice in the sector is, overall, relatively weak, sectoral organisations do not need to play a implementing role, as is the case in the health sector. However, they develop other activities, filling the space which the weak intensity regulation has created. The international standards in the welding sector are one example of these kinds of activities, which would be difficult to implement in a high intensity regulatory environment. Other examples are efforts of professional organisations in the Netherlands in the plumbing and handyman sector, which aim at voluntary quality assurance, based on sectoral self-management. Sectoral organisations have set up arbitration committees for their members which can be called upon in situations where there is conflict between a practitioner, in this case a plumber,

and a client. The arbitration committee can help resolve this conflict by providing binding judgement. Though the involvement of an arbitration committee is a measure of last resort, membership of a sectoral organisation gains a distinctive status of some kind of accreditation, as it signals to the client that quality assurance mechanisms are in place. This can be seen as a market-based mechanism replacing the front-loaded approach of entry regulation with a back-loaded approach of self-management.

Overall, we can distinguish four different functions of sectoral organisations in the electricity, water, gas and waste sector:

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

The role of sectoral actors can be seen as significant, as the institutional structures allow space for social partners to exert their influence. However, the example of Lithuania shows that the prerequisite for exerting influence is not only the institutional structure, but also simply the existence of strong sectoral organisation.

### **5.2.2. The role of qualifications in practice: what happens at micro level?**

The regulatory context in this sector is characterised by low intensity regulation. With the exception of Greece, the countries in the selection do not set entry requirements for the occupations studied, though the occupations are defined in the qualifications frameworks and sectoral partners are involved in the governance of the content of the qualifications. So what does this regulatory context and the different systems of governance mean for the situation at micro level?

The country reports can only provide general indications on compliance by employers and employees with the regulation in the sector. Nonetheless, they show up interesting issues, especially when comparing the situation in the

different countries. In Greece, with the exception of entry requirements for plumbers, compliance with the regulation is rather weak, meaning that employers make use of unlicensed and unqualified staff or that unlicensed plumbers work as self-employed service providers. In the Netherlands, where there are no formal entry requirements, the available evidence points in the opposite direction. Despite the lack of entry requirements, employers place strong emphasis on the qualification of their employees, as they are responsible for their health and safety and for the quality of the services provided. Liability plays an important role as a motivation for employers to look out for the qualifications of their employees. Where in Greece the entry requirements are strict and in the Netherlands the occupation is open and unregulated, the outcome of this regulatory framework seems to be the opposite.

The importance of quality of products and services in connection with OSH legislation, independent of formal entry requirements, can be confirmed in several countries. In this context, the difficulty of the tasks performed can play an important role as well. In Spain, for example, it seems that companies involved in general plumbing activities do not embrace qualifications to a high degree, leading to poor qualification levels. However, companies carrying out specialised plumbing tasks try to employ qualified staff. The same process can be observed in the Netherlands, where the more all-round profession of handyman requires less formal qualification than the more specialised plumbers.

The main issue in this context is simply the question of whether employers think that the required skills can be acquired on the job. If this is the case they will not place much emphasis on the formal qualifications of their employees. Where this is not the case, they will want staff who have already acquired the necessary skills. Financial resources also play a role. In Lithuania, for example, employers often lack the resources to organise further training for their employees. In a situation where there is high unemployment, i.e. high labour supply, they are therefore likely to set high requirements for new employees. In countries like Greece, where the VET system does not provide a high degree of practical training, this also means that employers place additional emphasis on aspects such as previous work experience.

This leads to the question of whether employers trust and value the existing qualifications. This seems to be specific to the individual qualification and not tied to the system as a whole. In Lithuania, there seems to be some dissatisfaction with the VET system for welders which leads employers to require additional qualifications or on-the-job training. International welding certificates are also available, but their relatively high costs do not always make them a viable alternative. In Spain, too, welders place more emphasis on practical experience



rather than qualifications, though the development of new qualifications in the field may increase their value. A different situation exists in the case of Spanish forging press workers, where the expectations placed on newly developed qualifications seem to be high. In the UK-England, in contrast, the qualifications in the sector are trusted by employers, as they are developed directly by employer representatives. In the Netherlands, no issues of trust in the specific qualifications have been reported.

A final aspect is the micro level relevance of qualification in relation to changing demands on workers in the sector. In the UK-England, qualifications are seen as a tool for various professional development rather than for determining entry requirements. In the Netherlands, qualifications are formulated in reasonably broad terms which make them flexible to new demands. Aspects such as new OSH legislation or environmental regulation, which has an impact on occupations in the sector, can be included in initial qualifications. Practicing employees, however, need to update their knowledge through on-the-job training. In Greece, professional federations organise training for their occupations to update their knowledge, for example of emerging green technologies. Whether this training has an element of qualification to it, is not clear.

In general, qualifications play an important role in the sector at micro level, despite the lack of strict entry requirements. The quality of goods and service in connection with consumer protection and the OSH of workers are the main drivers determining the relevance of qualifications. As we are talking about technical occupations active in, for example, construction projects, safety is a big concern for clients and employers. However, where qualifications are not seen as sufficient proof of competence, work experience is an even more important factor. Moreover, in some cases employers use unqualified staff to limit their costs. This is mainly the case for activities that do not require complex technical knowledge and skills.

### **5.2.3. Conclusions: key factors making the difference**

The situation in the electricity, water, gas and waste sector can be characterised by the following recurring themes:

- (a) relatively low intensity regulation on entry requirements;
- (b) high importance of general regulation, e.g. regarding OSH;
- (c) existence of qualifications, albeit with some different definitions and unclear delineation across occupations;
- (d) strong role of sectoral organisations in both regulation and qualification management;
- (e) pragmatic use of qualifications at micro level.

While these aspects are shared among most countries, there are some exceptions to the rule as well as aspects among which countries differ. These are the following:

- (a) Germany and Greece are exceptions in setting entry requirements for occupations;
- (b) the welding sector excels in sectoral initiatives by having developed international qualification and training infrastructure;
- (c) in some countries (Greece) sectoral organisations lobby for government restrictions, while in others (the Netherlands, the UK-England) they are involved in self-management;
- (d) in some countries (Greece) unqualified staff is employed despite regulation, while in other qualifications are demanded in absence of regulation (the Netherlands);
- (e) trust in qualification differs across countries (the Netherlands, the UK-England high; Greece, Lithuania lower).

When looking at these differences and commonalities, the main question is whether sectoral factors determine the situation in the different occupations or whether national factors prevail. In the first case, the commonalities among countries should be stronger than the differences. In the second case, national exceptions should be stronger.

The influence of European level licensing requirements on specific regulation is low in the occupations under discussion. This might be because the sector is not inherently international, especially when compared to, for example, transport. However, the importance attributed to OSH and to quality of products and services plays an important role in all the countries. This originates clearly in the nature of the work which is technical, physically demanding and needs to result in reliable building structures and products. In the welding sector this aspect of the work, i.e. the need for reliability in building processes, is cited as the main driving force behind establishing international quality assurance structures. In most countries (except for Greece), safety aspects are judged to be sufficiently covered by generic regulation and do not justify specific occupational or sector requirements.

With respect to national factors, the most important exception is Greece, where the regulatory tradition seems to trump the sectoral distinction and leads to high regulation intensity. This may also be a result of the strength of Greek sectoral organisations as they lobby for protection of their trade, unlike the weaker social partners in Lithuania. However, the sectoral actors in the Netherlands can also be seen as strong, but this has a different result in this case, better explained by the regulatory culture which emphasises market-based

solutions. Differences in the practical use of qualifications at micro level are also likely to be grounded in national circumstances, also connected to the trust in the qualifications system. This would suggest that the institutional trust in Greece is lower than, for example, in the Netherlands, where qualifications are valued more highly. Further, the differing degrees of practical training within VET education in the different countries seem to have an effect on the relevance of qualifications, which seems to present a challenge in Lithuania.

Most important, these aspects cannot be seen in isolation: the interaction between the factors, both national and international, can have the most decisive impact. One of the questions is, for example, whether the strong involvement of social partners, e.g. in the Netherlands, but also in the welding sector, can be seen as a result of the space provided by the lack of regulation, or whether this lack of regulation is made possible due to the activities of sectoral actors. A similar question applies to Greece where it is difficult to say whether strict regulation can be seen as a result of the lobbying of social partners or whether the strength of the social partners is based on the existence of strict legislation. Moving on to the micro level, it is interesting to see that a system of well-trusted qualifications in combination with a culture of strong safety and liability (the Netherlands) leads to a higher practical use and relevance of qualification than a system of strict regulation combined with little trust in qualification and public authority (Greece). Finally, in situations where no entry requirements are set by the state, it remains up to the employer to determine the relevance of qualifications in a pragmatic way. In that sense, a system focused on firm educational regulation but few labour market restrictions, as in Spain, seems to produce a similar outcome in the sector as a system based on business needs, as exists in the UK-England.

These issues cannot be explored in sufficient depth by looking at the situation in just one sector. However, the dynamics and mechanisms that can be defined to play a role in the three occupations examined here can be useful in comparing the electricity, water, gas and waste sector with other sectors where the stability of the influence of national factors also plays an important role. The comparative analysis will show whether the dynamics identified here can be confirmed in the other sectors and countries.

### 5.3. Chemicals, rubber and plastic

The situation in the chemicals, rubber and plastic sector was examined in the following six countries: Belgium-Flanders, Greece, Spain, Slovenia, Sweden, the

UK-England. The analysis focused on the occupations of pharmaceutical and toiletry products machine operator, welder and chemical engineering technician.

**5.3.1. The role of qualifications in practice: what happens at micro level?**

Since the occupations in the chemical and rubber sector are all subject to constant change, influenced by technological developments but also by the high competition from China and Eastern countries, further professional training is often provided by employers within the occupations themselves. An example is instruction in using new technologies.

It is not necessary to hold a licence to practise one of the above professions. For some, Member States limit access to the profession to those holding a necessary diploma. However, the profession of welder in the rubber and plastic sector is generally not regulated. For welding activities, employers often demand a technical secondary school diploma of the third degree or a bachelor degree. There is also a lot of training on the job.

In Spain, enterprises may need to use the services of chemical engineering technicians for the development of particular tasks that statutorily require their intervention. In such cases enterprises must hire qualified professionals with the official academic certificates. Employers perceive these degrees as a necessary, but not necessarily sufficient, condition for the exercise of the occupation. The academic programmes taught at universities do not always reflect the changing needs of the market and so the training of employees through additional education is a useful tool to update their knowledge and complement the competences acquired during the university studies. Experience or specialisation is also valued by employers. Although the provision of continuous training by employers is not formally required, it is sometimes provided. However, research into the job offers published by pharmaceutical companies shows that a high number of employers in the sector do not use qualifications in their hiring decisions. The degrees and or certificates of potential candidates are not a crucial element in many of the analysed positions: most did not even require them. Experience in the occupation seems to be the main element valued by employers. The Spanish Gas Association (Asociación Española del Gas) (Sedigas) has developed certificates aimed at accreditation of competences for welders of polyethylene gas pipes. Since this business association is composed of employers in the sector, it is partly ensured that the content of the programmes is adapted to the needs of the businesses and that technological developments are swiftly introduced in the courses leading to the certificate. Since the programme is set up by Sedigas, it is ensured that the certificates are highly adapted to the needs of the employers.

In Greece, enterprises providing workplaces to chemical engineering technicians include personnel with or without formal qualifications. However, since increasing technological and scientific developments require that highly qualified personnel should be employed, graduates should acquire experience and enrich their knowledge and training within the workplace. The education offered for chemical engineering technicians is general in nature and specialisation has been taking place in the workplace where knowledge passes from one employee to the other. Due to the size and multiplicity of chemical plants needing chemical engineering technicians, it is believed that specialisation should not be provided within initial vocational training.

Employers comply with national requirements, as strict checks and controls are in place to ensure product quality and safety where machine operators are employed. Enterprises employing chemical engineering technicians take it upon themselves to acquaint their technicians in the specificities of the industry. Since the occupation of chemical engineering technician does not exist in a pure form in the Greek labour market, it is not possible to use personnel trained in the workplace on the peculiarities and specificities of the position. This does not pose serious safety and health risks for personnel, nor for the protection of consumers, since, according to law, a licensed engineer of tertiary education level is responsible for the well-functioning of production units in chemical plants. Efforts are being made to underline the importance of specialisation, possibly through continuous vocational training programmes. However, due to the small or medium size of industries employing chemical engineering technicians, and the multiplicity of specialisations associated with the occupation, it is believed that continuing vocational education and training (CVET) and the ensuing specialisation can be undertaken within the workplace. Qualifications for machine operators are seen by employers as a legal requirement that needs to be abided with. They will assume a prominent place as soon as the educational programmes of initial vocational education and training (IVET) and CVET are updated. Unfortunately, technological and scientific developments in the field are not adequately reflected in the educational programmes of CVET and IVET or in the qualifications of relevant personnel.

In the UK-England there are no governmental restrictions for entering a profession or occupation. This is mainly left to the decision of the employers. Various quality standards, however, express the need for a qualified and skilled workforce (e.g. for welding assignments). For this reason, the sector itself requires employees to have or to obtain the necessary qualifications in accordance with their own established guidelines and standards. These guidelines are skills-based, focused on working in the sector. Issues, such as

safety and health are mentioned, but additional transversal skills (reading, writing, information and communications technology (ICT), etc.) are presupposed. The qualifications developed by the SSCs (voice of the employers and in charge of developing NOS) are highly valued as tools for continuous professional development. In particular, the unitised approach to qualifications ensures that employers can train their workforce efficiently and effectively in particular subjects. The final uptake of formal qualifications is, however, not huge. Employees are trained with unitised modules related to the qualifications, but this does not mean that the employees will finally obtain the qualification. For employers, it is not important that the employee has a paper stating that he/she has a qualification; what is more important is that the employee has the right and relevant skills to do the work (i.e. follow training courses demanded/desired by the employer). In addition, Cogent (the Sector Skills Council for the Chemicals, Pharmaceuticals, Nuclear, Oil and Gas, Petroleum and Polymer Industries) developed a gold standard for the process technician. The gold standard is a national framework for continuous professional development setting out the skills required for world class performance in key job roles in the process industries. It describes and maps the competences required to do each job. It follows that in addition to the gold standard and the say Cogent has in developing qualifications, the input employers provide in determining the learning outcomes of educational provision is considerable. In this regard, it can be noted that the provision of educational programmes and curricula by VET colleges and other providers in the welding sector are attuned to the NOS. Through the involvement of employers in the development, review and refinement of these standards, supply is well aligned with demands from the industry. The qualifications of process technicians in chemical industries are also taken into account by employers in their recruitment policies. The apprenticeship framework will change the fact that skills are most important to some extent, since it will lead to a formal qualification (to obtain public funding). The fact that the sector is characterised by fast-changing technologies has an impact on the way qualifications are used, i.e. not as entry requirement, but as a tool for continuous professional development. Employers indicate that (university) graduates lack soft skills, such as teamwork, communication and report writing skills. Obtaining formal qualifications is not the main reason for training in the workplace; the aim is that the work is carried out keeping in mind the right health and safety regulations and quality standards.

Even though it does not always matter to employers too much whether an applicant has a formal VET qualification or whether he or she has only acquired a professional certificate, the industry suffers from competition with China and the Eastern countries and needs to become more competitive through specialisation.

Even though there is some deregulation, this leads to diplomas becoming more important.

### **5.3.2. Conclusions: key factors making the difference**

The chemical sector is a knowledge-based industry which demands a skilled workforce for its success. The sector faces increasing competition from Asia and the Middle East which leads to overproduction in the European industry and a decrease in jobs. In most European countries, changes in health and safety regulations, together with changes in environmental policies, have resulted in additional process and monitoring requirements affecting the operating costs, and therefore the competitiveness, of the sector.

Despite increased emphasis on upskilling the workforce, demographic change results in an increasingly older workforce (skills shortages) and a need to recruit more young people. In Belgium-Flanders, Slovenia and the UK-England, there is often a lack of skilled professionals. Shortages of technical and engineering skills such as technicians, fitters, operators, remain a Europe-wide problem. In most states there is an increasing demand for sustainable products in the chemical sector. Technological innovation can lower energy consumption or increase capital intensity but organisational innovation, such as outsourcing non-core activities to specialised subcontractors, also takes place. Significant investment in research and development is needed. Consumers do not only demand stable and sharp prices, but often ask for support by the producer with regard to the further development of process and applications. Companies need to respond quickly to the demands of consumers and more attention has to be paid to sustainability.

It is not necessary to hold a licence to practise one of the professions in this sector. However, access to certain professions is restricted in some countries: in Belgium-Flanders, Greece, Spain and Sweden, the title of chemical engineering technician is reserved for those holding the required diploma/qualifications. In the UK-England, there are no entry requirements but the National Skills Academy provides training for the sector. Even though in Spain there is a trend towards deregulation, most professionals are highly qualified. The trend towards deregulation is also noticeable in Greece. Welding activities in the chemical sector are mainly not regulated. The specific profession is often not even known in the Member States under research; training generally takes place on the job. There is an exception for polyethylene welders in Spain. With regard to toiletry machine operators, a professional degree is generally not required. For all professions training on the job is of main importance. In the states researched there is no specific education that deals with pharmaceutical and toiletry

production operators. However, the chemical-pharmaceutical industry is very specialised and most operators working in the industry are highly experienced (certainly in Spain). In Greece, a specific amount of practical experience is of great importance for those wishing to qualify as specialised machine operator technicians; a licence to practise the profession is not needed. In the UK-England, the gold standard follows the same logic as for the process technician chemicals.

With regard to sectoral actors, two different patterns can be identified. They have an autonomous stake in the process of shaping qualifications and entry requirements, such as in Spain and the UK-England (polyethylene welders), or they provide advice to the macro level where decisions are taken, such as in Belgium-Flanders, Greece, Spain and Sweden. This does not mean that these actors are weaker than in the former group of countries. This is particularly so for Greece and Spain (licence exemption) where social partners are proactively lobbying the government in favour of their occupational group.

Sectoral organisations have no role in implementing state regulation, though they can occupy the space, as with the social skills council in the UK-England and Sedigas in Spain. Overall, we can distinguish the following functions of sectoral organisations: social partners, professional organisations or sectoral federations play a technical role in determining the content of occupational standards and qualifications within the national qualifications structure (Spain and the UK-England (polyethylene welders)); professional organisations play a role in advising government in the context of macro regulation and lobby for the protection of their occupational groups (Belgium-Flanders, Spain, Sweden); self-managing social actors (Sedigas in Spain).

Even though it does not always matter to employers whether an applicant has a formal VET qualification or whether he or she has only acquired a professional certificate, the industry suffers from competition with China and the Eastern countries and needs to become more competitive through specialisation. Even though there is some deregulation, for this reason diplomas, but specifically LLL and continuous professional development, become more and more important.

#### 5.4. Transport and logistics

The fourth sector we examine at country level is transport and logistics. We examined this sector in Belgium-Flanders, France, Greece, the Netherlands, Slovenia, and the UK-England. The occupations we looked at in detail were heavy truck driver, air traffic controller and ship's engineer.



#### **5.4.1. The role of qualifications in practice: what happens at micro level?**

Corresponding to the strict licensing requirements on labour market entry and continuing professional education, the general picture that emerges from the micro level is that the licensing framework is complied with and embraced by employers and employees. In the case of air traffic controllers, the system is so tightly organised by the employers themselves (i.e. the air traffic control services) that non-compliance is unheard of. For truck drivers, the requirements are basic and easily attainable and in a labour market situation where a lot of drivers are available; employers are unlikely to take a gamble with unlicensed personnel. The same applies to the world of ship engineers where employers are closely involved in the training (initial and continuing) of their own employees and thereby embrace international requirements. However, these are only general impressions described by respondents, as no representative research was carried out at micro level in this study.

Compared to other sectors, the enforcement of the licensing regulation at micro level is high. This has partly to do with general traffic controls, as a truck driver is more likely to be required to show his licence on a regular basis than, for example, a social worker. In addition, specific enforcement procedures exist in the sector, which are more extensive than in other sectors. In Greece, the coast guard and the port state control are not only allowed to board ships in Greek waters and check the certificates of competence of all employees on board the ship; they are also entitled to subject ship's engineers to on-the-spot practical testing of their knowledge and competences. In all countries, controls of national and international traffic police are cited as an important incentive for employers and employees to comply with the licensing requirements. Further, the risk of accidents and the connected liability of employers may also play a role in the decision to employ qualified staff.

As a result of the need to carry an appropriate qualification and licence, qualifications in the sector are trusted by employers and professionals. Their core function, however, is that of an entry requirement, i.e. allowing the holder to practice the occupation. Through their licence, and hence their authority to practise, practitioners are seen as able to carry out their tasks. Licence holders are also expected to follow continuing professional training which increases the general feeling that they are competent to practise. In that sense, licences also reflect the continuing skills of the practitioners.

Where additional VET qualifications exist on top of legally binding requirements, such as the VET courses for truck drivers in Belgium-Flanders and the Netherlands, these are seen as having additional value, especially for the students, as they teach them more transversal skills and delve more deeply into

topics such as customer relations. Employers may also appreciate these qualifications, but will not wait several years for their trainees to complete their training. In times of labour shortages, they will rather make use of the regular certificates of competence and drivers' licences. Continuing professional development for truck drivers is also seen as effective for employers, as it teaches drivers to increase their fuel efficiency and therefore save costs for their employer. For air traffic controllers, the employer is usually also the training institution, and training (initial and continuing) and work are closely connected, as air navigation service providers have an obvious stake in their staff being well-trained.

Though the occupations in the transport sector are subject to constant change, influenced by both technological and legislative development, this does not diminish the role of qualifications. As in other sectors and occupations, respondents do not classify the current pace of change as unprecedented or unique and most of the occupations in the sector have been in existence for a long time. Changes in skills demand, for example regarding new technology or soft skills relating to customer service, are integrated into training and especially into continuing training, which is maintained for exactly this purpose. Legislative changes enacted internationally, for example regarding training requirements such as the amount of experience at sea for ship engineers, are implemented in the national structures and thereby feed through to the micro level.

In conclusion, qualifications are seen as important at micro level to avoid safety and health risks for the occupational practitioners and accidents for the general public. The strict licensing regime that is in place is therefore seen as justified by both employers and practitioners.

#### **5.4.2. Conclusions: key factors making the difference**

The situation in the transport and logistics sector, examined by making references to the occupations of heavy truck driver, air traffic controller and ship's engineer, can be characterised by the following recurring themes:

- (a) strong regulatory framework, defined through European or international legislation;
- (b) strict licensing requirements for entry into the profession, including demands on practical training and experience and additional criteria such as age and health;
- (c) strict requirements regarding continuing professional development of occupational practitioners;

- (d) strong role of sectoral organisations in implementing the regulatory framework, under the auspices of national authorities, in some cases entirely separate from public VET structure;
- (e) little room for national and sectoral actors to influence or change the international framework of regulation;
- (f) strong trust in qualifications at micro level, motivated by enforcement and concern for safety and security.

All occupations are subject to change triggered by legislative and technological developments, addressed through continuing professional development.

While most of these aspects apply to all the countries and occupations examined, there are some exceptions and also some aspects in which countries and occupations differ:

- (a) the occupation of air traffic is most tightly regulated and managed by elaborate regulatory infrastructure, while the profession of ship's engineer is more often integrated into the public VET structure;
- (b) some countries (Belgium-Flanders, the Netherlands) offer VET courses for truck drivers in addition to mandatory competence training;
- (c) the maritime sector is characterised by a strong role for sectoral educational institutes; in air navigation the employers (air navigation services) carry out the training themselves, and for truck drivers regular driving schools play an important role.

When looking at these differences and commonalities, it appears obvious that there are more commonalities among the different countries than differences, as the nature of the sector prevails over the national differences. Nonetheless, it is interesting to look at which sectoral factors have an influence on the way that work and education are governed and which national factors lead to specific exceptions to the rule.

There are two sectoral factors that clearly determine the nature of regulation and governance in transport and logistics. First, work in the sector is inherently international, as trucks, ships, planes and trains cross national borders and international air and sea space. Second, the work carries with it high risks of accidents which do not only affect the practitioners, but also the general public. These two factors clearly lead to a situation where international agreements and regulation is desirable. As international agreements cannot always take into account the national structure of education and training, it is also not surprising that separate structures are needed to organise the licensing of employees in the sector. Some occupations, such as the air traffic controller, carry such intensive

responsibilities and risks, that an entirely self-sustaining infrastructure was deemed the most effective way to approach governance in the sector.

Due to the strong international regulation infrastructure, national factors can only be of limited influence. The strong standing of trade unions in the Greek truck driving industry allows them to influence the national framework to a certain extent, in the same way that the Greek ship owners can put pressure on licensing requirements. National VET structures play a role in maritime education and in additional qualifications for truck drivers, determining the possibilities that exist for future students, though not impacting on the underlying mandatory framework. Overall, however, the structures and ways of dealing with the international sectoral framework are similar across the different countries and at all levels of the governance structure.

The sector can, therefore, serve as an example of a strong sectoral approach which trumps national differences in VET structures and regulatory tradition. It is interesting, however, that this sectoral approach is expressed in a strict international framework, which exists next to national educational and labour market structures and does not leave much room for national or sectoral actors to influence the framework. We can therefore speak of a top-down, labour-market centred approach, which determines entry to, and practice in, occupations in the sector.

## 5.5. Sports

The last sector examined at country level is the sports. We examined this sector in Germany, Spain, France, Lithuania, Slovenia and Sweden. The occupations we looked at in detail were those of ski instructor, fitness instructor and referee.

### 5.5.1. The role of qualifications in practice: what happens at micro level?

Generally, the importance of qualifications in this sector does not seem to be questioned by most respondents and country reporters. Qualifications are seen as essential to ensure high quality services, especially when consumers' health and/or safety are at stake. This is the case with, for example ski and fitness instructors, whose skills and knowledge regarding, *inter alia*, anatomy, OSH, possible traumas, etc. are seen as indispensable. With regard to referees, due to the very nature of their activity, respective qualifications are seen as vital to ensuring fair play.

Despite this rather positive rhetoric, possible lack of compliance of employers with qualifications requirements or failure to employ qualified staff in general was a recurring concern in several country reports. Before coming to this,

however, it should be mentioned that the micro level turned out to be the most difficult to cover for the country researchers; there are several reasons. First, this is related to the very nature of the subject, which concerns employer compliance with qualification requirements, which is inherently difficult to research. Second, to draw firm conclusions as to employers' views and practices, much broader (qualitative) interviewing would be necessary. This was not possible given the broad focus of the study. Third, any other reliable information on employer behaviour and/or compliance is scarce, with the few exceptions of the available documents or studies which explicitly address this issue (e.g. the Lithuanian sports strategy, which explicitly addresses the question of lack of compliance with the requirements for fitness instructors, or the Spanish report on innovation sessions). This all makes it difficult to conclude, at any general level, whether, and in how far, qualifications are a helpful tool for employers. Therefore, in the following, only tentative conclusions can be drawn which may point to some overarching issues or be indicative of broader tendencies.

Despite the generally claimed importance of qualifications, there are some indications that lack of adequate qualifications, or lack of employer compliance with the existing qualifications requirements, may be an issue: employers sometimes fail to employ qualified staff. This was noted with regard to fitness instructors in Spain and in Lithuania and, to a lesser extent, ski instructors in Spain. The Spanish report noted that several fitness centres do not embrace the use of official qualifications and several fitness instructors lack adequate training. The same 'deficit of compliance' with regard to fitness instructors was reported in the Lithuanian strategy on sports. This results in poor quality services and so may have detrimental effects on people's health.

While several reasons were put forward as possible explanations for such a compliance deficit, they all boil down to the issue of competitive (dis)advantage and the role of qualifications as a marketing instrument. Employers seem to be more interested in the qualifications of their employees when they can publicise them, for example on their websites, and attract consumers by doing so. The extent to which this market mechanism will work in ensuring highly qualified staff will, however, clearly depend on the consumers' interest in high quality services and their vigilance. This, again, may be seen in relation to consumer interest in high quality services and willingness to pay for them. However, due to certain information asymmetries, it may sometimes be difficult for consumers to assess the quality of services they receive. Employer interest in highly qualified staff will, *inter alia*, depend on the strength of market incentives to employ such staff. These and similar issues were raised in Spain and in Lithuania.

Not all country reports explicitly addressed the issue of employer compliance at the micro level, so discussion needed to rely on the available information. It should also be stressed that, among the interviewed parties, no similar concerns relating to lack of adequate qualifications discussed above were expressed with regard to referees, as sports federations have been reported to be vigilant with respect to their qualifications.

While the above indicates that, in some cases, employers may hire under-qualified staff, there are also factors which may point to the opposite (high qualification requirements from employers). Such factors include, for example high unemployment (especially in Spain and in Lithuania), which given high supply of labour enables employers to set high qualification requirements and/or (over)supply of qualified staff.

#### **5.5.2. Conclusions: key factors making the difference**

The importance of qualifications in governing access to, and practice of, occupations/professions in the sport sector does not seem to be diminishing. Qualifications remain the main currency in access to the professions covered as well as for regulating access to professions. While the importance of qualifications does not seem to be diminishing, it may well be noted that the number of qualifications in the sports sector seems to be on the increase. This is, for example, illustrated by the introduction of a new study programme for referees in France (*sport de haut niveau et arbitrage*), introduction of new degrees and certificates in fitness instruction, and the newly developed programme aimed at educating fitness instructors in Lithuania. This is especially welcome in the latter case, where discrepancy between educational provision and the needs of the labour market can be considered as especially strong.

Where regulatory requirements for the professions examined do exist, the main reason for such requirements include ensuring high quality services and protecting consumers' health and safety. It is different with regard to sports referees, whose qualifications do not serve any (health) protection objectives, but mainly serve to ensure 'fair play'. An essential part of referee qualifications is mastering the rules of the game, which vary across the sports in question. This, as well as the nature of the protected interest, may be among the explanations of why the state has delegated the main regulatory functions for sports referees to sports federations. This does not, however, imply regulation of lesser intensity as sports federations are active and vigilant in setting the respective requirements regarding referees' training and qualifications.

While sectoral organisations, especially sports federations, play a central role with respect to sports referees, the situation is different for fitness instructors,

which seem to be the least well-organised among the studied professions/occupations, at least on the national level. The EHFA represents an interesting example of 'Europeanised' qualifications standards for fitness instructors. Moreover, organisations uniting fitness instructors and ski instructors play an important advisory role, participate in training, lobby, or are engaged in licensing.

Although the importance of qualifications is not questioned, lack of compliance on the micro level may well be an issue in some cases. This is well illustrated with fitness instructors (e.g. Spain, Lithuania), the lack of the necessary qualifications a recurring concern. Both in Spain and Lithuania, several employers (fitness clubs) fail to employ qualified staff as fitness instructors. While some employers tend to use qualifications as a marketing instrument, due to the absence of consumer pressure the market mechanism does not seem to ensure sufficient qualification for fitness instructors.

While technological change does not seem crucially to influence the professions studied, there seems to be a greater focus on general skills, especially communication, skills of sports instructors. This was especially frequently noted with regard to fitness instructors, who are expected to possess interpersonal skills necessary to communicate, to explain, motivate, encourage, etc. It may well be that such transversal skills will be paid more attention in future training fitness instructors.

## CHAPTER 6.

# Cross-case analysis

### 6.1. Governing systems and regulatory traditions

The discussion of the national and sectoral information has shown that it is not the case that every country has its own specific system of governance applied throughout the economy to all the occupations. The role of qualifications, and the framework within which they are used, vary from sector to sector and even from occupation to occupation. Sectoral factors often seem to trump national factors where the sector has a strong specific identity and nature, leading to recognisable systems across different countries. Where an occupation is not seen as displaying unique sectoral characteristics (e.g. pharmaceutical and toiletry production operator), the national system prevails, leading to differences across countries. In this section, we discuss the different systems of governance we have encountered to determine the role ascribed to qualifications within them.

Table 2 provides a review based on a synthesis of information presented in the previous chapters. The aspects of the different systems relate to the following categories:

- (a) type of occupational regulation: licensing, accreditation, registration, certification;
- (b) intensity of regulation: intense (+), average (+/-), lenient (-);
- (c) type of qualification (including diplomas, licences, certificates): public qualification, separate private qualification;
- (d) importance of continuing professional development: mandatory, voluntary, non-existent.



Table 2 Synthesis of cross-case analysis

Occupation	Country	Type of regulation				Type of qualification		Type of continuing professional development			Intensity of regulation
		Licensing	Accreditation	Registration	Certification	Public	Private/sectoral	Mandatory	Voluntary	Non-existent	
<b>Health and social work</b>											
<b>General practitioner</b>											
	BE	X	X			X		X			+
	DE	X	X			X		X			+
	FR	X	X			X		X			+
	LT	X		X		X		X			+
	NL	X		X		X		X			+
	SE	X		X		X		X			+
<b>Nurse</b>											
	BE	X		X		X		X			+
	DE	X		X		X					+
	FR	X		X		X		X			+
	LT	X		?		X	X	X			+
	NL	X		X		X	X	X			+
	SE	X		X		X					+
<b>Social worker</b>											
	BE		X			X					-/+
	DE					X					
	FR	X				X			X		+
	LT	X				X			X		+
	NL				X	X					-/+
	SE					X					

Occupation	Country	Type of regulation				Type of qualification		Type of continuing professional development			Intensity of regulation
		Licensing	Accreditation	Registration	Certification	Public	Private/sectoral	Mandatory	Voluntary	Non-existent	
<b>Electricity, water, gas and waste</b>											
<b>Plumber</b>											
	DE	X				X				X	-
	EL	X				X				X	+
	ES					X				X	+/-
	LT					X				X	-
	NL					X				X	-
	UK					X				X	-
<b>Forging press worker (*)</b>											
<b>Welder</b>											
	DE				X	X	X		X		-
	EL				X	X	X		X		-
	ES				X	X	X		X		-
	LT				X	X	X		X		-
	NL				X	X	X		X		-
	UK				X	X	X		X		-

(\*) The occupation of forging press worker could not be identified in the countries examined, except for Spain, where a specific qualification has recently been created for this occupation.

Occupation	Country	Type of regulation				Type of qualification		Type of continuing professional development			Intensity of regulation
		Licensing	Accreditation	Registration	Certification	Public	Private/sectoral	Mandatory	Voluntary	Non-existent	
<b>Chemicals, rubber and plastic</b>											
<b>Pharmaceutical and toiletry products machine operator</b>											
	BE	X				-	-				-
	EL	X				X	X		X		+/-
	ES	X				X					-
	SE	X									-
	SI										-
	UK					X		X			-
<b>Chemical engineering technician</b>											
	BE					X					+/-
	EL					X	X	X			+/-
	ES	X				X					+/-
	SE					X					+/-
	SI					X					+/-
	UK					X	X		X		+/-
<b>Welder</b>											
	BE				X	X	X		X		-
	EL	-	-	-	-	-	-	-	-	-	-
	ES				X		X				-
	SE						X				-
	SI						X				-
	UK		X				X				-

The role of qualifications in governing occupations and professions

Occupation	Country	Type of regulation				Type of qualification		Type of continuing professional development			Intensity of regulation
		Licensing	Accreditation	Registration	Certification	Public	Private/sectoral	Mandatory	Voluntary	Non-existent	
<b>Transport and logistics</b>											
<b>Heavy truck driver</b>											
	BE	X				X	X	X			+
	EL	X					X	X			+
	FR	X					X	X			+
	NL	X				X	X	X			+
	SI	X					X	X			+
	UK	X					X	X			+
<b>Air traffic controller</b>											
	BE	X					X	X			+
	EL	X					X	X			+
	FR	X					X	X			+
	NL	X					X	X			+
	SI	X					X	X			+
	UK	X					X	X			+
<b>Ship's engineer</b>											
	BE	X				X				X	+
	EL	X				X				X	+
	FR	X				X				X	+
	NL	X				X				X	+
	SI	X				X				X	+
	UK	X				X				X	+

Occupation	Country	Type of regulation				Type of qualification		Type of continuing professional development			Intensity of regulation
		Licensing	Accreditation	Registration	Certification	Public	Private/sectoral	Mandatory	Voluntary	Non-existent	
<b>Sports</b>											
<b>Ski instructor</b>											
	DE	X									+
	ES					X	X				-
	FR	X	X			X					+
	LT	X				-	-				+/-
	SI		X								
	SE	X									+/-
<b>Fitness instructor</b>											
	DE				X	X	X				-
	ES				X	X	X				+/-
	FR				X	X	X				-
	LT	X			X	X					+/-
	SI		X		X						-
	SE				X						-
<b>Referee</b>											
	DE		X				X	X			+/-
	ES		X				X				+/-
	FR		X			X	X				+/-
	LT		X				X				+/-
	SI		X				X				+/-
	SE		X				X				+/-

Source Cedefop.

When looking at Table 2, it becomes clear that most occupations display similar characteristics across countries. The differences can be identified between occupations themselves, and also between sectors, but only slightly between countries.

It is interesting to see what Table 2 can tell us about how sectoral characteristics interact with the national governance regimes. The most uniform sector that we see is transport and logistics, as reflected in the sectoral analysis in the previous chapter. Tightly organised, dominated by licensing systems including demands on the continuing education of occupational practitioners, with separate training structures catering for the needs of the sector. As we have seen in the description of the sector, the national level is almost exclusively focused on the implementation of international agreements, explaining the similarity of the regulatory structure in the different countries.

This stands in contrast to the situation in the electricity, water, gas and waste sector. As Table 2 shows, there is little regulation in place for entry requirements and continuing training of people active in the occupations we examined. Further, there seems to be considerable variety among occupations in the existence of sectoral structures; the welders' occupation has set up its own privately organised training system. Different from the situation in the transport sector, this international sectoral system is not, however, implemented through regulation or international law, but purely industry-based and self-organised, existing next to the public VET infrastructure. Despite the similarity that, for example, both welders and air traffic controllers follow their own sectorally organised education paths, their regulatory environment could not be more different.

The pattern that emerges from the sector health and social care displays further different characteristics. While the strictness of the licensing system resembles the situation in the transport sector, these are distinctly national systems, though comparable across the different countries. This is reflected in the fact that education is exclusively organised within the public structure, where the manner in which, for example, doctors are trained, is determined (and financed) by the national government in conjunction with national sectoral actors. Though recognition of professional qualifications is strictly organised by recourse to the EU directive, national actors decide how the sector is governed. While the transport sector is characterised by a strong sectoral dimension which trumps the national dimension, and is organised beyond national borders, and the electricity, water, gas and waste sector is integrated in national systems with only sporadic interference of a sectoral framework (e.g. in welding), the health sector can be seen as displaying a strong sectoral tradition which is nationally grounded.

The chemicals, rubber and plastic sector, in contrast, shows a relatively unclear pattern of regulation, educational provision and other aspects. This is, however, a reflection of the reality in the sector, since it is difficult to identify a clear model of governance or a trend of regulation across the different countries or the three occupations. Generally, the sector is only weakly regulated through licensing systems. However, since it is a highly knowledge-intensive sector and at least the two occupations of machine operator and chemical engineering technicians are located at the higher end of the educational spectrum, education in general, and qualifications specifically, are of high importance on the labour market. Due to the need for further specialisation, continuing professional development also plays an important role in these occupations. For specific welding techniques used in the sector in polythene welding, the sectoral framework available is again of strong significance. Generally, we can say that the overarching national regulatory and educational frameworks determine how the education and labour market interact in this sector, as unique sectoral mechanisms could not be identified.

Finally, the sports sector is a specific case and an exception in several ways. On the one hand, it displays characteristics of an emerging sector which is still formalising its procedures, especially for the occupation of fitness instructor. Referees, in contrast, are entirely governed by the sectoral organisations themselves, in the context of which they are sometimes not even seen as actual employees. Only ski instructors are affected by 'regular' regulation, as safety concerns and international competition lead to entry restrictions. Further, education in the sector is largely left to private actors, as public education systems are only starting to provide courses. As some occupations are a blank slate when it comes to regulation and governance, this provides opportunities for sectoral actors to develop their own initiatives, as the EHFA has done, mirroring those in welding. We can identify a generally increasing trend of official qualifications that are available to employees and trainees in the sector. It remains to be seen whether this development is picked up by public or by private actors.

## 6.2. Categorising systems of governance

Having described the differences between the countries and sectors, how can we categorise the different systems identified? And which aspects or dimensions determine whether a specific system falls into one category or the other?

The most distinctive systems of governance we have identified in the countries, sectors and occupations we have looked are the following:

- (a) medical profession: strong sector-determined system of national regulation and management of both education and labour market;
- (b) transport sector: strong sector-determined system of international regulation and sectoral substructures of labour-market-focused education;
- (c) electricity, water, gas and waste, some parts of chemical industry and particular professions in other sectors: lenient system of low labour market regulation, public training provision and balance between labour market and education structures;
- (d) welding occupation (to a lesser extent fitness instructor): strong international sectoral system of labour-market-focused training provision, based on independent sectoral structures implemented in addition to national education systems.

The differences between these systems lie in the manner in which access to the labour market is determined, including the actors and instruments involved, the educational structures used to implement the system, and the resulting situation for practitioners and employers, including the importance attributed to qualifications by these actors. The example of the medical professions is characterised by a top-down manner of labour market regulation with strong sectoral actor involvement, using public education structures and leading to a situation where qualifications are highly important to professionals and employers in determining both entry to professions and career progression. The system applied in the transport sector is also characterised by a top-down approach, but organised at international level, implemented through sector-specific training structures, and leading to a situation where qualifications are of high importance to practitioners and employers, especially regarding the entry into occupations. The third system can be seen as open with regard to labour market regulation, situated within the public education structure and the standard qualifications framework, including the balance of influence between labour market and educational actors within this framework, leading to a situation where the importance attributed to qualifications is dependent on contextual factors such as the economic situation, labour market supply and demand and consumer preferences. Finally, the structures identified in the welding sector can be characterised by international self-organisation of sectoral organisations, making use of sectoral training structures and leading to a situation where sectoral qualifications can be used by occupational practitioners as a distinguishing instrument on a competitive labour market. While the welding occupation is highly organised in this way, similar systems can also develop in other sectors, such as the example of the EHFAs shows.



Based on these characteristics, we can describe these systems of governance using the following terms:

- (a) traditional sector-based licensing,
- (b) international sector-based licensing,
- (c) generic national governance,
- (d) independent sectoral governance.

These categories cannot claim to be exhaustive and cover all possible options, as they originate only from the information collected in the countries, sectors and occupations examined in this study. It is possible that other systems exist in sectors not covered by our research. However, regarding the objectives of this study, they not only show us the diversity of different approaches to educational labour market governance, but also show how this diversity feeds through to the use of qualifications by the different actors.

The distinction between these four models of governance points to an interesting conclusion regarding the level of governance involved. This study has been carried out based on a conceptual model distinguishing between the European policy context, national governance structures, sectoral initiatives and micro level implementation. What the classification shows is that, first, there is an additional level on top of the European one, namely the international level going beyond Europe; and second, that these levels of governance are strongly intertwined and interrelated. All of the systems are based on some kind of multilevel governance implying a distribution of tasks and responsibilities across the different levels.

The first system of traditional sector-based licensing is based on national legislation, but also embedded in European framework regulation, and finally dependent on sectoral organisations. The international sector-based licensing has a strong European or international grounding, but is implemented in national sectoral structures. The general national governance, as implied by the name, is determined by national factors, but once again includes sectoral actors in the implementation. The independent sectoral governance is sector-based, but at international level.

To conclude, both the sectoral aspect, as well as the international or European influence, are represented in nearly all of the systems of governance we have identified. This conclusion ties in well with current Cedefop work on the international dimension of qualifications. Cedefop's report on international qualifications shows, in many sectors, the emergence of independent international qualifications, both sector and company-based, with varying degrees of coverage (European, international, EEA) and differing purposes and characteristics (Cedefop, 2012a). These kinds of international qualifications have

not been covered by this study, except for the qualification system in the welding sector, but it shows that a conclusion pointing in the direction of a multilevel landscape in the world of qualification is valid.

We will turn to discussing the distribution of responsibility between different levels and actors further below in this chapter. First, we will focus our attention on the question of whether we can identify changes or developments in the role of qualifications in the occupations we have examined.

### 6.3. Changes, developments and trends

Looking at national qualifications structures, we identified several trends characterising the approach to qualifications and the labour market. First, we can identify a move towards more labour-market-based instruments such as occupational profiles, a greater involvement of private actors such as industry associations and trade unions, and increasing emphasis on the feedback loop between labour market at education, both at policy level and in the actual management of the system. Further, based on previous research, one of the initial hypotheses triggering this study is the general claim that qualifications are losing importance on the labour market, as deregulation, changing skills demands, and more flexible ways of labour market management are increasingly setting the scene.

### 6.4. Educational and labour market dimension

Judging from the four categories identified in the previous section, we can confirm the labour market focus of regulatory systems and the role of qualifications in these systems. The licensing systems in particular, both traditional and international, can be seen as labour-market-focused. Their main objective is not to structure the education system in a specific way or to force people into education. They are clearly aimed at making sure that employees in these sectors dispose of the knowledge, skills and competences that are deemed essential for entry and practice in the occupations and professions. In the international regimes, this is even deemed important enough to set up separate training structures to cater for labour market needs. The same applies to the independent sectoral system, which can be seen as an industry-led effort to bring education and training as close to the labour market as possible.

The generic national system shows a different dynamic. On the one hand, it could be said that it can be seen as an example of the decreasing value of

qualifications, as there are no mandatory qualification requirements in place. However, the analysis shows that the absence of legal requirements does not automatically lead to a lower importance of qualifications at micro level. Further, in this system (which can be seen as the basic system across different sectors), the new labour-market-based instruments, from occupational profiles to learning outcomes, and the involvement of labour market actors in the feedback loop between public VET structures and the labour market, display their real value. In a system that is left relatively open so education and labour market actors can decide for themselves how to approach occupations and the related qualifications, effective governance can be seen as even more essential than in systems where legal obligations guarantee regulatory influence on the practice in occupations. It is unsurprising that within these occupations we see social partners and educational institutes working together to make the public VET system serve both students and employers.

There is a strong labour market focus in all systems identified. Since the analysis does not have a strong temporal dimension, it is difficult to say for certain whether this focus is a recent development. Judging from the policy debates on the connection between labour market and education, and the use of relatively new instruments such as learning outcomes and occupational profiles, it can be concluded that the emphasis on the labour market relevance of qualifications has increased in recent years. It is not only in the licensing systems but even in the more liberal generic systems that active labour market policies are increasingly aiming at influencing the quantitative side of education to connect it to labour market demands. Qualifications connected to specific training courses and to specific occupations at the same time play a central role.

## 6.5. Regulation and deregulation

While the labour market orientation of qualifications can be confirmed, their diminishing use of qualifications as an instrument of governance, and their decreasing importance for employees in the workplace, are not supported by the information collected for this study. The supposedly diminishing use of qualifications as instruments of governance would be expected to point to a trend of deregulation. We did not identify any specific cases of actual deregulation in the sense that specific occupations or professions that were previously affected by qualification requirements have been opened up to unqualified staff. In so-called liberal systems like the Netherlands and the UK, we see that the occupations that are traditionally highly regulated, i.e. healthcare and transport, are still so. People wanting to practice as a doctor or to drive a commercial truck

not only have to acquire the needed qualifications in these countries, but also make sure they follow the proper routes for continuing professional development.

However, in other countries that are traditionally seen as highly regulated, i.e. Greece, Spain and Slovenia, the changes that are taking place do not always point towards a trend of deregulation. While in Spain, some requirements for so-called authorisations, i.e. licences, have been removed indeed, no large-scale change in the labour market system can be identified. Further, the Spanish regulation is mainly focused on educational provision, where the main policy instruments remain royal decrees. In Greece, the regulatory system is undergoing great change, yet, according to the information collected at country level, this cannot unequivocally be described as deregulation. Rather, the reform efforts are directed at clarifying the system and cleaning up superfluous legislation. The removal of regulation that is not only deemed superfluous, but also currently not implemented properly, cannot be seen as actual deregulation or liberalisation. The direction of policy developments in Greece points towards constructing a more efficient and working system of regulation, which does not necessarily imply deregulation or liberalisation. The general situation in Slovenia does point to a strong drive to deregulate and liberalise the labour market, by abolishing entry requirements for certain occupations. Though it is the expressed ambition of the government to realise this reduction in regulation, professional groups and employers are arguing for 'better' regulation instead of 'less'. It remains to be seen what the effect of reforms will be in the end.

This raises the question of what we mean by deregulation. The problem is that it is not guaranteed that regulatory intensity is reduced by the removal of regulation. This has to do with several factors. First, there are examples of highly regulated systems which are in fact overregulated and so not implemented in practice, as in the Greek electricity, water, gas and waste sector. By streamlining regulation, including the cutting of unnecessary provisions, the intensity of the regulatory pressure can increase. It can also be the case that state regulation is replaced by social partner initiatives which are possibly not legally binding, but turn out to have the same status as binding legislation. Continuing professional development provisions in the medical sector in the Netherlands, for example were originally voluntary, but the importance ascribed to these provisions by the entire sector (including health insurances) make it virtually mandatory. Similar situations exist where, for example, a professional title is protected, but carrying out the work itself is not regulated. While this would, on paper, look like low intensity regulation, in reality entry to such a profession will only be open to those holding the title as well.

These difficulties point to the fact that not only regulation, but also deregulation, have to be implemented and are not always effective. Reform efforts in countries like Greece, Spain and Slovenia need to be monitored closely to see whether the changes in the regulation lead to a situation where the openness of the labour market increases to the extent desired.

## 6.6. Technological and societal change

Connected to the view that deregulation is diminishing the role of qualifications is the assumption that the practical use and relevance of qualifications is under pressure due to the unprecedented pace of technological and societal change. This assumption, too, should however be reconsidered in the light of the information collected in the different sectors. In all of the occupations and professions examined, technological changes play an important role and other developments are also impacting on the demands on occupations, such as increasing importance of environmental aspects, soft skills in relation to consumers, and language skills. It is certainly the case that the content of qualifications has to be adapted to fit the developing skills demands.

However, again in all of the occupations and professions under discussion, these changes are generally not described as being different from what the sectors are used to. Medical doctors, for example, have always dealt with new methods of treatment, and plumbers, too, have incorporated new technologies into their practice. While in some occupations, these processes of adaptation are carried out empirically, in others the structures of qualifications governance are designed to accommodate exactly these kinds of change. Regardless of the question of whether a qualification is mandatory for practice or not, employers expect most of their staff to have a qualification, as a necessary precondition for proving their ability to do the job in the occupations selected for research. There needs to be profound change in the way that occupations are carried out or serious deficiencies in the qualifications themselves if micro level actors are to completely abandon the idea of qualifications.

Although in the sectors examined, no unprecedented pressure on qualifications through changes in the occupational definitions could be identified, it may be that in other sectors or occupations these pressures are present. Especially where new sectors or occupations are emerging, it is possible that regulation systems do not apply to the new activities. But even this process has always existed and been tackled by governing systems. A difference could only be identified if the influx of new occupations and tasks were considerably greater than used to be the case, which is not possible to determine within the scope of

this study. The occupations and professions that were examined in the sectors described above, however, nearly all have already been in existence for a long time. Respondents therefore reported some adaptations that were carried out in qualifications portfolios, but few fundamental changes were identified.

Some examples of new or changing occupations that fall within the scope of this study show that existing qualifications systems provide enough flexibility and permeability to adjust to changing demands. This can be seen in the profession of ANP in the Netherlands. As technological advances turn certain specialised medical procedures into routine activities, nursing staff are able to carry out these as well. At the same time, financial pressures on hospitals and shortages of specialised doctors lead to situations where some alleviation of the workload of doctors is seen as desirable. As a result, the new occupation of ANP was introduced, linked to a specific qualification. In addition, reallocation of tasks within the regulatory framework was carried out by changing the legislation determining the authorities of medical staff. Motivated by technological and societal developments, which led to a changing reality in the workplace, the regulatory framework could be adjusted without a reduction in the relevance of qualifications.

The emergence of private sectoral arrangements such as in the welding sector and international licensing regimes, e.g. in the transport sector, could also be seen as a challenge to the status of traditional qualifications. In the first place, it is the sector itself that circumvents the traditional structures by developing its own specific training programmes and qualifications. Though financing the training has to be organised privately, the sector can shape the system to fit the demands of businesses, so not having to consider public priorities on education and training. The international licensing systems, in contrast, superimpose a system of regulation and, in some cases, institutionalised education to guarantee international harmonisation, thereby also diminishing the role of traditional qualifications.

In both of these cases, the international dimension plays the most important role, not the change of occupational content. This is not surprising, since traditional qualifications are, by definition, enshrined within national education systems. Policy instruments such as the common recognition of qualifications through Directive 2005/26/EC and the EQF are trying to address exactly this point, increasing the comparability and compatibility of different national qualifications systems. In the examples described, we can see a movement towards self-sustaining international frameworks that exist outside national structures and therefore take into account the international nature of the labour market by default.

## 6.7. Transversal skills and specific competences

The final issue to be discussed regarding the changes in use and utility of qualifications is whether and how the growing emphasis on transversal skills within VET policies has an influence on the way qualifications are set up, described and used. In the descriptions of the sectoral information, the importance of transversal skills has repeatedly been mentioned in diverse occupations. The transversal skills most frequently referred to in the interviews are language skills, IT skills and so-called soft skills, which mostly relate to social skills in customer service. Truck drivers, for example, are expected to interact much more with clients than they used to do, which has increased the demand for these interpersonal skills. In some low-skilled jobs (not the occupations examined here), it has also been mentioned that general aspects such as an individual's attitude towards work and responsibility, are more important than specific skills attested by qualifications. Another aspect of the trend towards increasing emphasis on transversal skills is to be seen in the formulation of learning outcomes and occupational profiles which make reference to transversal competences such as cooperation, consultation and following instructions. At both micro and macro level, the trend towards recognising the importance of transversal skills can be identified.

Nonetheless, this development is not challenging the role of qualifications nor diminishing the value of specific skills. In the first instance it can be seen that, in the description of qualifications, of learning outcomes and of occupational profiles, transversal terms are adding to, but not replacing, existing specific descriptors. Countries use general descriptors to cluster specific skills and competences, but also define these more closely by using detailed and specific terms. The occupational profiles underlying the occupations examined in this study are so detailed and elaborate that a research exercise of bringing together these descriptions to compare their level of detail turned out to be far too laborious for the scope of this study. Once again, this may also be due to the specific selection of occupations which includes several technical and specialised cases (e.g. GP, welder, ship engineer). Judging from this selection however, the specific task and competence description has not been replaced.

The same is true at the micro level. While employers and employees recognise the value of transversal skills and generic competences, the core skills and competences specific to a given occupation remain the most important requirements determining a person's suitability for a job. It is not surprising that the international welding certificates and the international air traffic licences are dominated by specific requirements, since these are frameworks developed specifically for the needs of the sectoral labour market. In such cases, the

dilemma of a sectoral approach reveals itself, since individual sectors, and individual employers, are not interested in contributing to the general employability of their employees and trainees. It remains the case that the labour market practice continues to focus mainly and specifically on specialised skills and competences.

Looking at the different dimensions of change, we can conclude that the reality on the ground is more complex than the policy discourse may sometimes suggest. The changes and developments taking place can be described as being located more in the periphery, or maybe the forefront, of the occupational landscape. The core of the labour market, which is possibly better represented by the selection of occupations and professions in this study, is not changing at an unprecedented pace. Further, qualifications systems seem flexible enough to incorporate the changes that are taking place. Developments that might diminish the importance of qualifications, such as deregulation, technological and societal change and labour market flexibility, do not appear to have a decisive impact on the way qualifications are used. On the contrary, efforts are being made to align qualifications increasingly with the developments taking place on the labour market in order to continue making use of their potential to connect the dimensions of work and education.



## CHAPTER 7.

# Conclusions

This study has shown that qualifications, defined in a broad sense as a ‘formal outcome of an assessment and validation process’, enjoy continued relevance in both education and the labour market, especially in their function as a bridge between the two. They are both used as governance instruments to connect educational outcomes with labour market demands and for employers, employees, trainers and trainees they are trusted and useful entities conveying knowledge, skills and competence. The ways in which they are used differ across sectors and occupations, and sometimes countries.

## Governance

In the countries, sectors and occupations examined, qualifications, including diplomas, licences and certificates, continue to be used to regulate access to, and practice in, occupations and professions. In traditional, sector-based licensing systems (e.g. in the health care sector), policy-makers use qualifications to determine the educational path, including practical experience, that a person has to follow before he or she may enter the profession. As the qualifications give the authority to carry out specific activities, they have a strong legal value. In these systems the provision of qualifications can also be used to influence labour market supply directly, as the number of training places available is often limited. In the absence of qualifications, policy-makers would lose control of the skills and competence of the professionals active in the sector and also of the number of professionals offering services. Qualifications clearly play an important role in structuring labour market entry and the quality of services in the sector.

The international sector-based licensing system displays a similar dynamic, as international organisations and bodies set up occupation-specific qualifications specifically designed to guarantee a general level of competence of occupational practitioners across countries. Again, policy-makers fill the qualifications with the necessary learning outcomes and enshrine them in the legal framework governing entry to the occupation and continuing development of the practitioners. While the training structures are strictly related to the sector and linked to occupational practice, the quantitative supply of qualified personnel can be influenced by the licensing system. Just as in a national system, the

qualifications play a central role in providing policy-makers with a path of influence over labour market dynamics.

The use of qualifications as instruments of governance is slightly different in systems that are less characterised by strict licensing, but focus more on generic national VET governance, i.e. systems where no specific legal requirements are set, but public qualifications are available for use by schools, trainees and employers. In these systems, policy-makers focus on creating the framework for educational institutions, social partners and micro level actors to contribute to a well-functioning system of labour market and education with a qualitative and quantitative balance between supply and demand. While qualifications are not used by policy-makers to regulate the labour market side in this model, the institutional framework set up to sustain the qualifications base may be even more important than in more restrictive systems, as broad support and trust in the system based on a balance of interests are paramount for it to work.

The general British system, supported by the government, but entirely given shape by the sector skills councils, and the general Dutch qualifications structure show that government actors can take up different positions. The role of qualifications is crucial in these systems, in the sense that they are the focal point of the different actors' activities. Without qualifications, sectoral actors, educational institutions and government representatives would miss the necessary link to their interests. This is not to say that all actors are constantly focusing on qualifications or on connecting the labour market and education systems. From a conceptual perspective, and looking to identify the role of qualifications in these governance processes, it becomes clear that this role is essential.

The central actors in systems of international sectoral governance change, as public bodies decrease in importance and sectoral actors take responsibility, but the role of qualifications and the governance dynamics remain the same. As sectoral actors identify a need or a desire to establish internationally valid systems of skill and competence recognition, they turn again to qualifications as the central instrument of trusted communication, backed by a strong institutional framework. Multinational companies (which have not been covered by this study) follow the same route by setting up in-company qualifications schemes. It also seems that for additional, independent systems set up by private actors, qualifications are seen as an instrument of choice for allowing cross-national and cross-institutional coordination of professional content, despite the absence of licensing or mandatory training.

Overall, it can be said that there is no alternative to the use of qualifications in the specific role they play in translating occupational activities into learning

outcomes and the other way around. Two reservations should, however, be added to this conclusion. First, the role of qualifications as instruments of governance in contributing to the qualitative and quantitative balance of supply and demand in occupations and professions can, in all the different governance systems, only be of practical relevance when it is embedded in trusted institutional structures and used in conjunction with other instruments such as occupational profiles, learning outcomes and qualifications frameworks. Second, although qualifications can be identified as crucial practical linking pins between education and training and the labour market, policy-makers, social partner organisations or educational institutes cannot often see this purposeful use. However, even in this case, qualifications can still play the role of a strong communication vessel.

Finally, it is important to underline the fact that, on top of specific regulation aimed at influencing the access to and practice in occupations, public policies in the areas of OSH, consumer protection and the environment can lead to indirect entry requirements on the labour market. For example, environmental policies may determine that mechanics working with a particular kind of substance need specific training for this work. OSH policies may require operators of specific machines to undergo mandatory training to be able to assess the risks of their activities. As these policies do not aim at regulating an entire occupation, but are motivated by a specific issue which is targeted, we call these policies indirect occupational regulation.

A growing body of occupational legislation originates at international or EU level, including that described. In addition, European policies aimed at international mobility of occupational practitioners are also making their impact felt, as in the case of Directive 2005/36/EC which inspired countries to adopt more structured approaches to occupational regulation. The need to compile a list of regulated professions was, for several countries, an incentive to have an overarching look at the labour market regulation for the first time. As this occupational regulation is often based in the topical ministries, e.g. the Ministry of Health or the Ministry of Transport, this overarching view was previously missing. By compiling a list of all regulation, countries were able to have a closer look at the need for the regulation in place, which also led to some regulation being removed. Nonetheless, it remains a challenge to keep the inventory of occupational regulation up to date.

Development of the EQF is also influencing national structures. The setting up of learning outcomes based NQFs was a particularly important step in some countries, as no equivalent of overarching qualifications structures existed, e.g. in Lithuania or Slovenia. The creation of an NQF is having a strong structuring

influence on these countries' qualifications systems, as the available qualifications were brought into a clearer relationship to one another. The EQF process has also contributed to embedding the learning outcomes approach firmly in all the countries, emphasising the connection between qualifications and occupations. Nearly all countries examined in this study possess some kind of learning-outcomes based qualifications structure, including occupational profiles and comparable qualifications formats. As countries are now also active with the process of referencing qualifications to these NQFs, the actors involved in the shaping of the NQFs are starting to compare their national descriptors of qualifications with those in other countries. For independent qualifications structures, e.g. in the welding sector, this process raises the challenge and the possibility of clarifying the relationship between the independent qualifications and those of the general public education system.

Public policies both at national and at EU level have an indirect, but substantial, influence on the way qualifications and occupations are regulated. The slow, but steady adjustment processes brought about by EU policies are interesting to observe. It remains to be seen what effect existing EU policy initiatives like the EQF, and also ESCO, will have on the common approach to occupational governance in EU Member States.

## Currency

Qualifications can only fulfil their function as effective instruments of governance if they can also play a relevant role at the level of students, teachers, employers and employees. There is a dynamic relationship between the governance system which determines whether micro level actors appreciate qualifications as relevant entities, and the micro level actors themselves who decide whether the intentions of the policy-makers are realised. The different regulation regimes also have an impact on the way that qualifications are perceived by the people who use them. This has to do with the amount of trust they have in qualifications, the importance they attribute to the qualifications, and the role they ascribe to them with respect to their occupation or profession. While this study has not focused in depth on the situation at micro level, some of the mechanisms that are of influence can be deduced from the information collected.

This study has not found specific examples of a lack of trust or a change in the level of trust ascribed to qualifications by those using them. Where trust is high, the way the qualifications are shaped and the institutional framework supporting them seem to be decisive for the trust, including the involvement of labour market actors in this system.

The degree or intensity of regulation does, however, influence the importance ascribed to the qualifications in question. In the licensing systems in health and in transport, it is seen as an absolute prerequisite to possess the required qualifications. The licensing requirements are internalised by professionals and by employers, as strong institutional arrangements, including enforcement procedures, render occupational practice in the sectors virtually impossible. In occupations where licensing requirements are less stringent, but strong qualifications exist, qualifications are also attributed high importance, as proof that the person in question has acquired the skills necessary to carry out the desired tasks. Ability to carry out the tasks may also be present in those who have not acquired the qualifications, but being able to show the concrete proof of a qualification means that the focus in discussions of aptness can be placed on competences not part of the qualifications, such as experience, attitude to work and soft skills.

This leads us to the actual role assigned to qualifications by the end users at micro level. The main distinction to be applied is that between using qualifications as signalling official permission to practice and using qualifications as proving aptness to carry out a specific task. In between these two aspects qualifications can communicate various additional messages, including dedication and loyalty to the occupation, profession and sector under discussion, a relevant background in the field, and trust in formalised educational provision. Where the trust in qualifications is high, and the importance attributed to them as legal requirements as well, they can be seen as necessary and sufficient proofs of competence on the labour market. Where trust is high, but the regulatory importance is low, qualifications are regarded as sufficient signal of employability, though other records of ability, e.g. experience, may also be used. Where trust is low, but legal demands are high (e.g. Greek plumbers), qualifications are seen as necessary, but other criteria are even more important and regulatory obligations may be ignored. Only where both trust in the qualification and the legal requirements are low, can qualifications be seen as obsolete.

## Do qualifications respond to current challenges?

Considering the way qualifications are used at both policy level and that of individual users, one question remains to be answered: do qualifications satisfy the demands placed upon them? Are they transparent, coherent, reliable, flexible and relevant?

Starting with the last two of these criteria, flexibility and relevance, it has already been mentioned that, in the occupations examined, few examples could

be found of qualifications which are not seen as relevant to the occupational practices, nor were there many concerns about qualifications being too rigid to react to labour market developments. Even in the most restrictive systems, e.g. GPs or air traffic controllers, the governance structures allow for sufficient flexibility, also through continuing professional development, to guarantee the relevance of the qualifications. In countries where the value attributed to VET is low compared to general education, overqualification can lead to an unsatisfactory degree of relevance of higher education qualifications. This paradox can only be resolved by policies focused on increasing the status of VET that will lead to increase in the value of VET qualifications. Systems where the feedback loop between work and education is well established perform better.

The same applies to the reliability of qualifications. In the sectors examined, well-established institutional arrangements promote the proper management of qualifications. The set-up and history of the independent sectoral governance system in the welding sector shows that continued attention to the coordination, cooperation and control of the organisations involved in implementing a qualifications system is the key to creating trusted and reliable qualifications. Even in the UK, the most liberal of the systems examined, attention is paid to cross-cutting quality assurance and certification processes. Where this reliability is grounded in national institutional arrangements, the international interchangeability of qualifications can be difficult. Where it is enshrined in the international structure of the institutional set-up, the reliability of qualifications can cross national borders.

This leaves us with the last two outcomes, namely transparency and coherence, which are both characteristics that relate more to the general qualifications framework than to individual qualifications. It is difficult to come to a general conclusion regarding this aspect. Judging from the research at country level, it can be said that the coherence of the national qualifications system varies, as some countries have well-established qualifications structures while others have only started working out a comprehensive system in the creation of an NQF. At the same time, most qualifications in the occupations studied are well-documented and no cases of confusion about learning paths at micro level have been found. Nonetheless, qualifications can be seen as a complex policy field and there is always room for improvement in the coherence and clarity of the overall frameworks.

One last remark is justified: while, from a policy-makers' point of view, comprehensive and coherent qualifications structures and occupational frameworks may be useful and desirable, the micro level view of these issues is slightly different. Employers and employees are pragmatic in their view of

qualifications and mainly look at the information that is relevant for them. This means that the relevance of a particular qualification for a specific occupation is certainly of importance to them, as is the relationship between qualifications and occupations that are similar to one another. Conversely, the equivalence of qualifications in one sector and occupations in another sector, or skills demands that are applicable to different occupations, which are of interest from a policy perspective, are not generally of relevance for the individual end users of qualifications. This is also implied in the fact that sectoral initiatives in the area of qualifications and occupations can work in relative isolation from overarching policy frameworks. A cross-sectoral, transversal vision of qualifications and occupations at micro level is an exception rather than the rule.

## List of abbreviations

ANB	authorised national board
ANP	advanced nurse practitioner
BIG	individuele beroepen in de gezondheidszorg [individual professions in health care]
Cedefop	European Centre for the Development of Vocational Training
CNCP	catálogo nacional de cualificaciones profesionales [national catalogue of professional qualifications]
CVET	continuing vocational education and training
EEA	European Economic Area
EEC	European Economic Community
EHFA	European Health and Fitness Association
EQF	European qualifications framework
ESCO	European multilingual taxonomy of skills, competences, qualifications and occupations
EU	European Union
GP	general practitioner
ICT	information and communications technology
Incuai	Instituto Nacional de las Cualificaciones [National Institute of Qualifications]
IVET	initial vocational education and training
LLL	lifelong learning
NOS	national occupational standard
NQF	national qualifications framework
OSH	occupational safety and health
RNCP	répertoire national des certifications professionnelles [national register of vocational certifications]
Sedigas	Asociación Española del Gas [Spanish Gas Association]
SLIM	simpler legislation for the internal market
SSC	sector skills council
TFEU	Treaty on the Functioning of the European Union
UK	United Kingdom
UKCES	UK Commission for Employment and Skills
US	Unites States
VET	vocational education and training
V&VN	Verpleegkundigen & Verzorgenden Nederland [Dutch Federation of Nurses]



## Glossary

<b>Accreditation</b>	This term refers to situations in which an individual may apply to be accredited as competent by a recognised professional body or industry association. Accreditation is distinct from certification in that the criteria governing accreditation and the procedures regarding enforcement are entirely the responsibility of the accrediting body rather than the state.
<b>Certification</b>	Refers to situations in which there are no restrictions on the right to practise an occupation, but job holders may voluntarily apply to be certified as competent by a state appointed regulatory body.
<b>Industry association</b>	An organisation representing the interests of employers, companies and organisations in a specific sector often based on membership structures and involved in social dialogue procedures.
<b>Licensing</b>	Refers to situations in which it is unlawful to carry out a specified range of activities for pay, i.e. an occupation or profession, without first having obtained a qualification which ensures that the practitioner meets the prescribed standards of competence.
<b>Occupation</b>	Defined as ‘a job or grouping of jobs involving similar content in terms of tasks and which require similar types of skills and competences’ <sup>(31)</sup> . In this most basic sense of the term, occupations are the equivalent of professions; an occupation can also be a profession.
<b>Profession</b>	Same as occupation, but often distinguished by a higher sense of professional.
<b>Professional association</b>	Organisation representing the interests of a specific professional group, often based on membership structures and run by professionals themselves.
<b>Qualification</b>	Defined by the European Commission as ‘a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to a given standard’ <sup>(32)</sup> . A qualification according to this definition is awarded by a certificate, diploma or other record of qualification.

<sup>(31)</sup> Adapted from *Skillsbase*, 2010.

<sup>(32)</sup> Defined by the European Commission in the *Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European qualifications framework for lifelong learning*.

<b>Registration</b>	This refers to situations in which it is unlawful to practice without having first registered one's name and address with the appropriate regulatory body. Registration thus provides some form of legal barrier to entry, but an explicit skill standard is not provided.
<b>Regulation</b>	Refers to all 'actions taken on behalf of governments in the public interest to steer events and behaviour, rather than to provide or distribute goods or services'.
<b>Social partners</b>	Organisations representing employers and employees, including trade unions, professional organisations, employer organisations and industry associations.

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Qualifications are commonly seen as one of the core instruments for governing and regulating the labour market. Linked to access to occupations and professions, qualifications define what a person needs to know and be able to do to carry out a certain activity on the labour market. Various factors, from health and safety to consumer protection and quality assurance, are quoted in justifying the use of qualifications in the governance of occupations and professions. In addition to such public interest motivations, they might also be used to defend the private interests of professional groups and bodies.

This report analyses current developments and emerging trends in 10 European countries and five sectors, and contributes to increased understanding of how the relationship between qualifications and the labour market is changing and, more specifically, the role of qualifications in governing access to, and practice within, occupations and professions.

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