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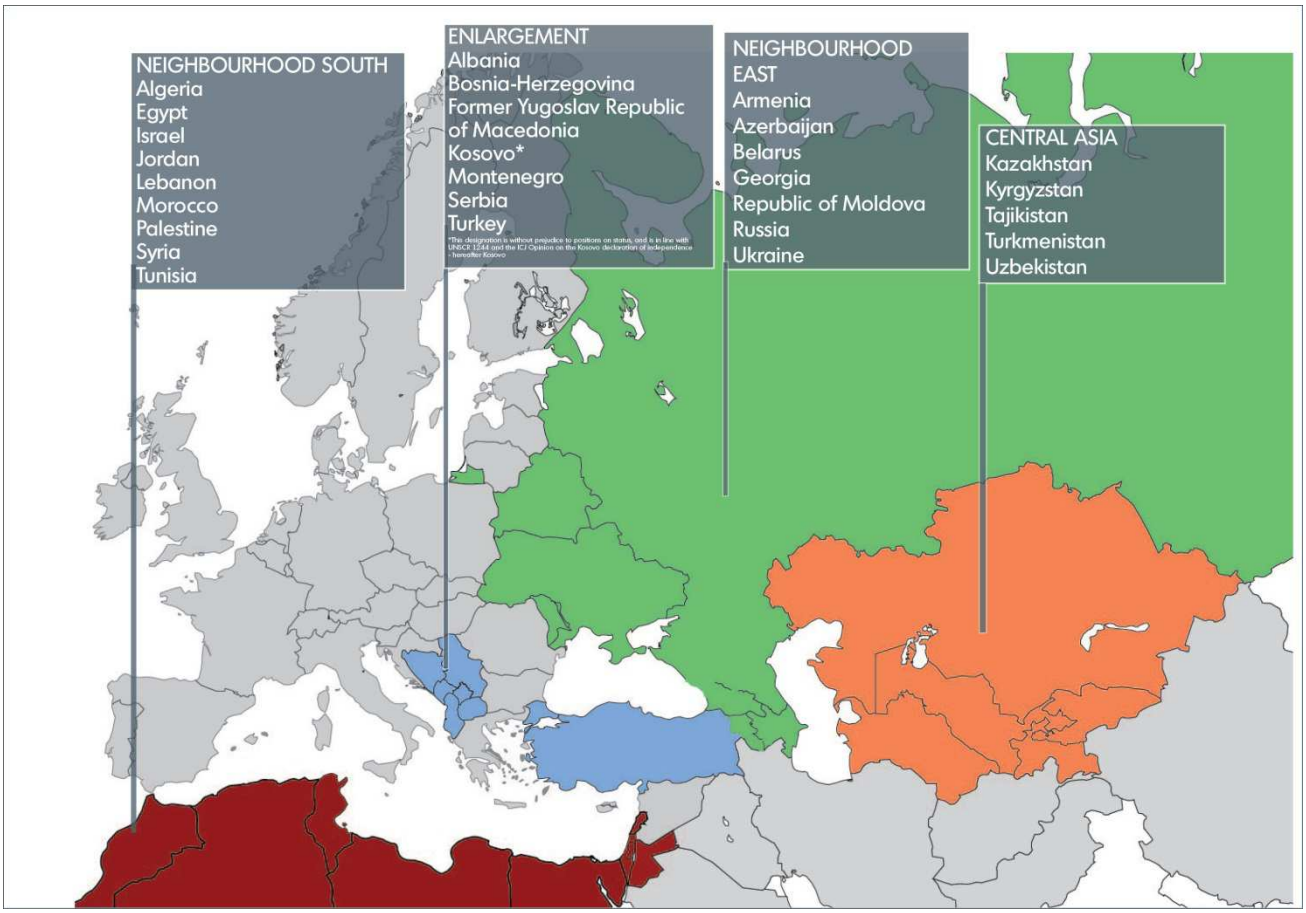
MAKING BETTER VOCATIONAL QUALIFICATIONS

VOCATIONAL QUALIFICATIONS SYSTEM REFORMS IN ETF PARTNER COUNTRIES

Table of Contents

Foreword

This study was written by staff at the European Training Foundation, based in Turin, Italy. It is primarily based on our own experience. The ETF is an EU agency and we work with countries on the EU's borders to help them improve their vocational training systems. Our partner countries are the potential future member states in South Eastern Europe, including Turkey, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Albania, Bosnia and Herzegovina and Kosovo; the Eastern European countries bordering the EU, including the Republic of Moldova, Ukraine, Georgia, Armenia, Azerbaijan, Belarus and the Russian Federation, countries in Central Asia including Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan; countries in the Middle East, including Jordanian, Lebanon, Palestine and Israel, and countries in North Africa, including Morocco, Tunisia, Egypt, Algeria and Libya. Our area of operations is illustrated in the map below. All our partner countries are undergoing important economic and social developments, from relatively closed economies to opener economies in which skills play an increasingly important role to ensure employment and sustainable growth. While Turkey is on its way to become a leading industrial nation, many countries are still recovering from recent turbulence and post-conflict situations.



Most of the countries are in transition, undergoing always difficult, sometimes painful, change from closed state-dominated economies to open free-market systems. Some are resource-rich countries trying to diversify their economies. Their vocational training systems vary but all need to adapt to the new world they find themselves in. Qualifications are important for individuals to enter and advance in employment. They symbolise the learning achievements of individuals, who successfully completed a programme. Qualifications are one part of vocational training systems and are often prioritised by our countries for reform. They are only one segment of vocational training

systems but are organically related to the other parts, curricula, teaching and learning, assessment and governance among others. That is why this study examines what reforming qualifications means for related areas.
ETF exists to be of practical service to our partner countries. So this is a work to support action. It is for people in our partner countries who work on qualifications or vocational training. It was written by ETF experts who work in and with our countries and is based on their observations, experiences and local contacts and intelligence.

We have tried to cover as accurately as we can the situation in our partner countries, but this is a working document and we welcome suggestions to improve the study or factual corrections.

Please contact us at **qualifications.platform@etf.europa.eu**

The ETF Community of Practice on Qualifications

Introduction

A new world needs new qualifications

One of the major challenges for countries and economies throughout the world today is sustainable growth and development. As an important aspect of this, there is a rising need for enhancing links between labour markets and educational systems. The labour markets are in need of qualified individuals with relevant education and training that is based on the actual demand of competence from employers. The question is: How to enhance these links?
One way to address this, for many countries and specifically for the ETF partner countries, is to reform their vocational education. It is within this larger context that countries are working on developing new or improving vocational qualifications. The title of this study, *Making better vocational qualifications*, refers to the on-going reform of qualifications system in our partner countries. The majority of these countries are reforming their qualifications systems as part of wider educational reforms. These reforms typically seek to make education and training better meet the needs of the labour market but also make lifelong learning a real possibility for individuals.

Purpose of the study

This study has two main purposes: to provide an empirical analysis of the reform processes in partner countries and to formulate lessons learned and recommendations for partner countries. The study focuses on how vocational qualifications are changing in our partner countries, showing the work in progress and the importance of experiences acquired while implementing changes.

It pursues in depth some of the themes covered in our 2012 study on national qualifications frameworks. It should be seen as part of a series of ETF publications on qualifications systems, designed to help our partner countries by identifying new knowledge and by sharing new intelligence on these themes. It primarily addresses policymakers and stakeholders implementing qualification reforms in ETF partner countries, which is why it focuses on reform in practice rather than on defining typologies. We want this study to support action by our colleagues in the ETF partner countries.

How are partner countries improving their vocational qualifications?

Many of the partner countries which are reforming their qualifications are trying to do so through newly developed national qualifications frameworks (NQF). In fact, at the time of writing, 27 out of the 31 ETF partner countries have NQFs at one developmental stage or other: planning, development or actual implementation. They are part of a global phenomenon, as 155 countries and territories around the globe are involved in similar developments. Our partner countries are inspired by the EQF, which is both a technical model and a reference system to which many aspire to relate to in the near future.

Although all countries featured in this study started the development of their NQF from their existing qualifications system, none of them have established the national framework to simply improve the definition and positioning of their existing provision of qualifications. Instead, the starting point for their NQFs tends to be a general dissatisfaction with the current qualifications system.

In 2011, ETF produced a study on the implementation of NQFs and a 4-page policy briefing for partner countries in 2011. A key finding was that countries introduce NQFs to improve the relevance and quality of their qualifications. Although the framework itself is a useful reference for a review of qualifications and qualifications development, the real change lies in its impact on learning, assessment and certification. This study therefore is a follow-up to our previous work.
In addition to the global challenges and developments that more industrialised countries also face, the ETF partner countries have to cope with social and economic transitions that are a consequence of dramatic political change in recent history.

Not so long ago, many of these countries had centrally steered economies where the state played a strong role in planning and development. Their industries were dominated by large state companies with specialised but also rather standardised jobs that operated in a centrally planned and highly regulated framework. Within a short time span, many of these industries folded and were replaced by a large number of small and medium-sized companies. Because all of these have their own niche and way of working, they provide a broader spectrum of jobs and require a greater degree of adaptability from professionals. This has a profound impact on vocational qualifications.

Enrolment in VET has declined. Young people prefer higher education, even though graduate unemployment figures are high. In between the vocational and academic pathways for specialisation, large numbers of people go without qualifications. In Georgia, for example, some 40% of those completing upper secondary education go to higher education and 8% go to post-secondary VET. The remaining 52% have no training pathway available. The decline of VET has left a gap in intermediate skills and left a vacuum in (re)training opportunities of the adult population.

Some countries are former conflict zones in which existing economies were totally disrupted. Many countries have become independent and had to build up their own national education and training systems. In a number of countries, rapidly growing young populations are in need of employment opportunities at home or abroad. Outside the formal vocational education systems, many of these young people acquire their skills through informal vocational training in traditional informal apprenticeships and through family farming. These traditional ways of learning are directed towards subsistence, but are inadequate for lifting young people out of poverty. It is generally assumed that offering these people more structured training and vocational qualifications will improve their opportunities and their employability.

Qualifications are gaining importance in continuing vocational training. A number of partner countries have a rapidly aging population and are looking for solutions to help older workers to acquire new skills and qualifications so that they can remain active and mobile longer.

Some privileged partner countries like Turkey and possibly Russia, Kazakhstan and Azerbaijan are emerging economies that maintain economic growth at a higher rate than the average during the current economic crisis. They are investing in state-of-the-art professionals to diversify their economies or to keep their growth industries going. In Turkey, certification is seen as a quality requirement for professional staff, providing growth industries with a competitive edge in international contracts.

Pitching the vocational qualifications correctly is seen as important to increase their added value, providing individuals with better opportunities, promoting development and meeting the needs of economies and societies in a changing world. In this context vocational qualifications are seen as an instrument for reform.

As a result of the challenges described here, the reform needs in our partner countries are broader than they are in the EU. Yet, they often have fewer resources to implement these reforms.

While this may be an obstacle, the general need for broader reforms also presents an opportunity because all countries have to adapt anyway to respond to the current challenges of globalisation and rapid technological development. Setting up new systems from scratch can make bolder steps easier to implement. In reality, however, reforms take time and as we will see, changes are typically incremental and often halted when projects come to an end or governments change. Forms of sustainability must be sought that are based on stable institutions which can grow over time and fit the national circumstances.

What we talk about when we talk about qualifications

We open the study by looking how vocational qualifications are perceived and defined in our partner countries. We start from the assumption that all countries have vocational qualifications, even if they do not always conform to today's international definitions. For learners and employers a qualification is simply synonymous to a certificate. But these certificates are issued only when certain requirements are fulfilled that are based on standards. These standards vary from country to country. In order to understand qualifications, we need to look at specific cases in the different countries. This is particularly important for practitioners working with qualifications. Countries start with what they have. From there they develop their qualifications gradually in order to improve them; countries need to be able to try out new approaches seeking improvements and developing systems that allow them to learn, adapt and improve them further.

In capturing the reality of new vocational qualifications development in the ETF's partner countries, we want to identify what new qualifications are being introduced, determine what is really new about them and establish what actors and institutions are involved in the processes that govern their development, approval, assessment and certification. Concentrating on a selection of countries, we will look at the processes of designing, developing, improving and using qualifications. A key concern is how they are quality-assured and how their entry into an NQF is plotted. We want to assess the depth of reform at system level: are qualifications development, delivery and assessment processes aligned in order to know if changes are embedded and sustainable.

Learning outcomes are a common thread in all EU initiatives in lifelong learning and increasingly so in our partner countries, who look to the EU as their principal source of ideas for reform. Where countries are reforming their vocational qualifications and are introducing national frameworks of qualifications, the innovations are invariably presented as based on learning outcomes. No country is developing a qualifications framework or new qualifications explicitly driven by traditional inputs such as the duration or volume of studies. We will take a closer look at these new qualifications to see how the rhetoric translates into practice.

Vocational qualifications, linking the worlds of work and vocational learning, should equip learners for the workplace so they meet the demand in the labour market. This implies a role for social partners and others

representing the world of work in the development of qualifications. We will examine their engagement in each country studied. We will examine how qualifications gain value by involving stakeholders in their development and use. Are qualifications social constructs that are agreed between different stakeholders? Or are they the work of experts working in specialised institutions?

This is not a comparative study. We have consulted the most recent research literature, including many studies conducted on developments in EU member states by our sister agency Cedefop. But this study is empirical, rather than conceptual, in nature. It does not claim to be 'scientific'. But we do want to know *why* and *how* choices have been made. Identifying the processes through which countries are introducing new qualifications can provide us with answers to questions about their wider VET system and about labour market reforms as well as about the specific arrangements that are made for qualifications.

Chapter 1: How reforms are changing definitions

Before, qualified simply meant competent, but this is changing into holding a formal certificate

Defining vocational qualifications

There isn't a universal definition or understanding of what a qualification is. The word qualification means different things in different countries. So does the attribute 'vocational' and the different translations of it used in different languages.

We have two formal definitions to guide us.

ISCED 2011 links a qualification to the completion of a programme. According to the ISCED definition qualifications can be obtained through:

the successful completion of a full programme;
the successful completion of a stage of a programme (intermediate qualifications);
the validation of acquired knowledge, skills and competences independent of participation in such programmes.

This last addition is new to the revised ISCED 2011. Just a few years ago, 'successful completion' typically meant that a student had attended training and understood the learning matter required for a given qualification. This is changing. In many parts of the world, it is now considered more important that a student can prove to master a set of skills than how he or she has actually required them. In other words: the focus of qualifications has shifted towards the assessment of what has been learned, rather than taught.

The European Qualifications Framework (EQF) views qualifications accordingly, defining a qualification as "the formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards".

Note the absence of a reference to the actual learning process itself. In line with the promotion of the concept of lifelong learning, the notion is becoming accepted that it does not matter how or where you have acquired your skills as long as you can prove that you have them.

The EQF definition presumes that a qualification is based on a given standard that defines learning outcomes. It presupposes an assessment and validation process as the basis for certification by a competent body.

While this sits better with the current EU context, it is still very conceptual and still far from universally applicable to the qualifications people have, even in the EU countries. The majority of qualifications that form the basis of people's employment today do not meet all of these EQF requirements.

For our purposes, we should not dwell excessively on definitions – this study is intended to provide stakeholders in our partner countries with useful intelligence on reform processes and on who and what is

driving them. Let us accept that 'qualification' is a rather amorphous concept in practice, but one which gives us enough to focus on for this study.

We can say that a vocational qualification should attest the attainment of an individual in a particular field of competence. It can also set the requirements for an individual to enter or progress within an occupation or profession. To be qualified is to be certified competent to pursue an occupation, several occupations or associated functions of an occupation. Higher education qualifications may or may not be in vocational in purpose. What makes them higher education qualifications is that they are developed and awarded by the universities themselves.

Definitions used in the ETF partner countries

Most qualifications currently in use our partner countries would not meet the ISCED or EQF definitions. This is not surprising and is no criticism – many of these states are experiencing social and economic upheaval which extends into their education and training systems. Most have deeply entrenched national systems and traditions and have only recently begun to adapt their VET systems, the associated qualifications and curricula, and indeed their definitions of qualification. In many cases, these processes have been prompted by the development of a national qualifications framework (NQF). They are in many cases at the foot of the mountain, looking up at a steep slope.

Now let us look at how some of our countries define qualifications.

> In **Morocco** there is no universally accepted definition for qualifications. In practice, no distinction is made between 'certification' and 'programme'.
>
> **Egypt**, considers a qualification strictly speaking to be equal to a certification. An interesting detail in Egypt is that while there are a stated total of 26 parties that issue qualifications, formal initial VET is the responsibility of the ministries of education and of industry and commerce. All qualifications that originate with other ministries are considered non-formal.
>
> In **Tunisia**, the qualification is the actual certificate "delivered by an authorised authority at the end of a training programme".
>
> In **Palestine** the term used for a qualification covers both certificates and curricula.
>
> The same applies to **Serbia**, which will adopt a clear definition once the draft NQF is approved. This definition will match the definition of the EQF (see above). Interestingly, a pilot developed qualification standards from 14 "educational profiles". While these are rooted in the educational process and not in occupational standards, they also acknowledge the need for separate qualification standards. This was the only reference to such standards we came across in any of the responses from the partner countries.
>
> **Georgia**'s qualifications are linked to occupational standards to the extent that both are described in one single document and are treated almost synonymously. These developments are recent, however, as is the expressly stated separation between curricula ("programmes") and qualifications.

In **Kosovo**, the (current) 2008 Law on National Qualifications defined a qualification as "an official recognition of achievement that recognises completion of education and training or satisfactory performance in a test or examination". This explicitly (and deliberately) opened the door for recognising prior learning on equal footing with the results of more traditional forms of education and training.

In **Croatia**, the VET Act of 2009 describes VET qualifications as a "formal term for a set of competences of a particular level, volume, profile and quality, and which is attested by a public document issued by an authorised institution". The Croatian VET Act clearly specifies the distinction between curricula and their function and qualifications and their function. It states that VET curricula are developed based on VET occupational standards and VET qualification standards.

In **Turkey**, a 2011 addition to the 2006 law on the Vocational Qualifications Authority defined qualifications simply as "the knowledge, skill and competence possessed by an individual and recognised by the competent authority". The qualification is not the same as the actual certificate, because the "vocational qualification certificate" has its own, separate entry and is described as "the certificate[s] approved by the Vocational Qualifications Authority and expressing the knowledge, skill and competence of an individual".

Azerbaijan's Draft Qualifications Framework for Lifelong Learning defines qualifications as "the formal outcome (degree, diploma or other certificate) of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards". Here the emphasis is on the assessment and, importantly, the assessor.

As suggested above, the examples show that there are considerable differences in how countries interpret qualifications. These differences are not meant to indicate that some countries do things 'better' than others. Instead, they simply serve to indicate that there is no full agreement and perhaps not always a full understanding of some of the basic concepts.

From the same examples, we may also safely draw another lesson: definitions change and continue to change, not just in the ETF partner countries, but also in the EU and indeed throughout the world.

We will now turn to the varieties of VET qualifications and analyse what is inside them.

Learning outcomes: the new defining perspective in qualifications

In recent years there has been a major shift in the conceptual basis of qualifications and curricula in most European countries, and indeed elsewhere in the world: the move to define qualifications by learning outcomes. Learning outcomes describe what a learner is expected to know, understand and able to do at the end of a course of learning. As outcomes tell us what is inside a qualification they create readability. At the same time, by basing a qualification on what the learner needs to achieve rather than on traditional inputs (such as the duration of the programme) learning outcomes facilitate diverse learning routes – formal or informal – which recognise and encourage lifelong learning.

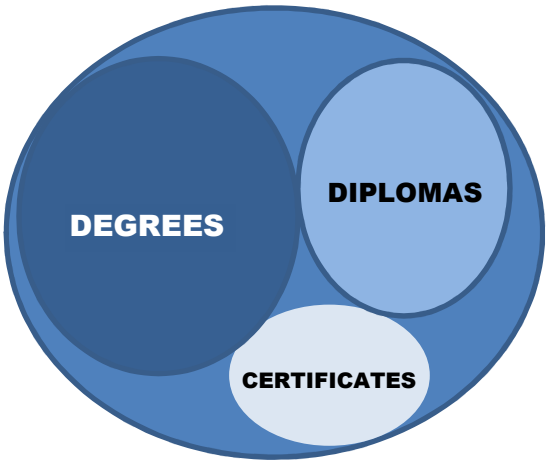
Learning outcomes are the common theoretical denominator underpinning all tools in EU education and training policies, including the EQF, Europass[1] and ECVET[2]. The strategic framework for cooperation in education and training, ET 2020[3], and the *Bruges Communiqué* under the Copenhagen Process[4] call for countries to develop NQFs – and so qualifications – on the basis of learning outcomes.

Learning outcomes in vocational qualifications are often derived from competences. Both terms are used interchangeably, but when we are going to discuss the qualifications development processes and how qualifications are influencing the curriculum the difference can be relevant.

Competences usually refer to practices in the workplace or in life in general. Learning outcomes do not necessarily refer directly to work practice. The relevance of learning outcomes to the labour market is therefore dependent on their link to competences.

Types of qualification

Different types of vocational qualification can exist side by side in one country. In fact, the number of different types of qualification tends to increase when countries start using them more actively for recognising lifelong learning. These different types of qualifications often have specific purposes and are frequently tailored to the needs of specific groups of beneficiaries.



Qualifications is the collective noun used for different kind of awards and the standards behind them

Examples of different types of qualification can include competency-based (i.e. designed directly from one single occupational standard) national vocational qualifications, for example English NVQs, Certificat de Qualification Professionelle in France, Estonian Professional Qualifications, in Turkey the VQA qualifications. Other types are the university degrees, MBAs, but also retraining qualifications for people who have been made redundant; qualifications that expand existing skills to cover a new technology or qualifications that

[1] Europass is an EU initiative which aims to help people make their skills and qualifications clearly and easily understood in Europe, thus facilitating the mobility of both learners and workers. See: http://europass.cedefop.europa.eu

[2] ECVET is the European Credit Transfer System for Vocational Education and Training. See: http://ec.europa.eu/education/lifelong-learning-policy/ecvet_en.htm

[3] Education and Training 2020 (ET 2020) is a new strategic framework for European cooperation in education and training that builds on its predecessor, the Education and Training 2010 (ET 2010) work programme. See: http://europa.eu/legislation_summaries/education_training_youth/general_framework/ef0016_en.htm

[4] National authorities and social partners from 33 European countries are taking part in the Copenhagen Process to help develop vocational education and training systems. See: http://ec.europa.eu/education/vocational-education/copenhagen_en.htm
For the Bruges Communiqué, see: http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/bruges_en.pdf

cover the skills needed for immigrants to integrate in society. The qualifications that belong to a specific 'type' of qualification share a common type descriptor. The adapted descriptors and the typical purpose for each type provide a common architecture that can be used in developing qualifications of that type.

The same types of qualification can be awarded by different bodies. Apart from traditional learning institutions, these can include economic sectors, NGOs or even single employers. This fairly recent diversification of providers has increased the need for quality assurance and trust in assessment.

In its publication *Changing Qualifications*[5], Cedefop also distinguishes between two meta-types of 'solid' qualifications and 'flexible' qualifications. In this distinction, solid qualifications are of a coherent nature and develop a good part of their public credit through reputation: they have been around for a long time, everyone knows them and therefore they are trusted and respected. The German Meister is a classic, example of this. Normally these qualifications do not comprise units.

Flexible qualifications are made up of discrete units. Some of these may also be interdependent but this is not necessarily the case, as it is with solid qualifications, so that some can be obtained separately. Qualifications can be made up of sets of partial qualifications that are called units. Such qualifications are referred to as 'unitised'. Unitised qualifications and individual qualification units can be in use side by side in one system. Comprehensive unitised qualifications can, for example, be offered as a full programme in initial VET, while individual units may be offered as retraining courses in continuing VET. So the same units might appear in different qualifications or types of qualifications. The relationship between units and qualifications can be defined in the architecture for certain types of qualifications or in the framework of qualifications. Often units are described as assessment entities, and the term modules are used for learning entities. There are strong objections against unitisation from specific stakeholder groups. The argument used is that unitisation is slicing up qualifications in different bits that are interconnected and these can loose their significance by dealing with them in isolation. The whole qualification is greater than the sum of the parts. Resistance against unitisation is particularly strong among well established universities and professional bodies that have their own qualifications, and in countries like Germany where compulsory vocational training standards are defined in close cooperation with social partners based on a commonly agreed profile of a model future professional. Strong ownership and the existence of a highly valued qualification can reduce the scope for qualification reform ('do not change something that works well'). But solid qualifications can be an obstacle to the validation of non-formal and informal learning, and the permeability of education systems since they do not allow for partial recognition. With more emphasis on lifelong learning there is a trend towards unitisation, and even some of the traditionally solid qualifications are now being built from interdependent units.

[5] *Changing Qualifications*, Cedefop Reference series: 84, Publications Office of the European Union, Luxembourg, 2010. See: http://www.cedefop.europa.eu/EN/publications/17429.aspx

The standards behind vocational qualifications

If you ask someone to show you a qualification, they often show you the certificate. But in order to understand a specific qualification, we must, as we shall see later in this study, know the standards that are behind the qualification. A standard sets the norm of performance, and can also act as a benchmark against which an individual performance can be measured.

In the 1990s and early 2000s, the ETF published four volumes on the development and use of standards. At the time, EU and partner country members of the ETF's Advisory Forum agreed that every modern vocational education and training standard should as a minimum contain the following three components:

The employment requirements	What does the student need to be able to do in employment?
The learning requirements	What does the student need to learn to be effective in employment?
The assessment requirements	How will we know what the student has learned and is able to do in employment?

Partner countries found it particularly difficult to identify and specify the employment requirements since these had to be defined in cooperation with representatives from the world of work, who were not usually engaged with education. In response to this deficit, many vocational education reform programmes focused on the identification of occupational standards. These could help to identify the employment requirements, which in turn would increase the relevance of the standards behind their qualifications.

Today, more than ten years later, we can see that many qualifications in partner countries are still not built on standards with all the elements that were identified ten years ago. In fact, development processes have only started to move in this direction recently, typically as a result of the development of NQFs.

The main standards that underpin qualifications take various forms in different countries and different education sectors.

Occupational standards

Approximately two-thirds of the EU countries examined in a 2009 Cedefop study[6] on qualifications and about 75% of ETF partner countries have developed, or are in the process of developing, occupational standards. These standards set the requirements for performance in an occupation. They can help to keep qualifications relevant to the needs of the labour market, while providing information to learners on the job profile targeted by the qualification.

In one group of EU countries, occupational standards take the form of a more or less comprehensive classification system whose primary function is supporting labour market monitoring. In a second group of countries, occupational standards are designed as benchmarks for measuring occupational performance, either in a work context or in an educational context. In a third group, occupational standards describe the

[6] *The dynamics of qualifications: defining and renewing occupational and educational standards*, Cedefop panorama series, Office for Official Publications of the European Communities, Luxembourg, 2009. See: http://www.cedefop.europa.eu/EN/Files/5195_en.pdf

occupation targeted by a qualification. In this group they are developed in an integrated process with educational standards.

Education standards

Education standards are measures of the quality of the education process or the outputs of the education system, which can be described as the expected knowledge and abilities at the end of a formal learning process but also as entry requirements, examination passes, etc. They follow logic of progressive accumulation of knowledge and skills, and are often described in disciplines or subjects. The variety of education standards across Europe is as significant as it is for occupational standards.

In most European countries, qualifications take both standards into account. Occupational and education standards are integrated and linked together to make the relationship between employment requirements and learning more evident.

In other countries, however, qualifications are based solely on educational standards, either because reforms introducing occupational standards have not yet been fully implemented or because other coordination mechanisms are used to ensure direct cooperation between the institutions determining what has to be learned and those which can indicate what the labour market wants. The latter is the case in Germany or the Scandinavian countries, where social partners are deeply involved in defining qualifications and in providing the actual training.

Finally, a few countries follow the British NVQ model, where qualifications are based solely on occupational standards, which, because they are separate from programmes, a feature that can make them particularly useful for the validation of non-formal and informal learning.

Standards in the partner countries

Most partner countries use education standards to define qualifications. These educational standards vary in content. However, a number of them are developing occupational standards as a first step in the development of qualifications (see chapter 2).

Turkey has adopted a new type of vocational qualification that is directly linked to national occupational standards. These ‘sectoral’ national vocational qualifications are meant to certify and train people already employed in industry.

At the time of writing, the Ukrainian Parliament was discussing a law for the development of similar sectoral qualifications, developed by sector committees on the basis of occupational standards. The law was proposed by the Ukrainian Confederation of Employers.

Several years ago Estonia, now an EU Member State, successfully implemented a similar system of ‘professional qualifications’ that are developed by professional councils and awarded by professional awarding bodies under the supervision of *Kutsekoda*, the Estonian Qualifications Authority.

Processes for governing qualifications

In practice, qualifications are the outcomes of a process. They are based on an assessment of emerging needs and build on current practice *as well as* on expectations about the future of an occupation and on the career paths of persons who hold the qualification.

Because the vocational qualification has to connect education and the labour market, people in the world of education must be able to work with it. It is therefore important that representative groups of stakeholders develop and agree on its contents. In this sense the qualification can be considered a consensus about expected learning outcomes. The different roles of the stakeholders, the qualification development process arrangements and the division of implementation responsibilities all shape the qualification as a common denominator of expectations. Because nobody can exactly predict the future, such collective agreements also represent a joint responsibility of stakeholders to support remedial measures if they are proven wrong in their forecasts.

A fine case study illustrating this can be found in a European comparative study on bricklaying qualifications[7], which not only analysed the contents of the standards but also offered an inside view of the principles for governing qualifications by looking at:

- who regulates the qualifications: social partners, employers, government, or a combination of stakeholders;
- how standards setting and related training is funded;
- central and regional approaches;
- the responsibility for defining the content of the qualifications;
- Training of the learner for the qualification: through teaching or productive processes;
- the involvement of '*handwerk*' (chambers of crafts) and industry (sectoral organisations);
- the role of the state.

National qualifications frameworks – driving qualifications reforms

Almost all the countries this study covers are reforming their qualifications in the context of building a national qualifications framework. In fact, it is more precise to say that most of them are using their NQF to drive the reform of their qualifications system, including the qualifications themselves.

Qualifications frameworks are structures which classify qualifications in a hierarchy of levels. An NQF is normally a grid (although other structures are possible) of levels of qualifications. Each level is defined by a set of descriptors indicating the learning outcomes that are relevant to qualifications at that level. The number of levels varies according to national needs. The lower levels may, for example, describe what people can do under guidance and supervision. The intermediate levels could focus on what people need to know and are able to do in order to act independently and in teams. Higher levels would typically describe the learning outcomes for people who can develop new knowledge and processes. Current NQFs of the partner countries have between 5 and 12 levels.

Often qualifications frameworks have a register or a database of the qualifications they cover. For a qualification to be positioned in the framework it has to fulfil some quality criteria, typically including its demonstrated relevance to learners and the labour market.

[7] Brockmann, M., Clarke, L., Winch, C., Eds., *Bricklaying is more than Flemish bond*, European Institute for Construction Labour Research, Brussels, 2010.

Each qualification will have a level and will be classified accordingly in the register associated with the framework. The level of a qualification is normally determined by comparing the learning outcomes of a qualification with the broader descriptors for the levels. If they do not exist yet, level descriptors can be informed by the outcomes of typical qualifications in a country. This ensures that levels fit with existing qualifications and vice versa. Many countries, however, have adopted national levels based on the European Qualifications Framework descriptors, rather than on their typical qualifications.

When the NQFs of different countries are linked internationally, qualifications from these countries can be compared. This can support mobility.

The implications of establishing and using an NQF go well beyond simply classifying and comparing qualifications. While many EU Member States use NQFs to coordinate their existing qualifications systems more efficiently, ETF partner countries can and do use NQFs to pursue much wider national education and training reforms objectives. These include bringing education and training closer to the labour market, developing relevant qualifications, creating progression routes that link vocational education and training to other education and training sectors, such as higher education, and working towards a greater recognition of qualifications within the country and abroad.

Because of the prospect of integration with the EU, the candidate countries in Southeast Europe are more strongly oriented towards the EQF approach and definitions than others.

Some conclusions

Most qualifications in partner countries don't meet the EQF definition. But countries are – consciously - moving in this direction. Some already use a concept for qualification close to the EQF definition and insert it in their legislation. NQFs are often the drivers of reform -they are outcomes-based, which means qualifications have to be outcomes-based. An NQF does seem to help improve qualifications.

The main reason for change is relevance – developing qualifications learners can show to employers based on identified needs, which increases the chance of being recruited.
Qualifications have different meanings in different countries. In many countries the term qualifications is used to describe the competences people hold, but increasingly the emphasis is on a formal certificate.

Behind those certificates are different standards. In most partner countries the most common vocational qualifications are still based on education standards and curricula, but this is changing slowly. Increasingly, the new occupational standards and national qualifications frameworks are influencing qualifications developers including officials, experts, social partners and other stakeholders to emphasise work-related competence and learning outcomes when developing qualifications.

Where qualifications were once mainly determined by the curriculum, now, it is the other way round - the new qualifications are starting to determine the curriculum. This is reflected as well in the changing international definitions of qualifications, moving from a certificate issued after successfully completing a training programme to a certificate issued by a competent body when a learner has demonstrated that he has achieved the learning outcomes defined in the qualification standard.

Chapter 2: Vocational qualifications development processes – how and why they are changing?

Vocational qualifications should be developed from identified needs, not from curricula

Regions and nations transformed

Before we look at current reforms and reform processes in the ETF partner countries, we should first take a short tour of their starting point and recent history. This will help us to understand how social and economic change and demographic challenges affect their labour markets and the development of qualifications. This in turn will help us to develop a better understanding of their needs for reform.

As we saw in the introduction, the ETF's partner countries are countries in transition towards free market economies. Their backgrounds differ. The majority had centrally planned economies only a few decades ago. In most countries, the processes of change started in the late 1980s. While they have this in common, they have different socio-economic and demographic circumstances (and therefore different needs for qualifications).

Eastern Europe and Central Asia

In the countries that emerged from the former Soviet Union in the early 1990s, the move to a free market economy has had a profound effect on labour market conditions and national VET systems. Their economies are generally characterised by a decline in manufacturing, growth in services, high unemployment, particularly among young people, labour migration and often an aging labour force.

In the past, VET systems had often been tied to huge state enterprises that guaranteed jobs to VET graduates. However, the collapse of many national industries and the explosive growth in smaller companies diminished employer engagement in education and training and distanced VET from the labour market. The quality and relevance of VET deteriorated. Curricula and qualifications became obsolete. Opportunities for professional practice and continuing training became scarce.

In the former Soviet Union, qualifications played an important formal role through the so-called tariff-qualification system that regulated the labour market. The system covered the allocation of jobs and wages and regulated the provision of education. There was a direct link between the education system and enterprises. Many higher education institutions and in particular the 'institutes' (narrowly specialised universities) produced engineers for the big state companies, the 'technikums' trained technicians and middle managers, and so-called PTUs (vocational schools) trained skilled workers.

PTUs were often linked to a specific company: the base enterprise that provided opportunities for practical training and future employment. Demand and supply were strictly regulated by the state and hence there was no real market of labour. As the main employer and manager of the education system, the state would assign graduates to jobs, rather than have graduates looking for jobs themselves. For occupations and

qualifications of different levels there was a centrally established 'list of occupations' and a 'classifier of specialities'. The requirements for training in specific specialities were laid down in education standards. These tools determined both the conditions for education and employment and the pension systems. Professional characteristics were described for all of the listed occupations. Occupations were classified by rank (*razryad*) based on their complexity. Their descriptions were often quite similar to the way in which competences are formulated in occupational standards nowadays.

These standards were developed centrally by specialised institutions that operated in close collaboration with experts from the world of work.

The classifier of specialisations described the specialisations for different types of education. There were specialisations for initial VET, for secondary specialised education and for higher education. The link to occupations was indicated for each specialisation. Every employee had a workbook in which was indicated where he worked in what job, as well as what his or her occupation was and what kind of qualifications he held .

Access to education institutions was regulated by state instructions , which indicated how many people the state had ordered to be trained in each specialisation. This does not mean that individuals were completely blocked from following their interests and preferences, but there was definitely less room for personal choice than there is in Western Europe today. It was the price the system paid for a much better match between the supply and demand of labour. Learning was recognised as important for the development of society and encouraged. There was an elaborate system for self-study, retraining and upgrading which included distance learning courses. A relatively high number of workers continued their studies while working. So what we today call lifelong learning is not entirely new in the region.

The Western Balkans

Other Central and Eastern European countries, including the countries in the Western Balkans, had similar systems.

When the communist markets and production systems collapsed at the end of the last century, a deep economic crisis ensued. It took considerable time for education and training systems to adapt to the new situation. In an economy where the state was no longer able to provide and regulate jobs, the tariff-qualification system had become obsolete. Nevertheless, many aspects of the old training system survived and can still be found in many of the partner countries.

In the Western Balkan countries demographic trends vary. Most countries have aging populations. Just like the former Soviet states, they have witnessed the dissolution of a system in which VET schools supplied graduates to state-owned enterprises. Curricula and qualifications have been slow to keep track with the changes. As a result, many lack relevance to current employment needs. The greatest challenge today is that reforms are slow. Not enough new qualifications are being produced. The overriding (and most urgent) need is for more and better qualifications. The Western Balkan states are also influenced by the prospect of accession to the EU. Their qualifications reforms are in good part dictated by the need to link into the European Qualifications Framework.

Turkey and the Southern and Eastern Mediterranean

The situation is different in Turkey and the Southern and Eastern Mediterranean countries. Governments have always been the key players in developing the predominantly public vocational education and training systems, but have never held a monopoly as in the former communist countries. Elements of the Anglo-Saxon and French educational traditions can still be traced in most of the countries in general and higher education and in VET.

Many of the Southern and Eastern Mediterranean countries have a large informal sector with traditional apprenticeships. The education and training systems in these countries are constantly expanding but not fast enough to meet the soaring demand in societies with young populations and high birth rates , so that many young people cannot access higher education or VET, or obtain employment on graduation. VET has historically been a small part of the education system, with the exception of Egypt. Most young people aim for the prestige of higher education. Much employment is informal: it is unregulated and workers are uncertified. These countries have few regular qualifications and in reality those that exist often signify curricula.

Turkey is an exception. It has always had a strong private sector, and is undergoing a rapid transition to become a globally leading industrial nation. It is strongly internationalising its economy and investing heavily in the development and competitiveness of its workforce. We can expect that before long, the combination of this economic growth, industrial expansion and education and training reforms will bring educational attainment levels to the European average.

The decline and rediscovery of vocational qualifications

In all partner countries formal qualifications are traditionally considered important for social mobility. This applies particularly to higher education degrees. During the 1990s, enrolment in VET declined. Young people prefer higher education, even though graduate unemployment figures are high. At the same time large numbers of people left the education system without qualifications.

VET qualification systems tend to offer certification only at upper secondary level and until very recently there were few opportunities to certify adults. Many countries acknowledge that the recognition of prior learning (RPL, also referred to as the validation of non-formal and informal learning) is potentially very useful, given the weaknesses of the formal VET sector and the wealth of uncertified skills and competences that do exist. But none of our partner countries have yet established a fully functioning RPL system. For the time being, in most countries lifelong learning is an aim, rather than a reality.

Over the last two decades, the role of the social partners in education and training has been limited, so representation in VET governance has often been narrow and usually dominated by education ministries. These have tended to prioritise general secondary and higher education but in some countries, such as Ukraine and Turkey, this is beginning to change. National qualifications frameworks are one influence in in bringing about this change.

All partner countries have reformed, but reform has often been implemented unevenly, sporadically and sometimes chaotically. In some cases change has been boosted by internal drivers such as political

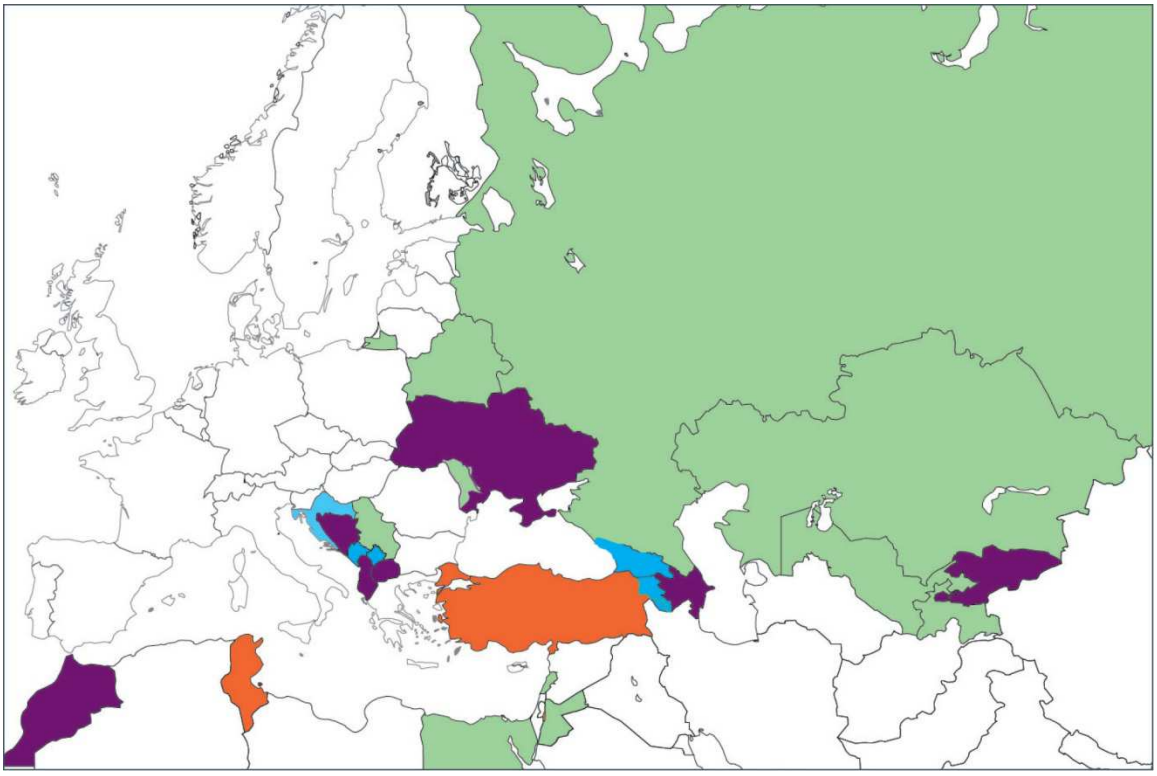
prioritisation, economic developments and demographic pressure. In other cases, it has been boosted by external drivers such as international aid projects and programmes. The two interact and have resulted in a patchwork of countries that are at very different stages of developing qualifications that are appropriate to the current reality. Even within individual countries, we observe in our work uneven development of education and training systems, so that they are characterised by strengths in some areas, weaknesses in others.

A small number of countries have started implementing changes and have established new institutions. Many have passed or are in the process of passing legislation regulating qualifications frameworks and qualifications. Pilots involving the development of occupational standards and new vocational qualifications and curricula can be found in most countries. But the number of new vocational qualifications on offer is still limited.

In its publication *Changing Qualifications*, Cedefop (2010) identifies five stages of change that can be used to mark the extent to which reforms have actually been translated from words into action. These are:

- **policy discussions**, where discussion or debate is taking place about change, but there are as yet no clear plans for a policy or implementation, such as in Serbia, Egypt, , Uzbekistan and Tajikistan;
- **policy**, where the direction is set, perhaps through a law or a high level decision, but there are as yet no clear plans or strategies for implementation, such as in Lebanon, Morocco, Palestine, Azerbaijan, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia , Kyrgyzstan and Ukraine;
- **implementation**, where the infrastructure to make change happen is in place and arrangements such as a leading organisation and funding arrangements have been decided on, such as in Georgia, Armenia, Montenegro, Kosovo and Croatia;
- **change in practice**, where pilot schemes and full scale implementation mean that providers or other stakeholders are taking policy through to the final stage, which is full implementation, such as in Turkey and Tunisia;
- **Effect**, where the new system brings benefit to learners, stakeholders, organisations or society, and where reform or policy change can be evaluated.

None of the partner countries have entered the last stage yet.



Of course, the lists are somewhat arbitrary and subject to constant change as countries do not always neatly meet the criteria. In Russia, for example, the Agency for Strategic Initiatives, a high level private-public partnership, has developed a detailed road map for the creation of a national system of competences and qualifications to support the development and assessment of competences for a more competitive and productive workforce, but formal decisions on the NQF are still pending. In Turkey, changes are being implemented for sectoral qualifications based on national occupational standards, but such systemic changes are only very partially implemented in initial VET and higher education. Ukraine is, under Cedefop's categories, at the same stage as Azerbaijan and Lebanon, but there has been some piloting, even though the infrastructure and institutions are not yet in place.
In this publication and the country sheets in its annexes, we will nevertheless try to use these stages to mark progress in the different partner countries as they are reviewed or referred to.

The quest for information

For all countries it is important to ensure that vocational qualifications can provide opportunities for employment and career development, that they can support social inclusion, and that they can support competitiveness, productivity and growth. In short: that they are relevant to the current economic and social reality.

To achieve such relevance, those who have been tasked with developing occupational standards and vocational qualifications need a continuous flow of labour market information. This will allow them to spot trends and early warning signals, which in turn can help them to prioritise work on the standards that are in high demand, change most rapidly or frequently and affect large parts of the work force. It may also help them to identify entirely new fields of work as they appear. Such prioritisation is very important in countries

where resources are limited. In most of the partner countries, particular attention must be paid to the specific needs of the rapidly increasing number of small and medium-sized enterprises.

The difference between central planning and an open labour market cannot be underestimated. It represents a huge mental shift. Not surprisingly, new mechanisms based on models from countries with a longer history of free market economics have been slow to develop, in part because it has been difficult to for the new generation of private employers to organise themselves and to involve them in labour market planning. While change processes were on the drawing board, for lack of alternatives students continued to be trained for types of employment that increasingly disappeared – not simply as a consequence of the introduction market economy mechanisms, but also because technological development has made huge strides in the past two decades. Reforms have continually been chasing a moving target.

Most partner countries have dabbled with labour market information systems but the expertise and finances needed to implement them or (more typically) to align different existing systems for different sectors has made it a tall order for most.

One additional problem is that the bodies developing standards are not usually the ones that gather labour market information. They typically gather their basic data from different sources, some within their own sector and others national, such as national statistics agencies. These may be incomplete or poorly comparable. Some critical data may not be gathered. Setting up a national, comprehensive labour market monitoring system represents a huge investment, both in terms of finances and of human resources. As a consequence, many pilot projects have limited themselves to certain sectors or geographical regions. Such limited initiatives can allow for thorough testing before they are expanded to cover different sectors or even a whole country.

In **Albania**, the ETF supported a study identifying skills gaps in agriculture, food processing, construction, textile, tourism, transport, communication, energy and ICT. The study produced a list of key skills and qualifications that were in short supply. The study looked at both current and future demand. A list of 84 occupations was compiled for a wide variety of areas including meat processing, nature medicine, fisheries, textiles, hospitality, travel, car repair and construction. Qualifications for these occupations are still to be developed.

In **Georgia**, the Ministry of Economy and Sustainable Development carried out a pilot study looking at employment trends and skills needs in tourism, apparel, ICT and food processing. The sectors were chosen because they were considered high potential growth areas. A combination of quantitative and qualitative techniques was used, including interviews with key players and stakeholders, a small survey of 50 companies in each sector and desk-based research using existing data. The interviews and survey covered questions about the nature and competences of the current workforce but also about recruitment matters. The desk-based research produced a summary overview of each sector, its characteristics and its context. From this were then distilled implications for employment and skills development that were used to inform the development of occupational standards

Kosovo: The National Qualifications Authority in Kosovo uses the following criteria for the relevance of qualifications: qualifications to be developed on a learning outcomes basis; labour market demand; basis on occupational standards or at least some occupational analysis; clear support from the relevant sector;

equipping the learner for employment, either directly or after related further learning opportunities. For the learner, relevance is supported by the requirement to use learning outcomes; design principles in the qualification that encourage progression upwards or horizontally to related qualifications; qualifications structure should be modular to allow for combinations with other modules and to facilitate accumulation and transfer of credit; qualifications should accommodate RPL paths.

Morocco: According to the Ministry of VET and Employment the relevance of qualifications should in the future be ensured at 3 levels:

- Upstream through the identification of needs (economic and social);
- During the development and implementation of qualifications (curriculum development, personal coaching, equipment and materials, educational organization, ...) through the involvement of relevant actors;
- Downstream after the training process: through transition from school to work studies, the tracking of graduates and evaluation studies of the vocational training (one study only so far)

Egypt: In the current circumstances it is difficult for formal VET to secure relevance of qualifications as there are just too few links between the education sector and the labour market, in spite of the fact that Education and Training Partnerships have been developed since 2005 to address this issue. Relevance is considered stronger for training offered in the non-formal system, because it is sectoral and more related to needs of the sector.

A common approach found across different countries is that the first efforts towards skills anticipation are launched in growth sectors where further development is inhibited by skills shortages and where it is difficult to fill vacancies.

From labour market information to occupational standards

We saw earlier that there is considerable divergence in what partner countries consider to constitute a vocational qualification. In fact, Cedefop analyses[8] have documented that this is the case in the EU too.

Qualifications generally used to be based on curricula formulated by educators but partner countries are now increasingly moving towards using occupational standards as their basis. Standards are measurable indicators of achievement. Occupational standards describe the requirements of an occupation.

The most frequently used techniques for developing occupational standards are Functional Analysis and the DACUM method. They grew out of plain job/task analyses, which had been used since the early 1900s.

In job/task analysis, an experienced worker is observed to analyse the different sequences of work tasks and activities performed, in order to prescribe them for all workers. The job/task analysis approach was a good tool for analysing manual tasks in the mass production processes of the industrial era but the global growth of SMEs, the knowledge economy, and in particular the services sector have increased the demand for a more flexible work force.

[8] *The dynamics of qualifications: defining and renewing occupational and educational standards*, Cedefop panorama series, Office for Official Publications of the European Communities, Luxembourg, 2009. See: http://www.cedefop.europa.eu/EN/Files/5195_en.pdf

Therefore, the newer methods of occupational analysis have shifted from analysing discrete tasks and activities to analysing the occupational competence needed to perform those tasks and activities.

DACUM

DACUM (Developing A CurriculUM) was first used in the US to develop in-company training. Despite its name, it actually involves only the first step in a full vocational curriculum development process. Instead of job observation, DACUM uses guided group discussions during a two-day DACUM workshop with experienced workers who actually perform the job that is being analysed. In this workshop the duties and tasks (competences) required to perform the job are analysed in detail. The participants in the workshop also identify what other elements support the performance of the tasks, such as general knowledge and skills, attitude and behaviour, tools, equipment, supplies and materials. The information is summarised in a DACUM chart.

Although supervisors and managers may know a lot about the work developed, they usually lack the necessary level of expertise to conduct a good job analysis. Expert workers can describe their jobs better than anyone else and describing their tasks is an effective way of defining an occupation.

To develop all tasks in an appropriate way, knowledge, behaviour and skills need to be applied and tools and equipment used. DACUM pays special attention to factors that explain a successful performance. It further specifies the tools with which the worker interacts in order to facilitate practical training.

Different forms of the DACUM method are used in many countries, including Turkey, Moldova, Estonia, Romania, Azerbaijan, Serbia and Jordan.

Functional Analysis

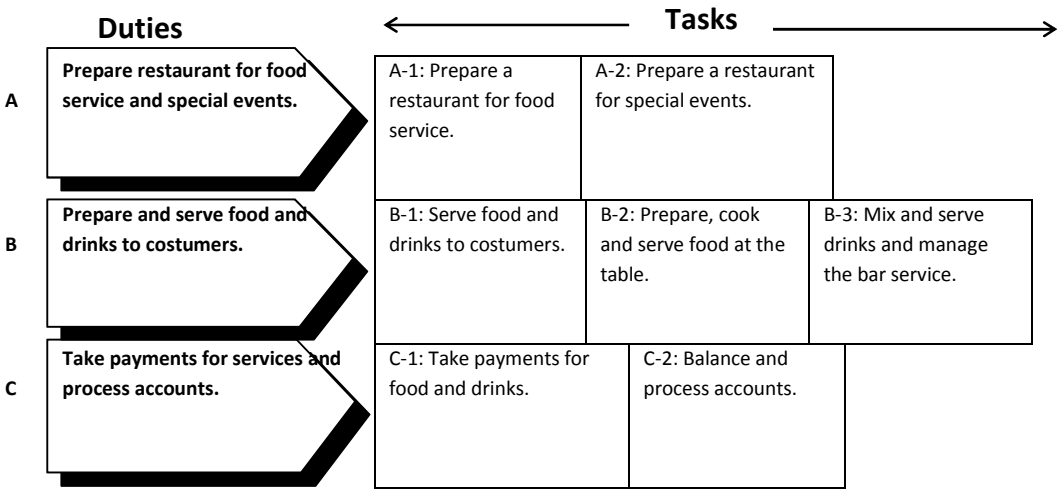
Functional Analysis was developed in the UK in the 1980s. It involves an occupational mapping exercise of a sector to identify its occupational structure. Related occupations are analysed to identify their main functions and associated work activities. Performance criteria are set and parameters of performance established.

Functional Analysis is not a method for occupational analysis in a strict sense. It starts with the identification of the purpose of an occupation in the main sectors where it is found, identifying the key functions and breaking these down into sub functions until outcomes for each key function are identified. Modules are analysed one by one to identify the performance requirements.

Functional Analysis uses a consultative process that involves practitioners, managers, and sometimes the users of standards.

Functional Analysis is used in the UK and other Commonwealth countries, Russia, Ukraine, Egypt, and the Former Yugoslav Republic of Macedonia.

Simplified DACUM Research Chart for Waiter



General Knowledge and Skills		**Worker Behaviours**	
• Written and verbal communication skills, including in foreign languages • Planning and organisational skills • Multitasking • Interpersonal skills • Knowledge of food and beverages • Service orientation • Health and safety	• Providing customer and personal services • Serving drinks (cold/hot) • Serving food • Carry out calculations • Checking the quality of food products and beverages	• Attentive (to clients and details) • Friendly • Hygienic • Good coordination and balance	• Quick and skilful • Respectful and polite • Flexible and adaptable • Good memory • Trustworthy
Tools, equipment, supplies and materials		**Future trends and concerns**	
• Bottle opener • Cork screw • Decanter • Drinks mixer • Fruit press • Knives and other cutlery	• Trays • Food heater • Microwave • Grill • Till • Computer	• Customers getting older, being more dependent on assistance, and having more diverse cultural and national backgrounds • Changing lifestyles with more emphasis on local specialties	

Simplified functional map for waiter

Key purpose	**Major functions**	**Modules**
Prepare the restaurant; serve food and drinks and process accounts.	A. Prepare a restaurant for food service and special events.	A1. Prepare a restaurant for food service.
		A2. Prepare a restaurant for special events.
	B. Prepare and serve food and drinks to customers.	B1. Serve food and drinks to costumers.
		B2. Prepare, cook and serve food at the table.
		B3. Mix and serve drinks and manage the bar service.
	C. Take payments for services and process accounts.	C1. Take payments for food and drinks.
		C2. Reconcile and process accounts.
		D1. Contribute to the organisation of work, effective relationships and social and environmental requirements.

For each of the individual modules, performance requirements are defined as well as the range of contexts, tools and methodologies. Core skills are defined in this way too. The module 'Contribute to the organisation of work' is a general module that is actually part of every single module.

Practical implications

Taking its starting point on the workshop floor, DACUM is considered to be more 'bottom-up' than Functional Analysis. No method will produce totally reliable (consistent) results, as the processes under scrutiny remain somewhat subjective. Verification of the results with a much wider group of companies and practitioners is therefore always important to ensure that the occupational profiles developed meet the needs of businesses.

Although occupational standards may provide information for training and assessment purposes, their main aim is to describe employment needs. Representatives from the world of work – preferably people who are directly involved in the occupation – are therefore the experts most commonly used for developing occupational standards. However, they are experts of the competences that are needed on the job. They do not always understand the implications for learning. As a result, vocational qualifications are often different from occupational standards. While this is not necessarily problematic, it is important that there are links between occupational standards and vocational qualifications. This will strengthen confidence in these qualifications. It is beneficial to already consider these links during the analysis of occupational standards.

The checklist below is meant as a diagnostic tool for the self-assessment of occupational standards. It is an attempt to formulate a number of questions regarding the development process, the development methodology, the format and functionality of occupational standards. It may help partner countries to establish or review the development of occupational standards.

The **process** looks at why occupational standards are developed, who is involved in the development, and how standards are used:

1. How was the decision taken to develop occupational standards? What evidence was available to decide for the chosen occupation(s)? Are the standards setting minimal requirements, an agreed average or an ideal for professionals in the occupation?
2. Who has been involved in developing the standard(s)?
3. How have the standards been verified with other potential users?
4. Who has approved the standards?
5. What is the formal status of the standards?

The **methodology** looks into the technical processes of identifying the requirements for a standard, the professionalism of its developers, and the consistency and coordination with other standards:

6. How do we ensure that standards are based on real needs? To what extent are these needs confirmed by representative groups of experts?
7. How competent are the developers of standards? Have they received training? Are they involved in the development of other standards too? What are their strengths and weaknesses?
8. On what basis has the development methodology been decided? How was it tested? Considering that all occupational standards are social constructs, to what extent are different standards comparable?

9. How is consistency between different standards ensured? Are several standards for an economic sector developed simultaneously or is standard development carried out in isolation? Who is in charge of sectoral coordination? Who is in charge of intersectoral coordination? How are existing standards used for the development of new standards?
10. Have standards been benchmarked against those of other countries?

The **format** looks at how the standards are structured, how readable standards are:

11. Is there a clear convention on the naming of occupations? Does the name of a standard reflect a level? Is there a link to a national classification system, such as a list of occupations, an NQF or a classifier of specialisations? Is there a link to ISCO or NACE classifications?
12. How are units grouped? Do they follow a work process sequence? Do they follow a logic of related activities and competences?
13. Is it easy to read the standards? Is there a clear distinction between main competence, function, activities and tasks? Do the standards specify performance or assessment criteria?
14. Can we identify key competences in the occupational standards? Can we identify common technical competences in the occupational standards? How easily can these be identified?

The **functionality** looks at how user-friendly standards are:

15. How are the occupational standards (going to be) used?
16. Can professionals understand their terminology? Can developers of vocational education standards understand their terminology? Are there clear statements about knowledge, understanding and skills? To what extent are issues such as attitudes, behaviour and personal characteristics integrated in the standards?
17. How assessable are these standards? How accessible are they? Are they free and available on the internet? Are they available in different languages?
18. How much time and resources does their development require?

With answers to the above questions it will be possible to compare and assess methodologies, identifying common elements, strengths and weaknesses of different approaches. Comprehensive approaches for developing occupational standards are not easy to use. It is important to start with what national stakeholders consider to be the essential characteristics of standards. It is important to work systematically so that different experiences can be compared. Methodologies can be improved incrementally. Recommendations for improvement have to be practical and feasible. For countries reviewing an existing system it can be beneficial to distinguish between work that can produce quick gains and immediate benefits and developments that will take more time.
Below are some examples of the introduction of occupational standards in partner countries.

> The VET Centre in Skopje **former Yugoslav Republic of Macedonia has** been developing occupational standards since 2010. A first edition of a methodology was published in 2009. It details procedures (initiation, coding, development, review and approval) but is vague on how competences are identified. Using standardised groups of tasks, specific tasks for each occupation are identified. The group which develops the standards includes representatives from chambers of commerce and the VET Centre. The role of practitioners is not specified. All proposals are reviewed by the Council for VET, which can amend them. The Ministry of Labour and Social Policy publishes the standards. They are linked to the national classification of occupations.

Moldova has been involved in developing occupational standards since 2008, but only a few standards have been approved so far. The methodology was officially adopted by the government in late 2011. A key point from this methodology is the role of sectoral committees responsible for the draft occupational standards. They are established through the collective bargaining process. A sectoral committee is expected to set up three working groups that (a) do the occupational analysis, (b) scrutinise the results and translate this into occupational standards and (c) verify and validate the standard before they are submitted for approval by a high level National Council for Occupational Standards and Certification of Professional Work. Both the processes and the format of the standards are described in detail. Several lists of questions are included to verify the contents of the standards. There is also a link to the national list of occupations.

In **Bosnia and Herzegovina**, where sectoral organisations are particularly weak, occupational standards development was recently piloted in agriculture. It had never been done before. The work started with the project team and a national expert establishing a model for occupational standards which included a broad list of required competences, knowledge and skills. Different tools were prepared for gathering and processing information and work teams were trained. These work teams involved teachers as well as representatives from ministries, pedagogical institutes and the VET Department of the Agency for Pre-primary, Primary, and Secondary Education. The work teams conducted 85 structured interviews in 62 companies. The survey questionnaire requested information about the company, job descriptions, the work environment, duties and tasks, and a list of learning outcomes required for the performance of these duties and tasks. Competences were then defined in draft occupational standards, which were sent around companies and chambers of commerce for feedback and validation.

In **Azerbaijan** the first two occupational standards were developed using functional analysis in a Unesco project that was implemented with the support of the Centre for Vocational Education and Training Studies in Moscow. The results were translated into a modular curriculum. The EU's Tacis project for VET Reform used a slightly different approach for an additional five occupations, but the real mass development of 200 occupational standards happened through the World Bank's DIOS project working with the ministry of labour. This project used a methodology that was adapted from DACUM and involved lead enterprises and sectoral committees. These sectoral committees had a number of permanent members from public bodies and the employers and trade union confederations, and rotating membership from sectoral or professional organisations and lead enterprises. Because of their focus on lead enterprises, many of the standards have been designed with employees of larger companies in mind. They are part of a national strategy to diversify the economy by making the non-oil sector more competitive. A designated workforce development agency is supposed to continue the work with sectoral committees after the DIOS project comes to an end. After initial objections against the format and scope of the occupational standards that were produced by the DIOS project, the Centre for the Development of Vocational Education in Azerbaijan is now using them to prepare educational standards and new curricula but translating them into initial VET qualifications remains a complex process.

In **Turkey**, it is the tripartite sector committees that initiate the development of national occupational standards. The Vocational Qualifications Authority (VQA) then agrees the development with occupational standard setting bodies. These bodies can be led by trade unions or employers, or they can be bipartite organisations or consortia that have an interest in developing the standard. They sign a development protocol with the VQA and do the work voluntarily with some support from the VQA. After an occupational standard has been developed and validated by companies in the sector it is submitted for validation by the sector committee. If the sector committee approves the content of the standard, its technical quality and format are checked by the VQA secretariat. Then it is submitted to the executive board of the VQA for approval. Finally, after approval, the standard is published in the official gazette and on the VQA website.

The Arab Labour Organisation (ALO) has developed its Arab Standard Classification of Occupations (ASCO) in line with the ILO's International Standard Classification of Occupations (ISCO). As a common labour market information vocabulary, it supports the exchange of information and the mobility of workers across Arab countries. The ASCO covers the five levels of qualifications (rather than the four covered by the ISCO) that are relevant to the Arab labour markets and technical and vocational education and training: level A (specialist), level B (technician), level C (professional worker), level D (skilled worker) and level E (semi-skilled worker).

The simultaneous analysis of several related occupations can be useful to clarify the relationships between them. It often shows that a number of the tasks for different parts of the work process require similar, if not identical, abilities. Some of these will be specific technical competences, but many are more generic. Examples of the latter can be problem-solving skills, communicative skills, the ability to take initiative and some more generic technical skills, such as skills related to health and safety and the environment. These generic functions are called core or key competences to distinguish them from technical skills and basic skills (numeracy and literacy). Identifying and describing such competences makes it possible to reuse or review them in the analysis of other occupations.

Qualifications architecture and design

From occupational standards to qualifications

In most of the ETF partner countries, using occupational standards as the basis for vocational qualifications is a new requirement. It distinguishes recently developed vocational qualifications from older qualifications that were often developed on the basis of curricula. The new outcome-based standards set a common, objective benchmark for the final (summative) assessment. They shift assessment away from widespread norm-referenced approaches where VET graduates are compared to each other, towards a criterion-referenced approach where the assessment results are marked against predefined standards.

Occupational standards are only rarely translated directly into vocational qualifications. Four key arguments weigh against this:

- *The training system has organisational limitations.*
  There are thousands of different jobs in the economy. Training providers cannot offer training for each single job. Instead, job requirements must be clustered and translated into wider qualification profiles.

- *There is considerable overlap among occupational standards.*
  Many jobs share common technical and key competences, or require similar basic competences. Reengineering these each time a qualification is developed means a duplication of efforts and reduces the comparability of qualifications.

- *Qualifications serve a broader purpose than just preparing people for certain work tasks.*
  Even if we ignore the broader learning demands of civil society, vocational training serves more purposes than just honing skills and competences. Students must learn to find and keep a job, to change jobs or to advance their careers. They must also be prepared for possibly continuing their studies. This requires competences that are not part of the occupational standard.

- *Vocational qualifications must be reasonably future-proof.*
  Considerable time passes between the identification of employment needs (the development of the occupational standard) and the completion of the training of learners that can satisfy these needs. In the meantime, the needs may have changed. Anticipating this, vocational qualifications must be developed in a way that looks not only at current practice but also at expected future needs.

While occupational standards are now being developed in many countries, they are still too infrequently used for the development of new vocational qualifications.

In **Egypt**, 328 national skill standards were developed for the construction sector and the industrial sectors of printing, food manufacturing and engineering but many of them have not been used in developing new vocational qualifications.

Supported by the World Bank's DIOS project, the labour ministry of **Azerbaijan** is developing 200 occupational and training standards for different priority sectors. However, the development process has not yet been properly connected to existing vocational education and training. It has taking a long time to determine how the occupational standards should be used, other than as the basis for the development of training standards for the labour ministry. Only recently, the Centre for the Development of Vocational Education has started to use them for new VET curricula. Their format and scope does still not allow for easy translation into educational standards and modular curricula.

Turkey started to develop occupational standards in 1992 but it took until 2006 and the establishment of the Vocational Qualifications Authority (VQA) to pass legislation that turned them into compulsory national occupational standards. The VQA developed a strategy for implementing a national vocational qualifications system which focused on these occupational standards. It promoted the active involvement role of sectors and reinforced quality assurance arrangements for assessment and certification. Initially, a clear definition of what constituted a national vocational qualification was not included in the 2006 legislation. It took some time before national occupational standards began to be used to inform national vocational qualifications. In early 2013, 352 national

occupational standards had been approved, against just 150 qualifications. Fewer than 30 of these are actually being awarded.

In **Kosovo**, one national criterion for the validation of VET qualifications (their inclusion in the NQF) is that they are based on occupational standards or occupational analysis. Most occupational standards have been developed by or with the help of donors, while some have been developed by the Kosovo Chambers of Commerce. While this boosts the quality of the developed qualifications, it exposes a more systemic challenge: that the time of writing more than 20 occupational standards had been approved by the national VET Council, but only 12 have been certified as fit for use to develop qualifications. In effect, there is a bureaucratic bottleneck inhibiting the development of the many standards and qualifications required by the national labour market.

In **Croatia**, most new VET qualifications and occupational standards are developed by the Agency for VET and Adult Education (AVETAE), though VET schools may also propose new qualifications. The procedure for both is described in legislation so that the same methodology is applied in developing new qualifications. They must originate in a sector profile – a source of information detailing demand in the occupational area, labour supply and what provision is available. Working groups including stakeholders such as employers and VET schools are then established to work on the development of occupational and qualification standards.

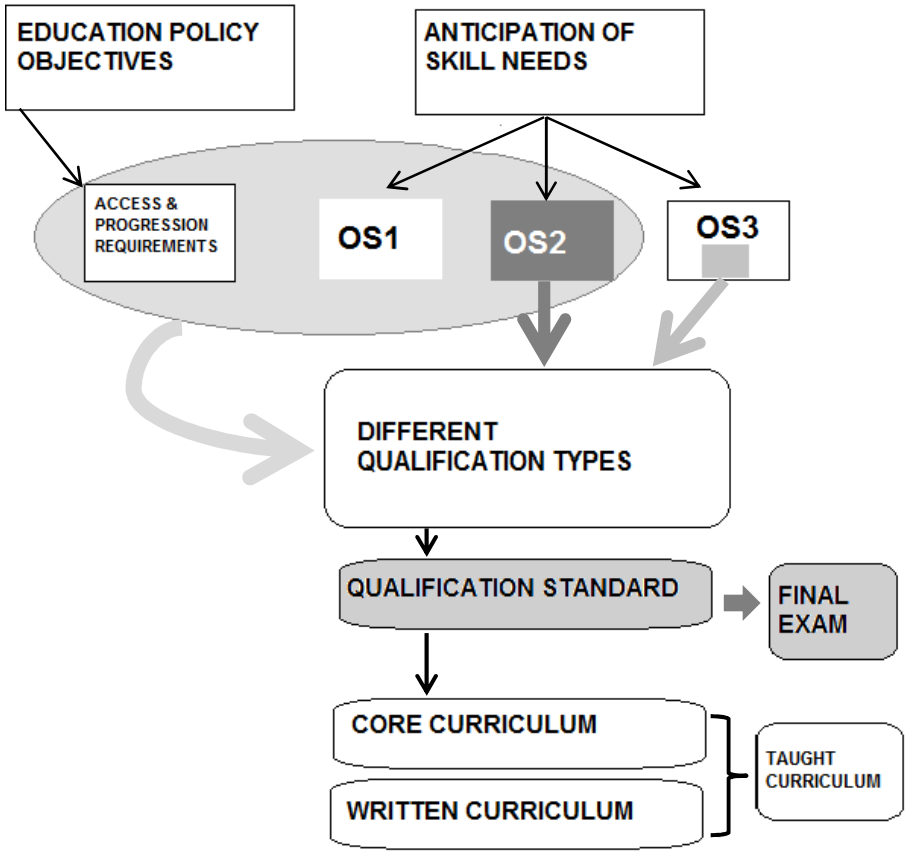
Just like Kosovo, Croatia needs more qualifications. So far, the Croatian Qualifications Framework (CROQF) remains empty. The administrative obstacle in Croatia, however, is of a legislative nature: the implementation of the whole CROQF and its associated procedures cannot proceed without the formal adoption of the CROQF law.

The great lesson is of course that before developing occupational standards, it is necessary to consider for what purpose they will be drawn up. This is a lesson that continues to be overlooked. The format and scope of occupational standards must support their use in education and training at a later stage.

The following is a diagram of the development process of vocational qualifications. It has been adapted from the Cedefop research paper *Curriculum reform in Europe*[9] that we will discuss in more detail in chapter five on curriculum development.

It illustrates how, starting from an understanding of labour market trends, relevant skills shortages and gaps are identified. Occupational profiles are then developed, analysed and validated with representatives from the world of work before they are codified as occupational standards.

[9] *Curriculum reform in Europe – The impact of learning outcomes*, Cedefop Research Paper No 29, Publications Office of the European Union, Luxemburg, 2012. See: http://www.cedefop.europa.eu/EN/publications/20816.aspx



As we will see below, these occupational standards can inform vocational qualifications in different ways:

1. Occupational standards can be translated directly into learning outcomes and assessment criteria without adding additional requirements. This happens, for example, in the Turkish sectoral qualifications, the English NVQs and the French CQPs.
2. Units from occupational standards can be used to develop small vocational qualifications for specific sets of competences that are part of an occupation which needs specialisation or updating in a particular area.
3. The information from several occupational standards can be used to develop a broader-based qualification to prepare young people for several related careers.

Beyond the information that we obtain from the occupational standards we can add additional requirements to the qualification, such as basic literacy and numeracy skills, ICT skills, language skills, job search and career management skills, or core skills such as entrepreneurship, health and safety, or project management skills. Typically, we would also build any access and progression requirements into a qualification.

Qualification types

Clearly defining different qualification types makes it easier to develop individual qualifications. A qualification that outlines all the learning outcomes and assessment criteria can in turn inform the curriculum.

Examples of different types of vocational qualifications in the partner countries include the national vocational qualification issued by the Vocational Qualifications Authority in Turkey, the journeyman certificate issued to apprentices by the Ministry of National Education in Turkey, the Vocational Associate Degree in Turkey, the Diploma of Specialisation in Azerbaijan, the Sub-bachelor Degree in Azerbaijan, the Junior Specialist and Specialist diplomas in Ukraine, the brevet de technicien supérieur in Tunisia, and Baccalauréat Professionnel in Lebanon. They can be aimed at specific target groups (young people between 16-19 e.g.) or open to learners from all ages.

Different types of qualification share the characteristic that they need type descriptors. The adapted descriptors and the typical purpose for each type provide a common architecture that can be used in developing qualifications of that type.

To catch these differences, Ireland uses four different types of qualification: major qualifications, minor qualifications (typically a single unit), special purpose qualifications (covering one specific task) and supplemental or additional qualifications (updating a skill or competence to new developments).

This typology has been adopted in Turkey too, but here the different types of qualification are named 'categories', while the term 'qualification types' is reserved for qualifications that share a common purpose. The following qualification types have been identified, but there could be more of them in the Turkish qualifications framework:

TQF levels	Qualification Types	Designated Institutions
1		
2	Primary School Education Certificate	Ministry of National Education
	Level 2 Vocational Qualification Certificate	Vocational Qualifications Authority
3	Junior High School Education Certificate	Ministry of National Education
	Semi-Skilled Worker Certificate	Ministry of National Education
	Level 3 Vocational Qualification Certificate	Vocational Qualifications Authority
4	Skilled Worker Certificate	Ministry of National Education
	Vocational and Technical High School Diploma	Ministry of National Education
	High School Diploma	Ministry of National Education
	Level 4 Vocational Qualification Certificate	Vocational Qualifications Authority
5	Level 5 Vocational Qualification Certificate	Vocational Qualifications Authority
	Associate Degree (Vocational)	Council of Higher Education
	Associate Degree (Academic)	Council of Higher

		Education
6	Level 6 Vocational Qualification Certificate	Vocational Qualifications Authority
	Bachelor Degree	Council of Higher Education
7	Level 7 Vocational Qualification Certificate	Vocational Qualifications Authority
	Masters Degree	Council of Higher Education
8	Level 8 Vocational Qualification Certificate	VQA
	PhD	Council of Higher Education

For each type there are very elaborate specifications that include the title, the awarding body, the orientation (general, academic or vocational), the level (according to the Turkish Qualification System (TQF) and the EQF, but also according to ISCO and ISCED (2013)), the credit range, a description, typical learning outcomes, what key competences are expected to be included, most common assessment and evaluation methods, quality assurance arrangements, entry requirements, progression paths, and career and employment paths.

The *TQF Concept Paper*[10] provides examples of qualifications at level 3, 4 and 7 to show how the types differ.

The same types of qualification can be awarded by different bodies. Apart from traditional learning institutions, these can include economic sectors, NGOs or even single employers. This fairly recent diversification of providers has increased the need for quality assurance and trust in assessment.

Qualification units

Qualifications can be made up of sets of partial qualifications that are called units. Such qualifications are referred to as 'unitised'. Unitised qualifications and individual qualification units can be in use side by side in one system. Comprehensive unitised qualifications can, for example, be offered as a full programme in initial VET, while individual units may be offered as retraining courses in continuing VET. Often, but not necessarily, their relationship to each other is defined in a framework of qualifications. It is important not to confuse units, which are assessment entities, with modules, which are learning entities.

Occupational standards can be used as a reference for identifying the units to be included in each qualification, together with the learning outcomes to be achieved by the learner. The main functions identified in the occupational standards will appear as units for learning and assessment. In order to adapt vocational qualifications to the needs and interests of individuals, vocational qualifications can contain both core and optional units.

[10] TQF Concept paper, April 2013

> New occupations are appearing in the construction sector such as the **kitchen and bathroom installers**. In stead of hiring an electrician, tiler, bricklayer, plumber, decorator and carpenter to install a new kitchen or bathroom, people can contract a kitchen and bathroom installer, who has the skills to perform the basic electrical, bricklaying, tiling, plumbing and decorating tasks necessary to install a new bathroom or kitchen. Different basic units derived from qualifications or occupational standards for the related occupations are used to test or develop modules for training **kitchen and bathroom installers**. In addition to the technical units they normally include compulsory health and safety units and optional customer service units and accountancy units, as many bathroom installers operate independently.

Flexible or solid qualifications

Reliable labour market intelligence is a scarce resource and it can never look so far ahead that it can compensate for the slow nature of changes in education we described earlier. So even in countries with advanced labour market information systems, other solutions must support the adaptability of the work force to the whims of the labour market. The most obvious alternative to adapting an entire workforce is to make it adaptable. This thought lies at the root of the lifelong learning paradigm, where flexibility is the key word.

In its publication *Changing Qualifications*, CEDEFOP (2010) distinguishes between two meta-types of qualification: the 'solid' qualification and the 'flexible' qualification.

In this distinction, solid qualifications are of a coherent nature and develop a good part of their public credit through reputation: they have been around for a long time, everyone knows them and therefore they are trusted and respected. The German *Meister* is a classic, but not unique example of this. Solid qualifications can be made up of separate units but these will be interdependent.

Flexible qualifications, on the other hand, are made up of a combination of compulsory and optional units. .. Flexibility in qualifications design can be achieved in two ways: by making the qualifications *development* process flexible so that it can be adjusted continuously; or by making the qualifications *themselves* flexible, for example through unitisation.

Solid qualifications offer great advantages in terms of quality control: wild growth of qualifications can be controlled when more static qualifications are used whose contents are continually updated. This simplifies the collection of statistics that can be fed back into the qualifications development process as evidence. But it demands great collaboration among all stakeholders in education and, as we have mentioned earlier, particularly the involvement of employers can be quite a challenge in many of the ETF partner countries.

Increasing the flexibility of the entire system by breaking qualifications into smaller units that can be combined more or less freely has its own advantages in that it transfers control mechanisms to the demand side of qualifications, presuming that individual learners and companies with qualification needs will vote with their feet and find and apply their own quality benchmarks. Training providers will have to join forces with their potential clients to do market research and find the exact needs. As such, the hurdle of organising employer involvement may be overcome more easily this way. But this has its downsides too. It may hamper monitoring because modularised training and unitised assessment are difficult to catch in statistics. It can

result in a theoretically endless number of combinations of learned modules and a theoretically unlimited number of qualifications.

To safeguard relevance without having to make changes that are more radical than strictly necessary, many countries have opted for a more supply-led qualifications system. With that, they have taken on themselves the obligation to seek closer cooperation with the world of work. Some have first experimented with continuing education, while others have limited their first efforts to sectors or even more narrowly operating pilot projects.

The majority of countries use solid rather than flexible qualifications. This applies to the former communist countries, where qualifications were traditionally earned upon the completion of rigid curricula that were developed by central authorities, but also to all countries in North Africa. But modularisation is beginning to appear or is aspired to in the stated policies and strategies of many countries.

> In some countries, such as **Croatia** the legislation supporting this is in place, but implementation is still just beginning. Croatia has databases of qualifications *and* units.
>
> In **Serbia**, new qualifications are composed of units of competences that form the basis of a new credit accumulation system.
>
> In **Kosovo**, qualifications usually have to be broken down into units that can be accumulated and gathered from different contexts. Crucially, this has allowed for the validation of skills and competences acquired through non-formal and informal learning. Qualifications have to be designed so that they can be obtained via different routes. But these developments are very recent. Guidelines developed by Kosovo's National Qualification Authority were adopted only in 2012 and implementation is on going.
>
> Kosovo faces other problems that are still hard to crack. One is the dependence of the qualifications system on rigid programmes, simply because very few new programmes exist. As a result, a learner wishing to enter upper secondary VET has to pass all subjects in lower secondary VET regardless of their relevance – a very typical problem across the partner countries. Further ahead, this makes it difficult for adults to re-enter education and training. They may still face entry requirements for a new qualification that are based on their formal education attainment rather than on their current skills and competences. Kosovo is aware of this and new initiatives in the recognition of prior learning are under development.
>
> Beyond the Western Balkans, some other solutions have been found. In **Georgia**, VET programmes are elaborated by level, towards each of which credits are earned. Credit values can differ from occupation to occupation but one credit corresponds to approximately 25 hours of learning activities, of which a minimum 40% must be of a practical nature. As such, the credits would appear to be input-based and not granted just on the basis of assessment results.

Summarising and slightly generalising, every country has to make two crucial choices in qualifications reforms:

1. Do you make your qualification system *flexible* so as to allow its users to pick and mix elements as the needs arise or do you offer a more limited supply of broader *solid* qualifications that thus can develop a reputation?
2. Do you base the development of qualifications on *supply* from the education and training sector or on the *demand* from the labour market and society?

Of course, the above division is slightly academic. It may suggest that the labour market value of qualifications is only an issue of concern for employers, which of course is not the case. Individuals are just as interested in their own employability as their prospective employers are. But for clarity's sake, in policy development it is important to establish where the current system (or sub-systems) of qualifications can be plotted along the axes of these two choices (flexible/solid and supply-driven/demand-driven) and in which direction change is desired.

To be able to answer the latter question, it is important to understand the relations between the two questions and the key issue we mentioned earlier in this chapter: relevance.

All qualification systems pursue relevance, even if they may be in disagreement about the object of that relevance. But the relevance of qualifications is always threatened by the slow nature of change in education, the slow nature of all learning processes themselves and indeed, the slow nature of policy reforms.

A qualification that is developed for relevance today, may not be relevant any longer by the time it has been implemented *and* the first learners or trainees have acquired the qualification. This puts two key demands on qualification development: it must be based on evidence that is so solid that reasonable projections can be made from it and it must be a flexible and continuing process.

Some conclusions

Many partner countries are dissatisfied with their vocational qualifications and are looking for more relevant vocational qualifications. They identify requirements for relevance by observing trends in the labour market and by redefining the standards required in occupations by using occupational standards. There are different ways to define occupational standards, but it is recommended to work on them in a systematic manner and develop several occupational standards at the same time. Translating occupational standards into vocational qualifications is not always an easy task.

In many countries there is a surfeit of unused standards – not a reflection on the value to the education and training system of those standards, but a comment on the limited capacities in the countries to use them for qualifications development. Most standards come from donors, but qualifications need to come from the national system. Working on time bound projects, donors often take a narrow view of what employers need, rather than look at the whole spectrum the country needs to consider in the interests of the learner e.g. career progression, core skills, generic knowledge.

Different types of vocational qualifications use occupational standards in different ways. Many vocational qualifications go beyond occupational standards and also cover basic skills, access and progression requirements or specific elements that are considered important to promote adaptability, employability and

career development. But linking too many different objectives to one vocational qualification can make it difficult to understand and use.

It may be easiest to start qualifications development with fairly straightforward qualification types where occupational standards and vocational qualifications are linked clearly. These may be qualifications that are aimed at certifying adults who are already in employment. Once experience with such qualifications has been gathered, the redevelopment of more complex vocational qualifications such as initial VET qualifications can be initiated.

Unitisation can be an important part of new qualification architecture. It can make qualifications more flexible. But an excessively open architecture, where the combinations of units are endless, can lead to a high number of qualifications that can become hard to recognise. Finding the right balance is crucial for the development of meaningful vocational qualifications.

Developing vocational qualifications is not easy, but it is important that countries move beyond occupational standards. Partner countries cannot rely on donor support and pilots to develop and maintain qualifications systems, but need to build local capacities and gain experience with the development processes in a systematic manner.

Chapter 3: Quality assurance and governance of vocational qualifications development processes

The value of vocational qualifications depends on the active involvement of relevant stakeholders

In the first chapter we explained that qualifications are the outcomes of a development process. The process arrangements and the different roles and responsibilities of stakeholders shape the qualification as a common denominator of expectations.

In this chapter we will take a closer look at the implications of this with the help of the following questions:

- What makes a good qualification?
- How are different qualifications managed?
- How can we involve the world of work?
- Who is responsible for defining qualifications?
- Who regulates the qualifications?
- What is the role of the public authorities?

What makes a good vocational qualification?

When qualifications are reformed with the help of a national qualifications framework (NQF) there can be quite strict requirements for the inclusion of new qualifications in the NQF register. If this is the case, we speak of a 'regulated qualifications framework' and 'quality-assured vocational qualifications'.

Typically, the **relevance** of qualifications will need to be demonstrated and their inclusion into the NQF has to be justified. This can be done with the help of labour market research or by involving relevant stakeholders from the world of work in qualification development, validation and approval processes. New qualifications can also be benchmarked or compared to existing qualifications from other countries that have proven their worth.

Qualifications should be based not on competition but on **consensus among stakeholders**. They should be the outcome of a process in which public and private actors work together. In a competitive system with many different awarding bodies offering duplicate qualifications, it will be hard for end users, such as individuals and employers, to figure out which one is the most appropriate. It will also be difficult for providers and assessment centres to decide which one to use. And how can periodical updating and impact assessments be ensured for duplicate qualifications? How can representatives from the world of work be motivated to provide systematic inputs into a competitive system? The cost of keeping large stocks of vocational qualifications up to date can be considerable.
Yet, even if proliferation can be curbed, the number of qualification types in lifelong learning systems will increase in order to better **tailor qualifications to different purposes and different target groups**.

Qualifications need to **serve a purpose**. Their **assessment requirements** must be clear. They should be **referenced to** qualifications framework **levels**. And if we want to **open** up qualifications **to people outside**

the traditional learning environments, qualifications should be usable for the validation of non-formal and informal learning.

This means that the yardstick for assessment should be **learning outcomes** rather than curriculum content. And if we want to use them for recognising informal learning it will be helpful if these learning outcomes can be assessed in units, so that **partial recognition is possible**. In the next chapter we will see why this is particularly important for people who have not been formally prepared for a specific qualification but who nonetheless meet the requirements for different qualification units.

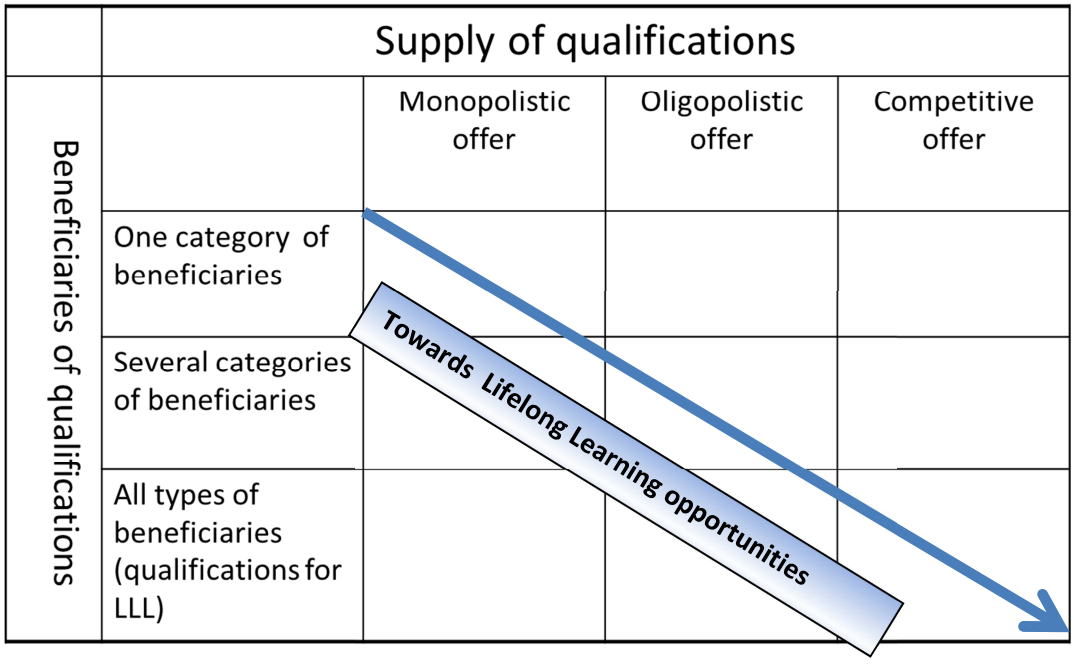
The **format** of the qualification is also important: the formulation of learning outcomes, the credit value and the **structure** of the units all affect how qualifications compare to each other.

Coordination and cooperation

The diagram below shows how vocational qualifications in partner countries are likely to diversify from a strictly controlled centralised system. With the development of national qualifications frameworks, different types of formal qualifications that are offered by the education authorities and higher education institutions will be brought into a framework that also covers adult qualifications and move the entire system in the direction of a qualifications market with different institutions offering qualifications.

Dealing with many actors and qualifications adds many challenges to the coordination and quality assurance of a qualifications framework. Ensuring that all these qualifications have value for society, the labour market and individuals is quite a task that can only be carried out satisfactorily if there is cooperation and coordination among the different stakeholders.

In this chapter we will explore how these issues affect the development of qualifications.



Involving the world of work

The institutional set-up for the development of qualifications in ETF partner countries is changing. Many countries are now developing occupational standards before qualifications are developed. This requires the involvement of those that are involved in the occupation. When the development of occupational standards is institutionalised, ministries of labour (rather than education) are typically in charge of the policy coordination of these processes. But ministries of education may retain the responsibility for initial, secondary and postsecondary vocational qualifications. Often we can therefore observe that the responsible ministries clash over the responsibility for vocational qualifications when a qualifications framework is planned. The establishment of a qualifications authority as an executive body reporting to both ministries or to the government can be a good solution to promote quality and support the practical implementation of the framework. In Kosovo, Georgia, Turkey and Montenegro such dedicated bodies are already in place.

A number of countries have recently established (or are in the process of establishing) sectoral bodies that are tasked with the development of occupational standards and sometimes more. In many countries, VET agencies play an important role in the development of qualifications. In a few cases specific regulatory bodies have been set up to coordinate the development of qualifications but in most countries the mandate of existing agencies has been extended. In some countries, schools can participate in these processes too.

By definition, however, sectoral bodies require the involvement of labour market partners and in the previous chapter we saw that involving them is one of the greatest challenges in qualifications development in the ETF partner countries. Labour market partners are often poorly organised. Those who get involved in education are not always representative of their sector and as a result they may not always be the best to identify the needs in their sector. Permanent (rather than ad-hoc) sectoral bodies can accumulate expertise by learning from their work. Their involvement is the closest one can come to a guarantee for relevance in vocational qualifications and for the acceptance of such qualifications in the labour market. But while sectoral partners may be able to indicate what is needed in the labour market, they do not automatically have the required expertise in learning and assessment. It is therefore important to help them to develop the capacity for this.

It is also important to gather them around the table with other stakeholders so that training and assessment standards can be formulated with broad agreement. This will benefit coherence and comparability, two key objectives of qualifications development processes.

All processes related to qualification development – labour market information gathering and analysis, occupational standards development, qualification design and development, validation against different standards and even policy development – require capacity. In most countries of the European Union, this capacity has developed gradually as systems evolved. In ETF partner countries, almost without exception, the transition from a radically different concept of qualification means that capacity is a severely limiting factor. Capacity is often developed only in donor-funded (pilot) projects and becomes a limiting factor when the results of such projects or of legislation adopted with the best intentions must be translated into nation-wide implementation.

> In **Palestine**, before the development of a national qualifications framework, there was no official consultation with social partners. Employers gave policy makers informal feedback on

outdated curricula. For TVET schools the Curriculum Centre in the Ministry of Education worked with standards defined for general education. The link to the labour market was not very strong. When a new qualification was needed, the Curriculum Centre set up a committee with members based on suggestions from schools. Usually, private sector representatives were included, but this was not a legal obligation.

In the future scenario that has been developed as the NQF took shape, relevance to economic and social needs is guaranteed by linking the framework through the Palestinian Occupational Classification to the labour market and by consulting policy makers, social partners and a broad range of other stakeholders. Standardised processes for qualification development, curriculum development, training of teachers and trainers, assessment and quality assurance are planned in parallel.

In **Georgia**, the relevance of new qualifications is in theory guaranteed by labour market analysis and by basing the qualifications on occupational standards. Labour market analysis is needed to demonstrate that there is prospective demand for new qualifications. Legislation on quality assurance in VET makes this an obligatory step.

The design of occupational standards is carried out by broad, mixed groups of stakeholders, including employers, experts, authorities and teachers. Draft occupational standards are posted on the portal of the National Centre for Educational Quality Enhancement for public consultation.

Problems remain in the definition of qualification levels. The required skills and competences of the lowest levels of many occupations are considered too limited or even irrelevant for actual occupations. However, current legislation stipulates that qualifications of the (Georgian) third level can be acquired only if the previous levels have been awarded. Therefore training must still start at the first level.

Moldova still faces considerable challenges matching the supply and demand of specialists. Sectoral committees are envisaged to play important roles in improving the matching processes. Market analysis should lead to a modernisation of the existing list of careers and occupations. Sustainable labour market forecasting would support the development of relevant training.

Conceptual models can help us to split the qualification development process into its constituent parts, but they tells us nothing about who actually does the work involved in initiating, developing, validating and approving qualifications.

Tripartite governance - Turkey's example

As we have seen in the previous chapter, the main standard behind qualifications in many of the ETF's partner countries is often still the educational or curriculum standard and hence the institutions that have led the work on curricular development have also tended to develop the qualifications. These could, for example, be the relevant ministries or VET agencies that were specifically established for this purpose. But we also saw that the search for increased relevance to the realities of the labour market has initiated the development of occupational standards from which different kinds of qualifications could be developed. This is challenging traditional institutional arrangements and has increased awareness of the advantages of broader stakeholder involvement.

> Currently, the most complete example of such a new setup can be found in **Turkey**, where the Vocational Qualifications Authority (VQA) regulates the development and implementation of national vocational qualifications that are based on occupational standards. The executive board of the VQA is tripartite in composition.
>
> Tripartite sector committees initiate the development of national occupational standards. The real work is done by occupational standard-setting bodies. These bodies can be led by trade unions or employers, or they can be bipartite or other organisations or consortia that have an interest in developing the standard. They sign a development protocol with the VQA and do the work voluntarily with some support from the VQA. After the occupational standard has been developed and validated by companies in the sector it is submitted for validation by the sector committee. If the sector committee approves the content of the standard, its technical quality and format are checked by the VQA secretariat after which it is submitted to the executive board of the VQA for approval. After approval the standard is published in the official gazette and on the VQA website.
>
> The development of a vocational qualification based on this occupational standard follows a very similar procedure, whereby the sector committees validate the quality, the VQA formally checks and approves qualifications through its executive board and the voluntary work for developing qualifications is done by a relevant sector organisation.

Engaging a range of actors – differing approaches by country

In most countries occupational standards and vocational qualifications have been developed in pilot projects. These often focus on specific sectors. The hospitality and construction sectors are particularly popular. Pilot projects may use slightly varying procedures and formats but involvement of the world of work is always part of the development process, not just for the development of occupational standards but also for qualifications. Such involvement can take very different forms.

> In **Russia** the development of vocational qualifications is decentralised. Large companies and employers' organisations in Russia have been driving new approaches towards qualifications based on occupational standards. This has resulted in the establishment of the National Qualifications Development Agency (NARK) of the Russian Union of Industrialists and

Entrepreneurs. The name is a little misleading because NARK is not a state institution and it only develops occupational standards.

Russia is also in the process of developing sector qualifications frameworks. The Ministry of Labour has initiated work on seven of these. In December 2011, temporary methodological recommendations were published for the elaboration of such sector frameworks on the basis of the NQF of the Russian Federation.

Qualifications development in Russia is fragmented. The city of Moscow, for example, works on its own vocational qualifications. The country's variety of strong public-private partnerships is quite unique and it is in fact expected that at some point the efforts across the country will converge into a joined-up national qualifications framework. The Agency for Strategic Initiatives, an NGO with good connections in both business and government, has elaborated a complex 2012 road map for a Russian NQF that foresees an integrated approach of labour market information systems, guidance and counselling tools, measures to manage skilled migration and a review of qualifications and programmes.

Besides Turkey, **Croatia** and **Montenegro** have also pioneered the establishment of sector organisations supporting the development of qualifications. Many other partner countries are now choosing similar directions.

The Croatian VET Act states that the Council for Vocational Education must coordinate VET stakeholder cooperation, initiate new curricula or propose amendments to existing curricula, and suggest measures, actions and strategies for VET development. Stakeholder cooperation is organised through sector councils. The VET Act stipulates that these should consist of representatives of employers, chambers, unions, higher education institutions and other relevant stakeholders. The sector councils are advisory and expert bodies that issue opinions on occupational standards and VET qualifications, and how these match labour market needs, higher education and society at large.

The Croatian Agency (not to be confused with the Council) for Vocational Education and Training and Adult Education uses a tool called 'sector profiles' for drawing comprehensive pictures of the VET sector and sub-sectors and their environments. Sector profiles cover the economic background and trends, principal occupations, skills in use and skills that are expected to come into demand. They also include a review of existing sector VET programmes which covers content and performance, as well as learners' flows and possible gaps with current and future labour market requirements. The results provide a valuable basis for defining priorities for VET development.

The initiative for the development of new qualifications typically comes from the Agency for VET and Adult Education, but VET schools may also come up with suggestions or develop qualifications themselves.

The second step is to form one or several working groups. The working group(s) will be made up of representatives of employers, VET schools, higher education (if required) and other relevant stakeholders. Working group members will be selected on the basis of their

> experience and expertise. Sector council members can nominate members of the working group(s).
>
> Throughout the process of developing occupational standards, qualification standards and curricula, the Agency and working groups work in close partnership with the relevant sector councils who serve as advisory bodies.
>
> In Montenegro, it is also the sector committees that monitor how well education and training and the existing qualifications match current labour market needs. They also decide whether new qualifications must be developed or a simple update of existing qualifications is sufficient.

A survey carried out by the ETF in 2012 showed that all seven partner countries in Eastern Europe are planning or already developing sector councils to support the development of qualifications. Armenia (15 sector committees), Azerbaijan (7 sector committees), Georgia (14 sector committees) and Moldova (4 sector committees) already have some real experiences to build on but also Ukraine, Russia and Belarus are expected to develop sector committees soon.

> On paper, **Georgia** and **Armenia** would appear to have the most stable arrangements. In fact, Georgia has clearly defined annual work plans for sector committees. **Moldova** and **Ukraine** have a partial legal framework building on tripartite agreements or recent legislation. Ukraine has just started its first sector council and is preparing very sophisticated legal provisions.
>
> In **Azerbaijan**, a proposed Workforce Development Agency will support the role of sector committees. In the other countries these committees are expected to work with existing bodies.

In all countries the committees are expected to work with occupational standards development processes but other forms of involvement are foreseen too, such as in the identification of their sector's training or skills needs, in the development of NQFs or in assessment and provision.

Sharing responsibilities

Trust, or rather the lack of it, is a major factor impeding the full liberalisation of qualifications in the ETF partner countries. In a number of partner countries, many people have lost faith in the value of existing public vocational education and training providers and not much more faith in the intentions of for-profit private providers. In such situations it is imperative that some kind of trust is rebuilt in the results of training and this can only be done through national standards and rigorous and transparent quality assurance mechanisms. Financial constraints dictate that any interventions should be as labour extensive as possible and therefore a fair degree of central control is often seen as the only real option.

Trust is not just an issue outside the European Union. European driving schools, for example, do not issue certificates either. Driving skills are assessed and driving certificates issued by entities that operate independently from driving schools.

> The issue of trust has received considerable attention in the partner countries of the ETF in recent years. In **Turkey** vocational qualifications were traditionally issued by VET schools. Because there are thousands of these, the qualification said little about the individual's

competences. Therefore, Turkey developed a new system of quality assurance in sectoral vocational qualification for adults where it is the central Vocational Qualifications Authority who awards qualifications through the sectoral bodies.

Such solutions can be applied in initial education too. **Georgia** has established a system for national secondary education where qualifications are centrally issued by the government and based on national exams to restore people's trust in secondary school diplomas. This not only supports excellence, but also equity, because elite school students get the same assessment and thus the same qualification as all other students.

Traditionally vocational qualifications in most partner countries have been issued by ministries of education or labour. These also controlled the contents of the training programmes. The delivery of vocational qualifications was the exclusive responsibility of one provider (the relevant ministry). The recipients were a fairly clearly demarcated group of young people. In this system, quality control was entirely in the hands of the ministry, assisted by the education inspectorates.

The move to lifelong learning is gradually changing this. With other providers offering vocational qualifications alongside those of the authorities, their relative relationship must be regulated in order to protect consumer interests and sustain confidence in qualifications.

One new type of vocational qualification that has appeared quite recently in many countries is the certificate issued after retraining programmes for unemployed people and job seekers. They have prompted a need for a kind of certification that has actual currency and have begun to challenge the monopoly of the ministries. These courses and programmes are often delivered by employment services with the help of different providers, including private training institutions and NGOs. The involvement of the latter is further strengthening the need for regulation.

In the study "*The relationship between quality assurance and VET certification in the EU Member States"* (Cedefop 2009) three broad models of quality assurance systems are described based on a Continuum of divisions of responsibilities, going from centralised controlled systems to completely decentralised systems. Cedefop speaks of the *prescriptive models* of very centralised controlled systems, prescribing how everybody should act, *cooperative models* with a division of responsibilities between stakeholders in a joint-up system, using common guidelines and *self-regulated models* in which "every body does its best, according to their own discretion". Given the importance of the involvement of different stakeholders in VET, and many different layers of quality assurance there is a strong tendency for cooperative models in the EU member states. But in CVT self-regulated models are still dominating in most countries.

Regulation

We now see that private providers, professional bodies and NGOs are beginning to certify successful graduates of their own training programmes, while public providers, such as universities and VET schools, are beginning to offer training programmes that lie beyond their traditional offer. Bigger companies, especially those operating at an international level, are also certifying their own personnel with their own qualifications. All these different qualifications offered by different institutions to different groups of

learners are creating a market in which it is difficult to navigate for learners. This requires regulation. Such regulation starts by setting up a system for deciding which qualifications are good enough to enter the register of approved qualifications.

To improve coherence and coordination, in some partner countries regulating bodies are now being established that are semi-independent public entities operating outside the responsible ministries. They provide external quality assurance of the processes and actors in the qualification system, working with the support of internal quality assurance processes of the different actors.

Most countries have adopted (at least the principle of) a national qualifications framework to bring order to potential chaos, linking the different qualifications ('old' and 'new', private and public) and adding a sense of logic to the pathways that cross and connect the different subsystems.

For qualifications to be registered in a national framework, they must be validated against qualification standards, but very few of the partner countries have fully-fledged national qualifications frameworks that include such standards. Many do, however, use registration and accreditation as a quality assurance gateway.

Because qualifications must have currency and must remain functional and user friendly, the qualifications that are on the register have expiration dates which vary depending on the need for frequent updating. Some must be updated every year while others perhaps need to be reviewed only once in every five years.

> In **Georgia**, one annex to the NQF holds a list of directions and specialisations. New qualifications must be included in the list before delivery of the educational programmes leading to that qualification can commence. Additions to the list are made by the National Centre for Educational Quality Enhancement (EQE) upon approval of the new qualifications by the Ministry of Education and Science.
>
> The relevance of qualifications is checked with the help of labour market analyses. This is an obligatory step in the qualifications development process.
>
> The Georgian qualifications framework contains occupational standards which in the country's jargon are synonymous with qualifications. These are defined (and updated) by groups of relevant employers, experts, state bodies and teachers. Draft occupational standards are posted on the portal of the National Centre for Educational Quality Enhancement for public consultation, suggestions and comments.
>
> While this may seem a thorough procedure, it is not sufficient to ascertain that the actual result (the occupational standard) reflects real labour market skills requirements. One problem is the definition of the levels of qualifications. Skills and competences of the lowest two levels of many occupations are considered too limited and sometimes even irrelevant for actually exercising the tasks and roles of the occupation, but the law stipulates that qualifications beyond these levels can only be acquired if the previous levels have been awarded. Therefore training must always start at the lowest level. This also hampers the recognition of prior learning.

Croatia is an example of a country where a qualifications framework has been approved but not yet implemented. Until then, different registers are being used side-by-side.
The Agency for Vocational Education and Training and Adult Education has developed an online database[11] of VET qualifications called *e-kvalifikacije*, which contains three related databases for occupational standards, qualification standards, units of learning outcomes and VET curricula. The registers will accommodate qualifications of all types and levels.

In **Tunisia**, qualifications are approved (or rejected) by a commission composed in equal parts of representatives of employers' organisations, trade unions, and public bodies and ministries. Upon approval, the Ministry of Vocational Training and Employment issues an *arrête d'homologation* (approval order) published in the *Journal Officiel de la République Tunisienne* (Official Journal of the Tunisian Republic). It specifies the title of the qualification, the training provider delivering it and the corresponding level in the Tunisian National Qualifications Framework. The approval is valid for five years, after which it the qualification needs to be reviewed and submitted for approval.

Legislation and the role of public authorities

In an ideal world, participatory systems that are owned by all the stakeholders would be developed in partnership and through voluntary cooperation, using an evolving common code of practice that gradually changes into the norm, but also allows for alternative approaches. Such systems require a lot of mutual trust, time, resources and consultation – luxuries that most transition countries simply do not have. Regulation therefore requires a legal basis. There is a need for publically endorsed mechanisms setting clear criteria for the development, validation, approval, use and review of vocational qualifications.

Legislation always plays a key role in qualification reform processes, but particularly so in ETF partner countries where many reforms start with legislation that is reviewed after some years of practical experience. Judging by common practice, there appears to be a general belief that countries can legislate themselves out of a lot of problems. Quite often, however, the reality shows that they cannot.

Legislation comes in many different forms. Sometimes it addresses the main regulating bodies and their roles. Sometimes addresses the vocational qualifications. Sometimes it springs from national qualifications framework. It may be used to regulate the roles of actors like sectoral standard setting bodies, or assessment and certification bodies.

Legislation can specify the requirements and conditions that an accredited certifying body has to meet on an on-going basis. These can relate to quality assurance of assessment processes but also to more practical responsibilities, such as the protection of the handled data.

In **Montenegro** there are many laws that regulate qualifications in formal education: the general education law, the law for elementary education, the law for grammar schools, the law for vocational education, the law for adult education and the law for higher education. A

[11] http://e-kvalifikacije.asoo.hr

specific law for national qualifications (NQF Law) regulates certification procedures for informal and non-formal learning.

Laws specify which institutions are in charge of the different parts of formal education: the Ministry of Education and Science, the Centre for Vocational Education, the Bureau of Education Services, the Examination Centre and higher education institutions. The Chamber of Economy is in charge of the *meister* exam (the 5th level of qualifications). Institutional support is provided by different councils that also have their legal basis in educational legislation. These include a council for general education, a council for vocational education, a council for adult education, a council for higher education and a council supporting the introduction of ICT into the whole education system.

The NQF Law specifies the required competences of bodies involved in the certification of informal and non-formal learning. This work is based on occupational standards. Occupational standards are also the basis for the development of an examination catalogue that is being used to assess knowledge and competences.

In **Turkey** all quality-assured qualifications should become part of the Turkish qualifications framework for lifelong learning. The legislation for the TQF is not yet complete, but developments thus far have been legislated through the law on the Vocational Qualifications Authority, which was amended in 2011, making VQA de facto the national qualifications authority.

VQA was originally established as the regulator of a new system of sectoral qualifications based on occupational standards. This system is tightly regulated and requires that assessment bodies and providers of qualifications are accredited and authorised.

The scope of the TQF is much wider and includes also higher education degrees, including associate degrees issued by colleges (MYOs), all the general, vocational and teacher training qualifications issued under the responsibility of the Ministry of National Education, including qualifications from adult training centres and for apprentices, as well as other quality-assured qualifications. The TQF would be a more cooperative model while the present system under VQA could be classified as a prescriptive quality assurance model.

The TQF concept paper (April 2013) proposed that the arrangements for the NQF are laid down in a regulation that is based on the VQA law, which has so far enacted the development of the TQF. However legislating a system that goes clearly beyond the scope of the Authority and will require other stakeholders to act might be problematic. Passing a separate act on the TQF that will have to go through Parliament on the other hand will be time consuming, slowing down the implementation.

Some conclusions

The development of vocational qualifications is more than just a technical process. Vocational qualifications exist in society ideas. Their value depends very much on the active involvement of relevant stakeholders. The relevance of qualifications is demonstrably enhanced if there is a link to occupational standards or some other labour market- relevant basis. This requires the involvement of the world of work, which in the past decades has been particularly weak in many of the ETF partner countries. Such involvement must be ensured, not just promoted.

Meaningful involvement means that we have to move from ad-hoc involvement, based on consultation with different representatives from the world of work, to structural involvement. This will allow labour market partners to accumulate experience in identifying skill needs and to develop the capacity to define these needs for use in the development of vocational qualifications. It will formalise the role of labour market partners and allow them to develop their own initiatives for ensuring that vocational qualifications are based on real demand. Many partner countries are trying to develop sectoral bodies but securing private sector involvement is difficult.

Qualifications also gain value if they are properly quality-assured. A formal approval process can ensure that the qualifications are both relevant and functional. Quality assurance is not just a matter of safeguarding assessment and certification procedures. It also involves capacity building among those involved in qualifications development.

The key aim is always to ensure that qualifications have value and that people who will hold the qualification are competent. This means that assessment must be appropriate and transparent and that certification must be dealt with by competent and reliable bodies.

In partner countries, quality assurance issues must typically be regulated by law. Given the involvement of many new actors who were traditionally not involved in qualifications development, pursuing good coordination and coherence through regulation becomes critical. Increasingly partner countries are deciding to establish a public regulatory body outside the responsible ministries to deal with these regulatory aspects.

Countries should avoid excessive proliferation of qualifications-developers, which makes difficult the achievement of properly national, and transparent, qualifications systems.

Chapter 4: Linking qualifications and the assessment and certification process

The outcome of a qualification is not a piece of paper but a person – a 'formally qualified' person.

Assessment and certification link a qualification to an individual. . Without credible assessment, qualifications will not benefit the holder.

Changing practice

Traditionally, assessment for vocational qualifications has been based more on the content of the curricula than on the competences gained by the individual. Final assessment could typically be neatly divided in a theoretical and a practical exam, with little consideration of how these were linked and how knowledge and skills were translated into competence. Traditionally, vocational qualifications also focused on whether knowledge and skills could be repeated or copied, rather than on whether the assessed person could do something new with them. Teachers were the main assessors and assessment took place in schools.

The development of qualifications based on learning outcomes has had significant implications for assessment, validation and certification. To be awarded a qualification based on learning outcomes, an individual needs to demonstrate competence against a relevant qualification standard. In practice however, in many countries the shift to learning outcomes is not a straightforward linear process. This applies not only to ETF partner countries but also to EU countries.

While in many countries NQFs have contributed to the development of outcomes-based approaches, many institutions pragmatically consider that outcomes descriptors for qualifications should take account of programmes and delivery structures, rather than vice versa. Indeed, in our 2012 NQF study we concluded that in most of the recent reforms of vocational qualifications it is more accurate to speak of outcomes-*oriented* rather than outcomes-*based* approaches. Cedefop recently reported a similar pragmatic combination of inputs and outcomes-influenced practices in many EU countries.

Different pathways

Traditionally, formal assessment follows formal learning. But in order to obtain a qualification, as evidence that a person masters a set of required skills and competences, formal learning in a programme is not always needed. Teachers and trainers play a role only for those who do not yet have the skills. As a consequence of this we must accept that some people can get to the point where they master certain skills without ever having been assisted by a teacher in the classical sense of the word, but rather through experience or self-study by reading, by doing.

The acknowledgement that learning that has taken place outside formal training routes and can have value is important for partner countries. Transition processes in the economies of ETF partner countries have brought a lot of uncertainty. Where families could afford it they have kept their offspring in education for as long as possible to postpone labour market entrance. Many of these young people enrolled in academic

programmes that provided them with numerous generic skills but few technical skills. Children from families who could not afford this left school as early as possible to support the family income. Both groups developed their labour market skills (their vocational skills) through informal learning. Many ended up in family companies, became self-employed or work as day labourers in the informal sector.

Because most people learn under such forms of employment, recognising their achievements can have considerable social impact, particularly for vulnerable groups. For young people who completed higher education and now work in jobs requiring vocational skills it can also be important to recognise these skills, particularly when they change jobs. There is a growing need therefore to assess and confirm the informally-developed skills.

Why do we assess?

Why do we assess? Initially, assessment is to determine if the individual learner meets the requirements of a qualification (or standard). But we also assess to promote trust, quality and fairness in qualifications. In a world where learning is increasingly diversified and deregulated, the importance of such trust, quality and fairness increases in equal measure.

It is self-evident that we want a person to be able to demonstrate that she or he meets the conditions for qualification. However, it is very important to stress that we do not assess only to *check* that people can do what they claim they can do. We also assess to *assist* people in acquiring proof of their skills and competences – proof that can help them later in their lives to get better jobs and to learn more.

Much assessment is still carried out in traditional ways, largely through examination. But as the philosophy of lifelong learning gains ground, new ways of validating the results of learning processes are being introduced. In fact, one important reason why there is so much emphasis on assessment is the increasingly recognised need to certify learning that was so far not formally certificated, such as on-the-job training, adult courses and in-company training, but also even less formal ways of learning.

The changing learning paradigm calls for a dramatically different view on assessment procedures that is still far from commonplace even in parts of the EU. While some countries, such as the UK, decided to diversify assessment approaches years ago and others, such as Portugal, are in the middle of large scale requalification exercises based on current assessments rather than classic learning pathways, some countries are only taking their first steps in this new direction. The latter is the case in many of the partner countries, where pilot projects have explored outcome-oriented approaches and national legislation has been approved but implementation or practice is still far behind. This is a paradox. There is potentially great scope in in our partner countries for validation of non-formal and informal learning or recognition of prior learning. In some cases, especially those countries which experienced war, parallel underground education systems were developed, training many adults who now possess a range of useful skills which are unrecognised formally. Additionally, many citizens in our partner countries migrate abroad and then return to the country with skills which are often uncertificated.

Recognition of prior learning in partner countries

In **Croatia**, a handbook for planning and developing occupational standards, VET qualifications and VET curricula describes the process of developing learning outcomes-based VET qualifications. Each qualification consists of units of learning outcomes and each unit also contains assessment criteria. Assessment criteria are specified in unit arrangements. The country has plans to develop recognition of prior learning.

In **Turkey** a system for the certification of adults has been developed under the responsibility of the Vocational Qualifications Authority (VQA). All kind of sectoral organisations are actively involved in the development. After signing a protocol with VQA they develop occupational standards that are validated by tripartite sectoral committees, before they are approved by VQA and published in the official gazette. These national occupational standards are then used to develop vocational qualifications that are in turn validated by the tripartite sectoral committee and approved by VQA. Competent national and regional sectoral organisations can become authorised certification bodies and use the vocational qualifications for the assessment of individuals working in their sector. All authorised certification bodies need to be first ISO accredited and then authorised by VQA. VQA is responsible for issuing the national certificates. The system is already in full operation in the gas and construction sectors. Other sectors are preparing applications for authorised certification bodies and are currently testing their procedures.

Tunisia was the first partner country to test the validation of non-formal and informal learning in 2005-2007, in the clothing and automobile sectors. The law on vocational education (2008-10 of 11/02/2008) created a legal basis for validation procedures that was reinforced by the Decree on the NQF (2009-2139 of 08/07/2009), but no progress has been made since to operationalize validation procedures.

In the former Soviet Union the idea of obtaining a diploma without attending a school is not new. Many qualifications, vocational and general, were obtainable by external study. What is new is the strong focus on work-related competences.

A law in **Ukraine** covering the professional development of employees (2012) charged the State Employment Service with the establishment of a system for recognising prior learning of employees. However, the legislation was not specific about the responsibility for assessment and certification. The State Employment Service developed a draft concept that initially paid more attention to the registration processes of candidates than the preparation of candidates, assessment and certification processes. The absence of standards that allow for partial recognition has been recognised as a bottle-neck, as well as the identification of competent assessors.

In **Georgia**, the amended VET Law (2010) created the conditions for the formal recognition of prior learning. In February 2011, the national education authorities published a short regulatory document, which specified authorised bodies, required documents, conditions for submission, decision-making and other features of recognition for skills and competences related to VET. In 2012, the National Centre for Educational Quality Enhancement published a complementary document containing more detailed recommendations for educational institutions on how to implement the validation of informal education. While the legal conditions have been met and the mechanisms are being discussed, non-formal and informal learning is still not officially rewarded in practice.

In the framework of the Labour Market Development component of the **Moldovan** Mobility Partnership programme a first concept has been developed in 2011 for establishing a system and

services for the recognition of non-formal and informal learning. The proposal uses occupational standards as reference instruments for the formal assessment and recognition of the skills of adults.

What do we assess?

What do we assess? From the arguments above, this is the easy question to answer. We assess whether or not a person masters a certain skill or competence or a certain set of skills or competences. This implies that there are standards describing the skills or competences against which people can be assessed. We can either assess to what extent the person masters these skills, in which case the result is a graded qualification like many school-leaving certificates are, or we can assess whether or not a person meets the agreed minimum qualification standards. In this case the result of the assessment is a 'pass' or a 'fail'. A rather universal example of this is the driving licence.

Changing assessment requirements in Ukrainian vocational qualifications

In the Soviet Union, qualifications were listed in a classifier (*klassifikator*) of specialisations. The specialisations were linked to specified occupations. For each specialisation, so-called "packages for study planning and methodological documentation" were elaborated. The packages often covered more than 100 pages. Little was specified about the assessment of qualifications.

In **Ukraine**, this system remained in place for a long time after independence. Even the first state standards of 2006 were still quite similar to the existing documentation packages. They regulated the process but not the result.

With the development of a market economy, the demands on graduates from employers increased. At the same time, the level of confidence in the qualifications issued by schools diminished. In 2011, with change badly needed, a new educational standard for welders appeared, which caused lots of comments and criticism. There was no NQF in Ukraine and yet the standard provided levels. The standard set high expectations for the results that had to be obtained. The assessment criteria were very different and given much increased prominence.

The conditions for performing the practical qualification test work and the criteria for their evaluation were defined in accordance with internationally standardised qualification tests for welders. The Ukrainian Attestation Committee established a State Welders Qualification Commission, drawing in the world of work. The example was soon followed by others in different sectors.

The new format of state standards of vocational education has been simplified. For each module in the new standards, learning outcomes and corresponding assessment criteria are split into knowledge and skills elements. Assessment is criterion-referenced. Assessors need to decide whether students have met the assessment criteria: knows/does not know, or can/cannot do.

The Ukrainian colleagues have developed a common understanding of how to deal with the assessment in the new standards. Only a few of these have been developed so far but they represent an important shift in thinking.

How do we assess?

How do we gather the evidence that an assessed person can be considered qualified? While this question is a lot more difficult to answer, the very fact that we ask it implies one thing: we need assessment standards. If we want to safeguard quality and generate trust in assessment procedures and results, we need guidelines that describe assessment procedures and minimum requirements. Because these minimum requirements are different for almost each and every qualification, such assessment standards must be tailored to each individual qualification and must be defined in close collaboration with those who know what the practical demands of each qualification are: the professionals who work in the field. It is important to define assessment standards with professionals in the field to ensure that they are relevant.

Assessment standards should also be comparable, particularly if the qualifications they refer to are related, which they almost automatically are if they are registered in the same framework. Because in practice this would typically be a national qualifications framework, some sort of provision must be made to ensure such comparability. How can this be achieved?

Most importantly, assessment standards should describe how we can assess. The chosen methods must satisfy a number of requirements. Importantly, if we want qualifications to be broadly recognised, we must adopt an integrated approach to assessment and certification in formal education and in the recognition of prior learning. Whether achieved in school or on the workshop floor, the qualification requirements must be based on the same standards and there is no valid reason not to use the same assessment methods for school-based and work-based learning.

Requirements

There are some basic requirements regarding the design and choice of assessment methods to ensure that the assessment is sound. These may seem obvious but they are not always easy to achieve. And they are critically important for transparency and trust.

First of all the assessment method must be *valid*: it must guarantee that we are assessing the right thing. The assessment tool must match the use for which it is intended and it must be tailored to the qualification it relates to. One simple example of an assessment mismatch would be a written exam to assess a manual skill.

The assessment method must also be *reliable*: if we repeat the assessment we must reasonably be able to expect the same results. Many factors are at play here: the assessing environment and its equipment, the demands of individual assessors, the competence of individual assessors and rapidly changing qualification requirements in some fields are just a few examples.

Methods should always be *fit-for-purpose*: they should reflect and be tailored to the assessed competences and they should be flexible towards who is being assessed and any specific needs of that individual/group (e.g. don’t give written test to dyslexic individuals) without compromising reliability.

The assessment method must also be *fair*: it must reduce effects of bias as much as possible. We need to avoid that certain candidates in the assessment are favoured over others. This means that we need to make sure the assessors are as objective as possible.

The assessment must be *representative* in its cognitive range: the tool must enable assessors to judge the breadth and depth of what the assessed person has learned. That is why it is often preferable to use than more than one method of assessment.

Finally, assessment procedures should avoid bureaucracy as much as is reasonably possible and aim at finding a balance between costs and added value. To develop sustainable procedures, the chosen methods and cost need to be measured in relation to expected outcomes and benefits for all involved stakeholders, including the individual.

Methods

Beyond traditional examinations, many other methods exist for assessment. Some of these are more tested and tried than others but they are therefore not more valid than others. The Cedefop definition of assessment[12] is quite clear: assessment is a general term embracing all methods used to appraise or judge performance.

Assessment methods are usually categorised as tests and examinations, declarative methods, conversational methods, observations or simulations. Evidence may also be gathered from work or other situations. These assessment methods can be used singly or in combination. Using different methods in one assessment process is referred to as triangulation.

Triangulation is good practice for many reasons. It enhances both validity and reliability. It reduces the pressure on assessors who don't have to rely on one single assessment. It reduces the risk of a negligible event ruining an entire assessment. It offers evidence about a person's ability to apply knowledge in different scenarios. It can give different independent assessments, thus reducing the risk of bias and even fraud. In short, it can be a cost-effective way of increasing the reliability of an assessment and, with that, its currency and status.

Assessment can be both *formative* and *summative*.

Summative assessment aims explicitly at the formal certification of learning outcomes while formative assessment can provide feedback to the individual on the learning process, thus serving as an input for further learning. Summative assessment must have a clear connection to the standard or qualification, typically through predefined assessment criteria.

Formative assessment is important as a way to map and identify knowledge, skills and competences that later can be formalised through summative assessment. Different assessment methods can be used for both formative and summative purposes although tests and examinations are generally associated with summative assessment and declarative methods with formative assessment.

In a traditional, school-based assessment, *testing and examination* is the most common method used. Tests and examinations are useful for large scale application and are relatively easy to standardise. They can be both oral and written and they can even be web-based. They are generally perceived as more valid, reliable and objective than other methods and can be both more time- and cost-effective too, but tests and examinations can cause candidate anxiety and may benefit individuals with strong oral and written abilities.

The most basic form of assessment is simply *declaration*. Declarative assessment is based on an individual's own identification and recording of his or her competences. Declarative methods are often used in the beginning of an assessment process and are, in combination with the use of portfolios, one of the most common assessment procedures in the validation of non-formal and informal learning. The assessed (normally referred to as the 'candidate') declares, orally or in writing, that he or she masters a skill or

[12] European Inventory on Validation of Nonformal and Informal Learning 2010 Thematic Report: Assessment methods http://libserver.cedefop.europa.eu/vetelib/2011/77646.pdf

competence. This declaration is typically confirmed by a third party, such as an employer. The final judgment can be made by a jury or panel. For obvious reasons this method is not without problems, challenging in particular the need for reliability. To enhance both validity and reliability, declarative methods should be supported by clear guidelines that the individual can use during the preparation of evidence.

Conversational methods, such as interviews or debates, are often used in combination with other methods, and are based on dialogue between the assessor and the candidate or even group of candidates. They are also often supported by self-assessment and can be used to identify tacit knowledge. For validation purposes, conversational methods are often used in the initial phases as a screening tool, to check if further assessment is possible.

Interviews can have a higher degree of validity than tests and examinations, as the possibility of dialogue decreases the risk of misunderstandings. On the other hand, unless interviewers use standardised formats, reliability can be affected. Fairness can also be disadvantaged using conversational methods; the assessor can be influenced by the personal characteristics of the candidates.

Observation is another method that extracts evidence from a real-life situation: the observer assesses performance in a natural setting. Observation can take many different forms and can have many different applications. It can reduce or even negate the stress of a formal examination. Sets of skills can be assessed simultaneously.

With observation, criteria structuring the observation need to be set in advance, typically by using a standardised checklist. Observations can be complex to arrange. They can be costly as well as time-consuming. A common example is a hairdressing exam where the candidate cuts and styles the hair of a client and the assessor observes how it is done.

Another possible method is *simulation*, which places the candidate in a simulated scenario to demonstrate competence. A well-known example is simulation in the training of pilots, but other occupations may require simulations too, often simply because a real-life situation would involve a life-threatening condition, such as in health or emergency services. Role play is a variation of simulation that can involve actors or peers in simulating a situation that requires a candidate to demonstrate knowledge and skills (problem solving). Simulation usually requires a lot of preparation and equipment, as well as clear criteria and standardisation. As a result it can be quite costly.

Evidence can also be extracted from the results of real work or other real-life situations, where the candidate collects intellectual or physical evidence of their competences. One obvious example is the assessment of a painting produced by a student of art. The judgment is normally made by a third party.

Some practical examples

In the National Vocational Qualifications System in **Turkey**, run by the VQA-authorised certification bodies normally develop item banks that can randomly generate questions to test knowledge. The item banks are seen as very objective. In order to prepare the multiple choice items hundreds or even thousands of questions are formulated, a process which requires considerable investment, but which is expected to reduce the burden for planning the assessment once the system is up and running. Multiple choice questions are a form of written assessment and particularly useful for testing knowledge.

Postgraduate education in **Russia** is complete when a student has prepared his final thesis (called the ”candidate dissertation”) and defends it at the meeting of the Dissertation Council specialized in

research area corresponding to the subject of the dissertation research. The defence is a kind of a declarative exam, during which the candidate makes a presentation and is cross-examined by the Dissertation Council.

Ukraine and **Serbia** are changing vocational qualification standards to meet the qualification requirements, becoming more and more explicit about the learning outcomes and the assessment criteria in formal learning in VET schools.

Observation is a widespread used method for assessing bricklaying skills in many countries, often involving experienced assessors from industry.

Who assesses?

Who assesses and who appoints assessors? We mentioned earlier that here too, trust is an important issue: driving tests are not performed by driving schools because their neutrality can be questioned and this may compromise the results. Just one incident with a biased assessor which yields sufficient media coverage can result in a general devaluation of the qualification itself. But while the assessors should be neutral, they should also be qualified to assess and balancing neutrality and expertise can lead to problems, particularly in narrow fields where 'everyone knows everyone'. Transparency is the only way of avoiding ambiguity and therefore a must in assessment procedures and standards.

The process of selecting assessors may not be the same for every qualification. What is certain, however, is that the role of teachers and trainers in the assessment of their own students is diminishing. There is a general trend towards external assessment and this development is particularly relevant for some of the partner countries, where trust is possibly an even bigger issue than in some EU Member States. However, it is still the case that in many partner countries IVET students are still assessed by their teachers or VET instructors. In some cases, these internal assessments are externally verified via sampling conducted by e.g. the country's qualifications authority.

Assessment by a third party does not necessarily imply outsourcing assessment. This is fortunate as this would greatly raise the cost of assessment and money is an inhibiting factor in education and training to begin with. Many countries have schemes where teachers are involved in assessment and assessors are swapped among schools or training providers.

The more a qualification bears direct relevance to professional skills and competences, the more important it becomes to involve representatives from the world of work in assessment. These can be working professionals who know the assessed field inside out but may not be specialist assessors, or specialised assessors who may not know the assessed field inside out. People from the world of work can partake in assessment procedures as the actual assessors, but also as observers or as members of a larger assessment team. They may also be the process supervisors: able to plan, organise and conduct assessment, to judge evidence and make judgments on the basis of this, to record the results, to develop assessment instruments, and possibly even to verify assessment processes performed by others.

Assessors need to be appointed and their work needs to be assessed too. Although their professional pride will typically command them to carry out their tasks in a reliable manner, their work must be validated and they must be trained for their specific assessment task. Both the training of assessors and the validation of their work can be done through cascading schemes, whereby a senior assessor trains junior assessors and validates their work.

Should assessors themselves then be formally qualified to carry out assessments? As assessment requirements become more precisely defined, greater demands are made on the assessing competence of the assessors. Should they have recent and significant experience in the occupation to which the qualification relates? Or in assessment itself?

One could argue that a higher number of assessors increases the objectivity and reliability of the assessment and that co-operation between institutions involved in assessment can increase trust in the process itself.

It is of importance to achieve balance between validity and costs, using a jury or panel of assessors is more expensive than using only one assessor. One possible way of creating balance is to go the middle way and use two assessors, who work together as an assessment team, particularly for observations and simulations.

Who are the assessors? Turkish versus Romanian experiences

Some countries, such as **Turkey**, insist on using assessment committees rather than individuals. A committee is certainly less likely to be corrupt, but there is a price to be paid for this neutrality – quite literally. Involving committees is obviously expensive. Another disadvantage is that it is possible that not everybody on a committee will be equally competent and that hierarchy or seniority rather than competence may come to influence or even define the assessment outcomes.

In the approach **Romania** chose, the candidates take a central position: the procedure starts with a self-assessment as an important preparatory stage. While the Turkish system seeks to pursue greater reliability through a panel of assessors, the Romanian system seeks validity through a combination of different assessment methods.

The **Romanian** approach grants an important role to the assessors who plan, design and conduct the assessment process – in this case experienced professionals from the occupation for which the candidate is tested. All assessors must prove their assessing competence against an assessor standard. In order to be certificated, assessors themselves are assessed too, typically by staff of the national qualifications authority. Experienced assessors can become verifiers, focusing on the coherence of assessment procedures and consistency in decision making process carried out by other assessors. Once accredited as verifiers they can also support less-experienced assessors, even if they operate as assessors for different occupations, thus contributing to an ever growing pool of assessors.

Internal verification is a key element of the quality assurance practices of so-called ‘VocTest’ centres in **Turkey.** Quality assurance is often based on the principle that institutions write down what they do, and do what they have written down to do. How VocTest Centres quality assure their different processes will need to be described in their quality assurance manuals. The quality assurance manual of each VocTest Centre will be scrutinised by both Türkak and VQA in the accreditation and authorisation processes.

All **Turkish** assessment centres are accredited against international standards (ISO 17024) by Türkak. The centres must apply within 90 days' time after receiving preliminary authorization of VQA. The process of accreditation by TÜRKAK may last up to six months from the date of application. Türkak verifies the institutional capacities, as well as the specific requirements for the assessment against specific national vocational qualifications. This means that for every assessment process against an additional national vocational qualification, additional Türkak accreditation is required. The authorisation by VQA starts from the principle that the VocTest Centre will have been accredited. Authorisation by VQA is complementary and not meant to duplicate the accreditation. There are also guidelines on the steps to follow for the assessment and certification which follow a more regular procedure for all VocTest centres. The authorization is within 30 days. Both VQA and Türkak monitor the activities of the VocTest Centres.

Some other examples
Kyrgyzstan started to work in a light industry pilot, with a sectoral committee focusing on preparing masters in companies as independent assessors for seamstresses.

In **Kosovo**, accredited schools may assess for awarding of qualification which are placed in the NQF. The National Qualifications Authority externally verifies these assessments via sampling.

Who certifies?

It is not always the institution that does the assessment, which also issues the certificate. The certifying or awarding body will have an influence on the value and status of a qualification. Therefore some of the same key dilemmas apply to certification as to qualification development and assessment: authorising many different bodies to certify may increase the flexibility of certification procedures and reduce bureaucracy but it may also compromise the status and, with that, the value of the qualification.

One critical question that must be answered is: what kind of organisation is the most suitable as the certifying body? A competent authority? Sector representatives? A professional body? Other end users than the potential qualification holders should be involved in making this decision. In practice this means employers, sector representatives and training providers. Whichever institution gives the certificate the most legitimacy needs to be taken into consideration.

And indeed, here too trust is a key issue because the certifying party has such a strong influence on the status and value of the qualification. The certifier must be trusted and therefore the process of accrediting the certifier must be quality assured and transparent. This will not only improve the professional recognition of the qualification but also its social recognition.

Some conclusions

Qualifications are becoming increasingly a proxy for the skills and competences that people have. Still much learning is taking place that is not recognised. There are however more and more situations where it is important to recognise the learning of individuals. Traditionally, curricula steer the assessment in partner countries. As everybody was studying the same content in the same programme, assessment mainly served to compare the performance between learners. Standards were often vague on the competences that should be assessed. But when people learn in different contexts assessment cannot just compare the learners in a group. Assessment becomes important to confirm that someone is competent. This requires first of all qualification standards that clearly

describe the learning outcomes that one should meet. Moreover, it becomes also more important that someone actually demonstrates the competences required. Asking about these competences is not enough. Therefore it is not only important **what** we assess (the learning outcomes), but also **how** we assess. This obviously applies for individuals who have not followed a formal learning programme, but also assessment in schools has to change. Beyond written and oral tests, there are a range of methods that can be used. They are not always easy to implement; i.e. assessors need to be competent to decide how they plan and implement assessment. It is important that there is confidence in the assessment process and that the process is fair and as objective as possible. This opens a whole new issue about who should be the assessors. Furthermore, with people being more mobile in their career and being often forced to move from job to job, it is important that the qualification they hold enjoys wide recognition. Therefore there is also a clear issue about which institution can provide more value to the qualification? Who should certify.

In short, three issues are critical when countries modernise their assessment: (1) making sure that there are standards against which people can be assessed (and can be partially recognised if they are not fully competent), (2) being clear about who the assessors are and making sure that they are competent and enjoy trust, (3) deciding which institutions should issue the official certificates. Modernisation of assessment can only progress when these three preconditions are in place.

Chapter 5: Linking qualifications with curriculum development

The curriculum is an instrument for planning learning experiences and can have individual, institutional and national dimensions

In the first chapter we saw that in many partner countries vocational qualifications are still based on the curriculum. In this chapter we will turn the tables and look at how, instead, vocational qualifications can actually affect and influence the curriculum and approaches to learning.

Changing approaches to learning

The learning experience is planned through curriculum development. In VET, this requires a very systematic approach during which multiple decisions have to be taken. It involves different stakeholders, not only for strategic decisions but also in the design of the actual learning matter and even in the delivery of it.

Before we discuss how curricula can build on qualifications rather than the other way around, it may be useful take a glimpse back at how curricula in the ETF partner countries have been developed and implemented in the past thirty years.

Training for state companies before 1990

The period before 1990 still has a profound impact on how curricula are perceived today. In many partner countries this was a period during which vocational education flourished. Concepts for the organisation of curricula were shaped that still affect VET today. Vocational education played a particularly important role in the command economies of Yugoslavia and the Soviet Union, neither of which exits any more. The focus was on production, rather than on services. Catering for relatively specialised jobs, VET served the needs of large, state-owned companies and organisations and was extremely regulated. It provided a high level of job security. Since VET schools often trained the future workers of one single company, the latter was often deeply involved in the training process. The basic VET schools (PTU in the former Soviet Union) trained qualified workers and did not provide access to higher education. However, the technics that trained technicians did. Higher education itself also prepared people for a relatively certain state-dominated economy.

A national list of occupations included the qualification characteristics for each of these. This informed the development of education standards and curricula (study plans and programmes). A classifier of specialisations formed the basis of the education standards. All documentation was drawn up by central expert institutions.

In Turkey and the Southern and Eastern Mediterranean regulation did not go quite so far, but also these countries followed strongly centralised approaches. Moreover, in the Southern and Eastern Mediterranean countries the education systems of the previous colonisers continued to have a strong influence. In Egypt

where VET is highly fragmented across different ministries, several centrally defined systems still exist in parallel.

Transition and the lack of direction

The collapse of the command economies had profound consequences, although the severity of the effects differed from country to country. Many state companies were closed or restructured, initially sending GDP into a steep decline. Collectivised farms were dissolved and land was redistributed in small plots. There was no job security any longer and many people migrated or tried to survive in the informal economy. Self-employment increased. In some countries bigger privatised state companies continued to operate but in most countries the labour and production became dominated by SMEs and micro companies. Foreign investments and outsourcing created some new employment. Private ownership started to dominate in the economy and labour conditions were largely liberalised. Most countries experienced contraction of heavy industry, while the service sector grew.

As large companies closed down, so did many of the affiliated VET schools whose profile was no longer relevant for local jobs. Hectic transitory conditions caused unpredictable fluctuations in the employment system. Labour market forecasting was near impossible. Employment rates of VET graduates dropped to very low levels. Companies increasingly trained their own staff on the job. Multinationals imported know-how from abroad.

Internships practically disappeared. Private companies had no obligation to take VET students. As a result, training became increasingly confined within schools. Many of these lacked the resources needed for practical training, particularly for consumables, and therefore shifted to more theoretical forms of instruction.

In many countries VET lyceums emerged. These provided full secondary education with an integrated general education curriculum. As initial VET increasingly became a last resort for poorly- performing students, there were many practical reasons to broaden and reduce the number of the existing profiles, but often this was done without any real consultation with the rapidly changing world of work. The divide between general education and VET was bridged by overloading the curricula, including subjects that were of no direct relevance for specific profiles. Such overloaded curricula could not be taught properly. In spite of the curriculum changes, general and higher education became the new norm in most countries. In countries where VET continued to attract students in decent numbers, such as in the Western Balkans, many VET graduates actually move into higher education.

In order to restructure the curricula, international agencies and bilateral donors started to influence national education and training agendas and provide technical assistance. In the early years this often amounted to system export from the donor country. Because different donors could be active in one country, several models of pilot VET schools operated side by side. Many of these were not sustainable. How the VET curriculum was affected by transition is well illustrated by the example below from an ETF report on Tajikistan (2006):

> Curricula and learning materials date from the early 1980s, the capacity to modernise VET programmes is very limited. Training provision remains highly supply-driven, based on

infrastructures, capacities and curricula inherited from the past. In 2002, a National Standard for Vocational Education was approved. This regulates the relation between general and vocational education and practical training within VET programmes, the total number of hours for programmes, and their certification. In the three year initial VET curriculum, general education makes up 42% of the time, vocational theory makes up 22%. Some 36% is practical training. There is an overload of subjects, with 17 different subjects in general education alone. There is hardly any link between the general education, vocational theory and practical training elements.

Practical training suffers from a lack of adequately equipped workshops and the absence of company-based practical training. The approach to teaching is based on knowledge transfer by the teacher. IVET students should learn pieces of theory, pieces of applied theory and practical skills, which are not well linked. The focus of the general education element is to develop purely academic knowledge for its own sake. The strong academic bias of general education in the curriculum reduces the focus on the vocational qualification and limits the skill level acquired to that of a semi-skilled worker at best. Due to the rupture of links with companies, the development of skills relies on the capacity of the practical trainers and the availability of adequately equipped workshops within vocational schools, but many trainers have had limited exposure to work situations and workshops offer outdated conditions.[13]

Increased relevance to private sector developments after 2005

The relative value of vocational programmes at secondary and higher levels has increased over the past ten years. There has been a rediscovery of VET as a potential provider for skilled labour, although VET systems cannot yet effectively respond to the new type of demands signalled by enterprises. In many partner countries, the turning point came in the beginning of the new millennium. It coincided with a growing interest in occupational standards, promoted by international donors, labour ministries and employers. From 2005 onwards this trend was intensified through a growing interest in qualifications frameworks which renewed attention for vocational qualifications. These, in turn, are now beginning to inform curricula.

The renewed attention to labour market relevance of qualifications was boosted by stabilisation and recovery of the economies of many partner countries. Growth sectors have started to signal skill shortages and skill gaps. This trend is not limited to the former command economies in the Western Balkans, Eastern Europe and Central Asia. Over the past five years the global crisis and Arab spring have provided a similar stimulus to education and training for employment in other regions. Job numbers have, however, lagged behind.

Governments are now looking for alternatives to public sector employment and focus more on skills that are relevant for private sector development. In Turkey, which has experienced explosive growth in exports over the past decade, the private sector is well organised with an increasingly competitive and qualified

[13] The Reform of Vocational Education and Training in the Republic of Tajikistan (ETF, 2006)

workforce. Importantly, technical and key competences are in higher demand than academic knowledge. Relevant vocational education and training is instrumental for sustaining the growth of the Turkish economy.

Common concepts and terms

What distinguishes curricula from qualifications?

In many partner countries, it is still difficult to distinguish between vocational qualifications and curricula. In general, vocational curricula have been driving qualifications rather than the other way around. But over the past two decades the context for curriculum development has changed quite a lot. This has nourished a change in traditional patterns.

Since the early 2000s we have seen a gradual rediscovery of VET. Occupational standards have started to redefine vocational curricula. The link between occupational standards and modular curricula has been promoted widely through donor projects. Occupational standards have often been defined through pilot projects and then not integrated into a new system. Many were originally developed to inform the curricula, using the units of competence of the occupational standards for course design. They were often introduced without assessment items that count towards the summative assessment of the qualification. The recent increase in recognition of the importance of lifelong learning, partly influenced by EU developments, has resulted in a diversification of vocational qualifications and more attention for assessment, practical training and work-based learning. The emergence of clear qualification types comes with a more systematic approach to building curricula on qualifications.

Should we distinguish between competences and learning outcomes?

The terms competence, competences and learning outcomes are used interchangeably in many countries. But originally, competences referred to the abilities of people to perform in the workplace and in broader social and personal practice. They are usually defined on the basis of workplace needs which may, for example, be defined in occupational standards.

Learning outcomes do not refer directly to work practice but can be derived from the competences that have been identified from work place practices. Learning outcomes describe the expected knowledge, skills and wider competences at the end of the learning process. These should make you employable in the immediate future rather than describe what you need to be able to do now in the workplace.

This distinction is important as education is preparing people for their future with an inbuilt degree of uncertainty about what will be needed. The relationship between competences and learning outcomes is a critical one. Experience from Europe shows that conceptualisation of learning outcomes evolves over time. There is evidence of policy learning. Concepts can be precise (prescriptive) or wide (open to local interpretations). At their introduction, learning outcomes are often directly based on work-related competences. These then develop towards wider and more open definitions once more experience has been gained.

Learning outcomes are the product of an analytical and systematic approach to qualification and curriculum development. This approach is always based on explicit rules set by the authorities, for example about how statements should be formulated and organised and about who should be consulted and who should make decisions.

Cedefop claims that the use of learning outcomes makes it possible to develop curricula that:

> (a) equip learners with knowledge, skills and competences that are relevant to available employment opportunities and of value to them in a range of different work and social situations;
> (b) integrate different kinds of skills, for example theoretical and practical or transversal and generic skills;
> (c) are transparent and understandable to learners and other stakeholders;
> (d) may be learned, taught and assessed at various times and in a variety of places and ways;
> (e) are responsive to changing needs

From written curriculum documents it is difficult to ascertain whether learning outcomes have been integrated in a meaningful way. It is technically possible to define very clear learning outcomes as a desk exercise using existing curricula. But for vocational qualifications and curricula it is important that the learning outcomes originate from workplace competences, rather than from elements of the existing curriculum. The process of arriving at learning outcomes and assessment criteria is at least as important as the mastery of formulating them.

The adoption and formulation of learning outcomes has been promoted by the emergence of national qualifications frameworks and by their descriptors in particular. Level descriptors influence qualification type descriptors that define individual qualifications with learning outcomes, assessment criteria and individual units. Learning modules and curricula are then defined on the basis of these, and not the other way around. The increased importance of lifelong learning and the validation of non-formal and informal learning have resulted in the reformulation of qualifications in learning outcomes so that they could be separated from curricula.

Learning outcomes are also used to promote modularisation, increased autonomy of providers, learner-centeredness, social inclusion and key competences.

What do we mean with curriculum?

At first glance curriculum, like qualification, seems to be a clear concept, but curricula have different cultural connotations and they can have national, institutional and individual dimensions.

An ETF cross-country study of 1998 registered that in partner countries the curriculum was perceived as a balanced response to the potential and interests of individuals and the requirements of society. From the individual point of view, the curriculum can be seen as the totality of measures, interactions and experiences

within an organised learning process. But from an institutional or national perspective it may be more a tool for describing the specialised teaching content and learning processes in its organisational context. A 2005 ETF Peer Review of the reform of vocational curricula in South East Europe concluded that it was difficult to find an operational common understanding of the vocational curriculum in any of the four countries studied. Different groups had very different ideas of what a curriculum entailed.

Cedefop identifies four different ways of using the concept of curriculum:

(a) as a description of a body of knowledge or of a set of skills;
(b) as a plan of teaching and learning;
(c) as an agreed standard or contract – a binding or normative standard that authorises and regulates teaching and learning;
(d) as the experience of learners over time.

Cedefop makes a useful distinction between the written and the taught curriculum. In the context of partner countries, 'study plan' and 'study programme' are frequently used to respectively describe the broad outline of the curriculum and the programme that provides a more detailed prescription of the contents. Both are part of the written curriculum.

A curriculum can incorporate all kinds of elements: "Depending on the country, the type of education and training, and the institution, curricula may define […] learning outcomes, objectives, contents, place and duration of learning, teaching and assessment methods to a greater or to a lesser extent"[14] Cedefop concludes that "any document for planning learning experiences can be considered a curriculum". The rest of this chapter will show that planning the learning experience in a systematic way is of crucial importance.

From curriculum development to implementation

Curricula are developed in different stages that involve different groups of stakeholders. Between the identification of labour market or learner needs and the delivery of a training programme there can be many different stages or just a few.

A typical process could start with the definition of an occupational standard on the basis of identified labour market needs. This occupational standard could then be used to define a qualification standard that describes the requirements for the award of a qualification, including the appropriate learning outcomes and assessment criteria. Those learning outcomes may be broader or narrower than the competences described in the occupational standard, depending on the purpose of the qualification: initial vocational education, retraining or a specialisation. Additional requirements could be built in, such as basic skills or employability skills, depending on the scope of the qualification (the qualification type). Learning outcomes could be grouped into units with a common purpose, so that the qualification can be used for partial recognition or to provide credit or exemptions to individuals that can demonstrate that they meet the requirements of certain units. The qualification standards in turn could be used to define core curricula that may be expressed as modules for learning. These should ensure that the learning experience will be effective and coherent

[14] Learning outcomes approaches in VET curricula- A comparative analysis of nine European countries, Cedefop 2010

without necessarily prescribing every detail of the learning programme. This would leave room for local providers and companies to develop and implement local variations that are adapted to local needs and opportunities.

Such a process can lead to the involvement of a greater number and diversity of stakeholders and it can ensure that an outcome-based curriculum takes into account not only a particular set of occupation-specific competences, but also learning outcomes associated with curriculum subjects, generic skills and educational objectives. Curricula that are developed with different stakeholders can be better adapted to the contexts in which they will be implemented, bringing them closer to learners and their immediate environments. But differentiated curriculum design can also be a more complex process that reduces the pace of reform and slows down the response time of the VET system to labour market developments. Moreover, an elaborate process for the development of outcome-oriented curricula can be expensive because it is likely to involve more research, more separate stages of development, more expertise, greater regulation and more consultation.

While the number of stages in curriculum development can vary, it is possible to distinguish three progressive phases that can help our analysis. These are planning the curriculum, establishing the curriculum content and implementing the curriculum. Cedefop names these phases: the policy development level, the written curriculum and the taught curriculum. We will describe each of them in the following sections.

Phase 1: Planning the curriculum

Systemic change in curriculum development and implementation is not easy to achieve. Experience shows that it is very difficult for policy to change practice from the top. But conversely, bottom-up initiatives and pilot projects seldom have a real influence on policies. In order to have a national system it is therefore important that there is agreement on what kind of curricula are needed and how these curricula will be developed and implemented.

A lot of decisions must be made during the planning phase.

The key question is what curricula are needed. It is important that decisions are based on proper analysis and that goals and objectives are realistic. Potential groups of learners and their motivations should be identified. The needs of potential learners, the labour market and society should be considered. It is important to know what the likely employment and progression opportunities are, who the potential providers will be, who will teach and train, how stakeholders can be involved, and what the minimum material requirements for implementing the curricula are. Factors that may support or jeopardise the new curriculum should be assessed. The new curriculum can be compared with similar programmes that are already being offered.

When curricula are developed from qualifications rather than the other way around, many of these questions can be dealt with in the qualifications development process. In other words: before the actual curriculum is defined. Qualification type descriptors set the general purpose of the qualification and a basic architecture. The individual qualifications define the expected learning outcomes. Qualifications already involve the needs of the labour market, individuals and society and they can also incorporate outcomes related to key competences and generic skills.

In **Georgia** VET curricula are currently produced by VET providers that should use occupational standards. But schools have not really developed any capacity to change their approach to curriculum development, which remain therefore traditional and subject based. Georgia has decided to use DACUM to produce occupational standards as well as an input into modules for learning and units of assessment. Some teachers and experts from the National Centre for Education Quality Enhancement and the Ministry of Education and Science were trained in using DACUM and in 2013 the Ministry decided that all VET curricula needed to be modularised.
A plan and a Module Writing Guide have been produced by the EU VET capacity building project. Central databases of qualifications, modules for learning, and units of assessment are proposed under the NCEQE as the main awarding body. Curriculum working groups should be established to define the modules.
A pilot exists for "textile product specialist" but it could not be tested yet, due to legal constraints. Apart from moving towards centrally defined modules, it will be important to build capacities among teachers and trainers to use and adapt the modules

How should curricula be changed There are different approaches to curriculum development for initial and continuing vocational education and training. The simplest models are CVT curricula and units that are based on qualification types derived directly from occupational standards. Initial vocational education is more complex as focuses on beginning practitioners while occupational standards normally describe experienced professionals. Besides, initial VET curricula tend to also cover general and theoretical knowledge. This makes developing initial VET curricula and qualifications from occupational standards a complex task which requires expertise in translating competences into learning outcomes. As such, initial VET qualifications and curricula may not be the easiest to start reforms with.

In Europe there is a trend towards centrally defined core curricula, with room for local implementation arrangements at the provider level. Stakeholder capacity is a critical condition for devolving more responsibilities to the local level. In the partner countries the curriculum development for initial VET is very centralised, with most still pursuing a single national curriculum. A shift towards modular curricula that are derived from units of competence of occupational standards or units of assessment of qualifications potentially leaves more room for autonomy of local providers and teachers. After all, the learning outcomes do not define what to teach but indicate what should have been learned. But the experience in partner countries shows that making this shift is not easy, primarily because it requires much capacity building among stakeholders and pedagogical guidance for teachers.

in partner countries? What new approaches are being introduced? The 2005 ETF peer review of curriculum reform processes in South East Europe showed that partner countries lacked the capacity to define and identify occupational sector priorities, translate these priorities into curricular profiles and programmes and measurable standards, deliver these programmes at school level, make the processes attractive for students and teachers, and provide timely and effective feedback through different mechanisms.

Sustaining the innovations introduced through EU-funded VET projects was difficult. Reasons for this included the limited duration of technical assistance projects and their focus on a small number of schools in a few occupational areas. Project documents often suggested using

modular curricula so as to link initial and continuing vocational education and training but the review found very little evidence that this was actually happening.

Although modularised curricula had been introduced everywhere as necessary innovations, this process needed more careful consideration as often these curricula do not fit very well with existing approaches and are difficult to maintain. Capacity development requires time and needs to build on accumulated experience.

Recent feedback from Bosnia and Herzegovina (one of the cases studied in the peer review) shows that a few years down the line, there is more positive appraisal from local VET schools that have grown accustomed to modular approaches.

In continuing vocational education the approach remains largely decentralised and left to (private) providers. Only a few national training programmes are available for active labour market measures.

Phase 2: The written curriculum – establishing the curriculum content

As explained above, countries can opt for centralised or decentralised policies for curriculum development and implementation. Outcome-oriented approaches usually make an explicit distinction between the manner in which the written curriculum is outlined centrally and subsequently adapted to local needs and circumstances at school level. Curriculum design experts work alongside stakeholders to design outcome-oriented curricula. In some countries curriculum experts are employed to validate curricula independently.

The table below[15] provides a schematic overview of the types of activity, responsibility, outcome and key question for the development of vocational curricula.

Type of activities	Responsibility	Outcome
Developing core curriculum	Central Expert body	Strategic plan, mission statement, goals, decision points
Establishing the study plan	Central staff, principals (with input from teachers and staff)	Curriculum plan, personnel development plan, facilities plan, budget
Developing the study programme	Local teachers, counsellors, staff (with inputs from parents and the community, including local enterprises)	Lesson plans, work plans

Traditionally, VET curricula are thought of in terms of theoretical and practical elements that were taught and assessed separately. Outcome-based curricula try to combine the theoretical and the practical in order to develop specific modules with a key purpose that can be assessed in their entirety. They may include a

[15] Adapted from "Curriculum Development in Vocational Education & Training", Finch & Crunkilton, 2001

core of basic knowledge, broad technical and application knowledge, specialised technical and application knowledge, laboratory practice and work-based learning.

Some European systems use separate modules for vocational and academic or general learning outcomes. Usually, key competences are integrated with vocational learning outcomes, in particular where work-based learning is used. The outcome-oriented approach makes it possible to teach and assess transversal and key competences in a cross-curriculum approach.

Below is an example from a 2003 ETF publication on core skills, showing how communication, decision-making and problem-solving are applied in the context of planting and maintaining trees and bushes:

Original learning outcome	**Learning outcome with core skills added**
Plant and nurture trees, bushes and seedlings (the learning outcome) ... The student must be able to: • use machinery for planting and maintaining growth; • trim and prune plants to control their growth; • maintain the health of plants by applying inoculation and other disease treatments.	Plant and nurture trees, bushes and seedlings (the learning outcome) ... The student must be able to: • **select, prepare and** use machinery for planting and maintaining growth; • **decide when to** trim and prune plants to control their growth; • maintain the health of plants by **identifying growth defects and** applying inoculation and other disease treatments.

How are the key competences included?

Learning outcomes	**Communication**	**Decision making**	**Problem solving**
Plant and nurture trees, bushes and seedlings (the learning outcome) ... The student must be able to: • use machinery for planting and maintaining growth;	**Read and interpret** operating manuals.	**Select** the **machinery** to use.	**Diagnose and correct** operating faults.
• trim and prune plants to control their growth;		**Decide when** plants need pruning.	
• maintain the	**Ask experienced colleagues for advice**	**Decide which** treatments to use.	**Diagnose** plant diseases.

health of plants by applying inoculation and other disease treatments.	on diseases. **Look up** plant diseases in reference manuals.		**Identify why** plants are **failing** to grow properly.

Real work experience is important and is difficult to replace by practical training or simulation, but integrating work-based learning into the curriculum raises a whole set of issues about how to identify workplaces, how to ensure a meaningful learning experience, how to support learning in the workplace, and how to deal with a large variety of individual learning experiences. It is difficult to engage employers in curriculum development and sustain their contributions. Private enterprises in partner countries often train their own staff for work-related tasks but they are poorly equipped to support learning programmes that go beyond the remit of the work in their company. European experience shows that agencies and VET providers that had enjoyed some success in generating employer engagement invested in resources and specialised personnel to develop and maintain relationships.

It requires a different mind-set to move from traditional subjects to an integrated approach focusing on learning outcomes. The challenge is not only conceptual but also organisational in nature as an interdisciplinary approach requires more cooperation between teachers and trainers.

At the central level outcome-oriented curricula can be loose or very descriptive. Cedefop use the term 'granularity' to indicate the detail of the learning outcomes in the curriculum. The more outcomes there are, the more prescriptive the curriculum becomes. Overly regulating authorities have a tendency to be rather prescriptive, which can increase the assessment burden and decrease flexibility in the delivery. This can also be disempowering and demotivating for teachers and trainers, who experience a too prescriptive approach as 'bureaucratic' and who may feel denied opportunities to contribute.

Phase 3: The taught curriculum – implementation

The manner in which qualifications and written curricula are structured and the way in which learning outcomes are formulated may have an impact on pedagogy in various ways. Some outcome-oriented curricula actively promote learner-centred pedagogies, while others give very little pedagogical guidance. Vocational learning requires specific conducive contexts. When implementing the curriculum it is important to consider alternative learning approaches that are appropriate for specific outcomes. Teamwork, for example, is not normally learned from a textbook although this might be an effective way to learn about teamwork.

Linking specific learning and assessment approaches to specific learning outcomes is referred to as constructive alignment – a term developed in higher education. What learning activities should the students engage in order for them to best achieve the learning outcomes? Aligning learning outcomes with learning and assessment strategies often improves the link between learning and assessment. The assessment becomes an integrated part of the learning process. How constructive alignment works in practice is demonstrated by the following quote from *Teaching for Quality Learning at University* (Biggs & Tang, 2007).

> Take driving instruction. The intention is that the learner learns how to drive a car. The teaching focuses on the learning activity itself: driving a car, not giving lectures on car driving, while the assessment focuses on how well the car is driven. Car driving is the verb that is common to all components of instruction: to the intended outcome of learning, to the learner's activity during teaching and to the assessment. The alignment is achieved by ensuring that the intended verb in the outcome statement is present in the teaching/learning activity and in the assessment task.

As we wrote earlier, much of the taught curriculum should actually be defined at the level of providers. There are different understandings of how much discretion each school enjoys and what is involved in developing and implementing a school-based curriculum. It requires that school staff is competent to define the teaching approach and adept curriculum contents to local conditions themselves. Before transition, most vocational curricula had been designed and defined centrally. An ETF study in 1998 described how, during the 1990s, individual VET schools had to adapt their own curricula simply in order to survive. In the absence of signals from enterprises, for inputs these schools largely relied on the educational aspirations of students. They hardly received external professional support. Only in the late 1990s new structures appeared in the form of national VET institutions that started with new curriculum approaches.

Since 2010, the ETF has systematically worked with partner countries on evidence-based reviews of VET reform progress through the Torino Process. The Torino Process reports of 2012 contain many references to partner country curricular reforms that show new ways of defining and planning the curriculum, but information about changing approaches in teaching and learning is poor. The emerging introduction of key competences to curricula requires learners across the board to take more control of their own learning and introducing more group work and individual project work. These changes are assumed, but are they actually taking place?

> The 2005 ETF peer review on curricula in South East Europe looked deeper into this but did not find evidence of systemic changes in pedagogy. Vocational education and training was traditionally scholastic and academically biased. General subjects dominated education even in secondary vocational schools. It was very difficult to change the approach to a more integrated learning process. The introduction of vocational training modules was only successful if introduced with new subjects with practical significance. Donor projects tried to cut through the traditional division of subjects and organise vocational training in defined broad occupational areas, including a system of modules for special occupational tasks. To adopt such modules in the local environment in a meaningful way, an analysis of the relevant labour processes was needed which was not possible in the transitory conditions of the time.

Context is very important in vocational education, as most teaching takes place in the settings of the workplace and educational institution. A skill can be taught in one setting and applied in another, often in a move from school to workplace. But how can we ensure that what is learned in one context is applied effectively in another and that learners are able to mobilise their skills, knowledge and competences in different settings?

Work-based learning is popular with students, particularly when it takes the form of direct work experience. Students believe that they acquire valuable competences from work experience and that it enhances their

employability. Planning for the delivery of learning outcomes is therefore facilitated by close collaboration between schools and enterprises. The degree and manner of this collaboration may vary, even when there is a shared commitment to outcome-oriented curriculum design and development. It is sometimes necessary to tailor a training programme closely to the needs of client companies and to local employers. Pedagogy is also shaped by the productive and commercial realities of the world of work which may lead to a company-centred approach, rather than a learner-centred approach.

During the past twenty years, initial vocational education was very much regarded as a parallel combination of general education and vocational training. The final purpose was not always very clear and differed between countries, institutions and programmes. A focus on qualifications can help to direct the provision of VET more towards learning outcomes that are linked to employability, career development and personal development. According to a new guide on vocational pedagogy developed by City and Guilds (2012), the primary outcome of vocational education is expertise: the ability to do skilful things in an area of work. 'Knowing' and 'thinking' have to be taught in such a way that they readily come to mind and are useful in practical situations. This means that learners need to be prepared to act and react rather than to reproduce behaviour. It requires a stronger focus on resourcefulness, on the development of craftsmanship, on functional literacy, on entrepreneurial attitudes and on developing skills for employability, personal and career development, and lifelong learning. These are the basic generic skills they need for functioning in the workplace and society.

Even though true system-wide reforms are still largely lacking, good practice in pedagogy can be found in many partner countries. Many possible ways of learning can be, and are, used in VET. The enthusiasm of teachers, trainers and learners involved in pilots shows that changing traditional approaches is possible. But generally VET still requires more learning-by-doing, the importance of which for VET which is still insufficiently recognised. It is important that learners can try things while they learn and that they can make mistakes and are corrected in a constructive manner. The main message for partner countries is to move forward and try, to gather more feedback from the grassroots level and to recognise which pedagogical approaches are more appropriate to learn specific skills than others.

Moving from passive to active learning styles is very important. The following example explains how the learning can change when learners are expected to take more responsibility for their learning and can make VET more attractive.

> **Marina Shvein, Teacher, School No 18 Almaty**
> **Context:** Marina is a teacher working in sales occupations. She organises workplace training sessions in a chain of local supermarkets that approached school 18 to ask for help in developing product knowledge and improving customer service. At the suggestion of the school, the employees are also trained in accountancy to broaden their employment potential.
> **Before:** "In the past I instructed students. They were attentive, but passive. This method worked with product knowledge but for customer service just learning the theory of interaction and rules for dealing with customers was not a very good method."
> **Now:** "Now the students work together in groups. For example, for customer service I will ask them to identify the desirable characteristics of a shop assistant from the customer's point of view. They develop their own profiles and use these to assess their own behaviour. For each

> session I give a theme and together we design a training activity based on the theme. Then they assess the results. At first the students found it difficult, but now they are very happy with the approach – they are more active."[16]

Barriers to the more extensive use of learner-centred pedagogies can be institutional constraints but also teachers' mentalities and resistance to change. Institutional constraints may include relatively large number of students per class, a lack of resources and time, overloaded curricula, unsuitable learning environments, inadequate methods of assessment and a lack of opportunities for learners to gain work experience.

Donor-inspired models could be a hindrance to systemic VET reform development as donor funding typically aims at supporting local development rather than promoting a formula roadmap.

The dual worlds of educational institutions and workplaces require two sets of expertise: teachers with current experience of the workplace and workers who can teach.

If qualification and curriculum standards are not directly linked to pedagogy, teachers and trainers can continue to use the pedagogies that they are most comfortable with and that suit their institutions best, but there is a risk that traditional teaching styles are sustained. Pedagogical guidance and the professional development of teachers and trainers are therefore effective tools to implement outcome-oriented curricula. Professional development work should be informed by change management approaches which help practitioners to become aware not only of their current practice and the need for change, but also of the wider affective, social and psychological dimensions of change. This is particularly important because the introduction of outcome-oriented curricula is just one of many changes that teachers and learners are expected to deal with. A lack of resources for professional development is often *the* main bottleneck for implementing reform.

Some conclusions

The purpose and scope of curricula that are planned and developed on the basis of vocational qualifications are already defined through the qualifications that can also provide a clear structure for the curriculum in terms of modules. In most partner countries vocational curricula are highly centralised. In order to enable progression many vocational curricula have been overloaded with general education subjects. There is a need to review this approach when redesigning curricula based on vocational qualifications.

In Europe there is a trend towards centrally defined core curricula, with room for local implementation arrangements at the provider level. This also seems a good solution for partner countries that move to learning outcomes based curricula developed from vocational qualifications. Since the assessment is already based on vocational qualifications, there is no need to micromanage the contents of curricula. By giving providers the possibility to adapt curricula to the needs of specific learners and local companies, they can more effective.

16 *Core and entrepreneurial skills in vocational education and training – from concept and theory to practical application*, ETF, Bob Mansfield 2003

Donors have introduced new approaches to curriculum development in partner countries including modular curricula that have been difficult to implement in the partner countries, in particular when moving beyond pilot projects. Often there has been insufficient capacity building with teachers and trainers to introduce these new curricula beyond pilot schools. Recent feedback from some countries that moved towards modular curricula shows that the teaching of modules has become routine in many schools, but the assessment of modules is still problematic. In a curriculum approach that starts from vocational qualifications rather than just occupational standards assessment is dealt with in a more systematic way.

It is important that learning outcomes in vocational qualifications and curricula are derived from workplace competence. But developing learning outcomes is not simply a process of using the competences identified in the occupational standards; it requires interpretation to come to the statements of knowledge, skills and wider competences aimed at.

Chapter 6: Vocational qualifications and career opportunities

Qualifications are awarded to individuals and are therefore theirs to use.

Introduction

This chapter is about the benefits of qualifications to individuals rather than their usefulness for companies, training providers or education systems. While the rest of the study uses empirical and emerging evidence from partner countries, we do yet have enough evidence to judge impact on individuals in the partner countries, but it is included because it explains a simple but critical and often misunderstood characteristic of qualifications: that they are made for people.

During the last two decades VET has lost much of its appeal in the partner countries. Where families could afford it they sent their children to higher education instead. Large numbers of young people finished education without any form of specialisation. Today VET is being rediscovered, from skills development for low-skilled workers to post-secondary and higher professional education, and including work-based learning. Qualifications are seen as a means to structure, recognise and assure the quality of these learning experiences. But they are also the recognition of achievement that individuals will build their careers on. As such they need to be accompanied by improved information, guidance and counselling.

There are high expectations about how vocational qualifications can change the opportunities of individuals and can help to make VET more attractive. In all ETF partner countries the opportunities for decent work are generally worse than in the EU and therefore the idea of developing more opportunities for individuals into new vocational qualifications is a popular one. Individuals equipped with relevant qualifications are expected to have better opportunities for employment, personal development and social mobility.

But are new vocational qualifications really opening new doors for the people that have acquired them? Are new vocational qualifications actually improving career opportunities? We actually do not know. There is a lack of evidence, as most new qualifications are still being developed or planned. Most of the current reforms are not profound enough yet to affect individuals. Few new vocational qualifications are on offer and few people are aware of them. Does this mean that we have not been able to convince decision makers and stakeholders to commit themselves to more ambitious programmes for reforming higher numbers of vocational qualifications? And if so, how can we communicate the needs and the implications for reforms more effectively?

The attractiveness of VET qualifications

There are many assumptions about new, competency-based VET qualifications and their benefits for individuals but we lack the evidence needed to substantiate them. One of the main assumptions is that a move towards competence-based qualifications will enhance transparency, which in turn will have effects on mobility, migration, progression and guidance and counselling. Vocational qualifications that are expressed in learning outcomes are supposedly easier to compare and link, which should make progression easier. But partner countries are still far from having such systems in place.

The international literature on national qualifications frameworks and learning outcomes provides a rather abstract, conceptual and system-focused debate that has not entered the radar of individuals yet. But in times of global uncertainty, qualifications are increasingly perceived as a determinant in people's career perspectives. Qualified individuals are expected to have demonstrated that they are competent. Qualifications are becoming a proxy for the capabilities of individuals. Qualifications have limitations in determining the quality of the individual, but within more open global labour markets, qualifications (as third party evidence) could possibly gain importance over traditional values such as what schools people have visited and even where they have worked.

From a learner's perspective, individual qualifications are definitely more important than the education and training system as a whole. What is relevant for learners may not be the same as what is relevant for employers, or providers. Learners want vocational qualifications with a documented value that provide them with the skills to find a job and opportunities for career development. Beyond the specific skills for a certain occupational area, individuals are interested in being able to continue their studies at higher levels and widening their opportunities beyond a specific occupation and progression pathway. Qualifications should not constrain them in pursuing their personal interests.

The implications of this for vocational qualifications are that beyond improving the relevance for the labour market and enabling progression, they need to be broad enough to both accommodate the core skills that will allow learners to switch careers and allow for the pursuit of personal interests. Experience from Europe shows that narrow vocational tracks can become straightjackets for career development. This is aggravated if such tracking begins at an early age, with a premature selection of students into different pathways.

Traditionally qualifications were a certificate issued after successfully completing a training programme. As a result qualifications are often associated with the provider. We know this more commonly from higher education but it can also apply to VET. VET qualifications are both an input and an outcome of the VET provision. As we saw in the previous chapter, they can define the curriculum, but they are also the final result of the learning process. They should not be considered in isolation from the provision of VET because training is normally a requirement to make people more competent. But if specific VET qualifications are linked to specific forms of provision, they cannot be compared and their value risks to be limited to their local contexts.

Nationally-defined vocational qualifications can give all individuals in a country the security that the outcomes of their learning process will be at least equal to a national standard. Locally defined qualifications may only give this security to those who can access good schools and receive a certificate issued by a particular provider. To gain additional currency, vocational qualifications must be endorsed by the national qualifications authorities who in turn will have consulted relevant stakeholders, often involving links to quality assurance mechanisms. The position of a single qualification into a broader framework based on learning outcomes can also value it and allow selected learners exemption for previous validated or certificated learning. Indeed, the value of individual qualifications resulting from pilot initiatives has been shown to be considerably increased if these qualifications can be placed into a framework.

Does this mean the whole system, including the qualifications framework, new institutions, stakeholder partnerships and quality assurance arrangements, has to be in place before individuals will be able to see the benefits of improved opportunities? Are new vocational qualifications really helping to ensure that individuals gained useful new competences? How are they perceived in the education system (progression) and on the labour market (mobility)? Is there a sort of threshold or critical mass of qualification holders that needs to be reached before new qualifications are really gaining value?

Improving the recognition of vocational qualifications

The recognition of a qualification is dependent on a number of different conditions, all of which must be satisfied. Firstly, a qualification should be transparent: the skills that a person has gained should be easily recognisable to the users of qualifications. Secondly, qualifications should be recognised as having a real and current value, for example for entry into the labour market or for academic or professional progression. Thirdly, qualifications should be portable: they should be used and trusted when a person wants to change job or migrate to a different area or country. Thus, recognition refers to the transparency, currency and portability of qualifications.[17]

Current qualifications systems tend to be complex. The relations between different qualifications at different levels can be extremely opaque. This is a problem for the growing number of learners who want to build careers on achievements from different levels and sectors. A smoother transfer of qualifications is needed because of increased occupational mobility. This requires that qualifications can be easily understood and valued in new settings. The learner should not only be informed which links and pathways exist that lead to and from the qualification in a national qualifications framework, but also be able to see where these links and pathways are lacking and how these gaps can be bridged.

In the globalising labour market, the international recognition of qualifications is also an increasingly important issue. This can be helped with tools that help to make the elements of different national qualifications framework internationally comparable, such as the EQF does in the European Union, or with wholly internationally designed qualifications, particularly if these also can be fit into existing national frameworks.[18] Indeed, some countries compare new vocational qualifications with internationally recognised qualifications before they are submitted for approval and inclusion in their own national qualifications framework.

Can vocational qualifications promote mobility and legal migration?

Changes to qualifications or qualifications development processes can affect mobility. A broadly recognised and trusted certificate can and will open employment options that were previously inaccessible.

Mobility can be different things:

- Learner mobility refers to movement between different education or training providers. It can take place within one country or between different countries.

[17] *Qualifications that Count*, ETF, 2009

[18] Added value of national qualifications frameworks in implementing the EQF
http://ec.europa.eu/education/lifelong-learning-policy/doc/eqf/note2_en.pdf

- Labour mobility, including mobility between economic sectors, can refer to social mobility and career development but also to between employers and regions within a country and mobility between different countries.

When we speak of mobility here, we do not consider vertical or horizontal progression within education systems.

In contrast with higher education, learner mobility in VET is still very limited, but it can have a positive impact on the mobility of workers. Students who have been involved in mobility are more likely to pursue career options abroad[19]. There are different reasons why mobility in VET is less developed. One is that VET systems differ a lot from country to country and labour mobility is difficult in highly regulated sectors (such as health care, education, finance and transport) or the public sector. VET students are also generally less ready for mobility as they tend to be younger and have poorer language skills than higher education students. Finally, cross-border cooperation among VET providers is still not very developed.

Qualifications that are based on learning outcomes and structured in units can provide partial recognition, which may support learner mobility but the ETF study *Transnational Qualifications Frameworks* (2010) shows that it is still too early to assess the full impact of qualifications frameworks on mobility.

The European ECVET initiative was developed to facilitate the recognition of mobility for students abroad. It is built around 'units of learning outcomes'. 1.) Units of learning outcomes can be used as bricks from which to build entire qualifications. Unitised qualifications can also be helpful in the (partial) recognition of prior learning. Focusing on the learning outcomes is a way of capitalising on the different learning experiences of international students, while still working towards the outcomes of their qualifications.

In the management of mobility flows, qualifications can be used as gatekeeping instruments (where people must show that they have formal qualifications that are identical, equivalent, or comparable to national ones) while qualifications frameworks can be catalysts, making qualifications more easily recognisable. If skills dimensions of mobility arrangements will increase further in importance instruments such as the EQF and NQFs could become important catalysts for labour mobility. Given the demographic developments in Europe and emerging skill shortages for certain vocational qualifications, this could very well happen in the years ahead.

In the EU labour market, citizens of partner countries do not have the same rights and opportunities as citizens of Member States. Often partner country citizens experience that their current qualifications are discriminated against in the EU. Many are underemployed, working in jobs that are below their abilities. Many partner countries are developing qualifications frameworks in order to link them to the EQF so as to be able to demonstrate that their national qualifications are of equal value.

It is important to note here that inn international cooperation and throughout attempts to harmonise qualifications, the local nature of much of VET must never be lost out of sight. Provisions will always have to be made for national and local requirements, such as legislation in building procedures. True harmonisation

[19] There is a lot of evidence for this form different sources see e.g. http://www.europeantrainingservices.co.uk/en/work_experience_placement_abroad/Graduate_Testimonials

could mean finding the lowest common denominator and this would go at the expense of the relevance of qualifications.

Country examples

This first example is not from a partner country but from **Bangladesh**, a country whose migrants work in 143 countries. In 2011, 568,062 citizens of Bangladesh migrated. Only 5.4% of these were women. The total figure was 45% higher than in 2010. The total remittances added USD 12.7 billion to the economy in 2011, which makes for 13% of the country's GDP. The number of skilled and semi-skilled migrants increases every year. *The National Technical Vocational Qualifications Framework* is a quality assurance tool for qualifications. Expatriate workers with NTVQF qualifications are expected to gain recognition and a better remuneration in overseas labour markets. Still, Bangladesh is now looking at measures to promote skills development to meet the specific needs of these markets, proposing to develop memoranda of understanding with receiving countries to regulate and manage legal migration.

Tajikistan is a partner country with a very high migration rate. Many of the different skills and qualifications of Tajik labour migrants are not recognised officially and their value in different environments is not guaranteed. In the development of adult learning, the Ministry of Labour and Social Protection now plans to establish a mechanism of qualification recognition that should support the mobility of labour migrants and improve their income and living standards. A framework for qualifications is one of the proposed mechanisms.

The EU's Mobility Partnerships

A European Commission communication of November 2011 on the global approach to migration and mobility (GAMM)[20] is the main migration policy framework of the EU. It confirms the union's increased interest in circular migration and mobility partnerships with the European neighbourhood, prioritising Eastern Partnership and Southern and Eastern Mediterranean countries.

The EU already signed Mobility Partnership agreements with Moldova (2008), Georgia (2009) and Armenia (2011). In October 2011 the EU started to negotiate with Morocco and Tunisia on new mobility partnership agreements. In 2012, dialogues were started with Azerbaijan and Jordan while similar negotiations have been announced with Egypt and Libya for the near future. These mobility partnership frameworks must have an employment and skills dimension that is closely linked to the national employment and skills policies of the countries. As such, qualifications play a central role.

As the importance increases of matching labour with skills, reintegrating returnees, and considering brain-drain and brain-gain, so does the importance of the proper validation and recognition of qualifications and skills. The benefits of labour migration can be increased for the sending countries, the receiving countries and the migrants themselves through greater cooperation and a better management of migration flows through improved forms of skills matching.

[20] EC Communication *The Global Approach to Migration and Mobility* (GAMM), COM (2011)743, Brussels, November 2011

A number of tools can be used for this, an important one of which is the validation and recognition of migrants' skills and qualifications, both at home and in the destination country.

Receiving country perspectives

The Gulf region has long attracted migrants. In many countries they outnumber the citizens. A delegation from the **United Arab Emirates** that visited the ETF in 2012 announced that the Gulf Cooperation Council is planning to establish assessment centres in sending countries. All Gulf Cooperation Council member states are now developing occupational standards which form the basis of their respective qualifications systems. The idea of the assessment centres is to assess beforehand to what extent prospective migrants meet the requirements for skilled work.

Australia has traditionally been a country of migrants. Today, immigration has been tightened and all migrants are evaluated using a points system that includes an assessment of their skills and qualifications. In 2010, the Department of Immigration and Citizenship introduced a Skilled Occupations List with high-value skills that are in demand. It is reviewed annually. Prospective migrants have to prove that their qualifications are equivalent to the Australian qualifications required for these occupations.

Russia hosts many migrants who are attracted by the country's growing economy. In 2012, the Russian Agency of Strategic Initiatives developed a road map for a national system of competences and qualifications that aims at 25 million highly productive workplaces in 2020. This must keep Russia in the race with other BRICS[21] countries. According to the road map, Russia needs to recruit and test an additional one million qualified migrants. The road map builds on a national public-private partnership for improving the investment climate in the Russian Federation.

Improving progression and the permeability of systems

Can progression in education and training and the development of new pathways be improved by changes to qualifications or the qualifications development process?

A qualification is no longer just a proof that you can carry out a set of tasks. It also confirms that you are ready to progress into other levels of education or training. This has implications for the individual subjects that make up the qualification. More general topics increase in importance as the qualification no longer just serves to prepare a person to take on a specific occupation.

Flexibility through clever design

Some vocational qualifications offer only limited access to further learning or career development. Sometimes this is because they only narrowly prepare for one specific occupation. But it can also be due to the narrow range of stakeholders involved in the design and awarding of the qualification.

[21] BRICS is short for Brazil, Russia, India, China and South Africa.

Units and credits are tools that make it possible to recognise learning at shorter intervals and to tailor learning better at the specific needs. As such they also make learning less costly, both in terms of money and time. They help to maintain the motivation of learners but also the flexibility of the learning process.

In vocational qualifications and in qualifications frameworks, units and credits can also make the options for progression more transparent and less abstract. This too supports motivation and flexibility. Credit transfer is an important part of the way some frameworks facilitate portability. By ensuring that units are admitted to a framework, they can be combined in different ways to build qualifications which are suited to both current and future needs of learners.

Units and credits can also make it easier to recognise specific elements of prior learning and thus give credit and exemption for previously validated or certificated learning

The issue of progression is more closely related to the curriculum than to qualifications. Competence-based qualifications can be difficult to compare with traditional curriculum-based qualifications. Competency-based VET qualifications are often developed by different sectors, rather than by a centrally established entity. Sectors emphasise what they think is important in qualifications but do so with the labour market in mind, more than continuing education. Traditional vocational qualifications are more attuned to progression.

Vocational qualifications and curriculum reforms are not without risks and can have unforeseen results. Many governments have attempted to address the different interests of learners and develop VET qualifications that are broad as well as relevant. The General National Vocational Qualifications in the UK were such an example that failed. They were discontinued in 2007. Other countries with school-based vocational education systems developed vocational qualifications that became a gateway for progression to higher education rather than the labour market. In the former Yugoslav Republic of Macedonia, 75% of the graduates of four-year secondary VET programmes go on to higher education.

Access to higher education

In Maastricht in December 2004 EU Member States committed themselves to better linking VET and higher education.

This had implications for the design of VET curricula. These should no longer just cover competences associated with work but also prepare for possible progression into other forms of education and training, including higher education. Learning outcomes-oriented qualifications can serve to provide learners with a formal qualification that will allow them to enter higher education. Where credit systems exist, they can also provide an alternative route into higher education for those who do not or cannot reach higher education via more traditional pathways, such as general upper-secondary education.

Today in the EU, the distinction between vocational and general tracks is becoming less clear. The share of vocational programmes devoted to generic competence development is increasing and vocational programmes are being broadened to avoid overspecialisation. The number of students who progress from VET to higher education is slowly growing, but in most countries upper secondary VET still mainly prepares for labour market entry.

That said, the differences between countries are quite considerable and therefore the need for changes is quite different too. In countries where tracking is not very strong, such as in Ireland, there is a risk that reforming upper secondary provision confers a universal right for university entry. In strongly tracked systems, such as the German system, bridge courses for lower level VET or double qualifying pathways for technical routes are required. But bridge courses mean that students spend more time in education while the general political trend is to make education more effective so as to reduce the total time spent on it.

Country examples

In **Georgia**, the NQF is less than two years old and its implementation remains a compromise with existing legislation on access to key education cycles, most notably higher education. The parts of the framework that relate to vocational education and higher education largely run in parallel with little permeability. This poses several concrete difficulties. Despite the ambition of the NQF's authors to minimise dead-ends and to make learning outcomes the cornerstone for qualifications, current legislation hinders the portability of credits from pre-tertiary VET levels to tertiary VET. Similarly, credits cannot be taken from the highest VET level to the first cycle of higher education. The determining hurdles in progression from level III to level IV are the successful completion of a secondary school leaving exam and a general skills test which is part of the 'Unified National Exams' for higher education. Most students on the VET track entered this with only basic education.

Conversely, VET level IV can only be reached through successful completion of VET level III, effectively blocking access for students from secondary general education. These have to make excessively long steps back into the VET track.

Although the legislation allows the acquisition of a level III qualification through validation of prior (non-formal and informal) learning, the practical mechanisms for validation are not in place. In practice it is therefore impossible.

Evidence shows that such barriers in progression discourage learners and may contribute to inefficiencies, such as drop-outs from key levels that effectively still are dead ends, such as the tertiary VET levels.

Azerbaijan issues qualifications to vocational lyceum graduates that allow them to take part in the university entrance exam. The flip side of this has been that is required much more general education to enter the vocational curricula.

Turkey has its colleges (meslek yüksekokulu) or MYOs as a route for students who do not pass the university entrance exams. The MYO certificates are difficult to define as a qualification. The general expectation of its students is that they can enter higher education at a later point but in practice only 10% do. At the same time, the MYO is seen more and more as a vocational degree, which is why its vocational aspects are being strengthened. Students are now required to spend more time in companies and MYOs are increasingly linked to occupational standards. In order to facilitate progression to a Bachelor the academic side of the MYO is important, but for those students who will not pursue that route, practical skills are more important. With the growing demand for higher

> education in Turkey, there is a tension between the needs to widen provision and gradually enhance quality against simply meeting Bologna requirements and maintain quality across the board.
>
> It is difficult to kill two birds with one stone. The vast majority of VET graduates from the four-year VET programmes in the **former Yugoslav Republic of Macedonia** continue their studies in higher education, but those entering the labour market feel ill prepared.

In conclusion, it can be argued that simply redesigning a vocational qualification to ensure that it can facilitate progression to further education is quite a tricky task. In order to stimulate progression, improved qualifications can only be part of a broader set of support measures.

Developing navigation systems for vocational qualifications

Although learners are the consumers of education and training programmes and qualifications they rarely have any influence on the offer and contents of qualifications. They are often poorly informed about expected learning outcomes and the career options that they offer. Vocational qualifications are changing, but communicating these changes requires good marketing among learners and employers.

Information, guidance and counselling systems in the ETF partner countries are often weak. Sometimes they simply do not exist. As new vocational qualifications are developed, this is an area that must be developed too. If individuals are to maximise the benefit of new vocational qualifications, they must be told what they can do with them and how they can use them.

It is important to distinguish between guidance and counselling before entering a programme and during this programme. The former focuses on the global education choices to be made: broad profiles, rather than single occupations. The latter focuses more on efficiency gains: which choices would fit better with the potential and opportunities of each individual?

From the learner's point of view, the range of qualifications on offer and the ways in which these relate to each other can be confusing. As we saw above, some learning pathways can lead to dead ends, which can weaken commitment to further learning. Guidance and information form a crucial part of promoting permeability. While they do not necessarily need to know about the qualifications framework itself, learners have to be informed how they can plot their training pathways and this information has to be accessible and understandable to them.

Career guides and counsellors need to be aware of vocational qualifications and the opportunities they offer, but they need to be unbiased and cannot be used to promote and market new vocational qualifications.

Targeted information about new vocational qualifications must also find its way to providers, employers, families and individuals. Web-based navigation systems are a possible tool. Most guidance tools provide information on training programmes and providers, but there is also a growing interest in systems that provide information on qualifications. A number of examples are available.

The French *Répertoire Opérationnel des Métiers et des Emplois* (ROME) was a first generation tool that linked competences, sectors, jobs, qualifications and information about providers. The German employment service has developed *Berufenet*[22] which builds on similar ideas. The Learner Record Services[23] in the UK have been set up to help learners to keep track of their own achievements and to show them different pathways for lifelong learning. It builds on the idea of the National Learning Record Database that was first developed in South Africa. Job Outlook[24] in Australia provides information on the prospects for hundreds of occupations.

Changing qualification systems and opening new pathways will often benefit groups that previously were unable to make career changes or had been unemployed because they had relevant skills and competences but nothing to show for it. Such groups may not be aware of what new options they have or even that new options have become available at all. As a result, all changes to qualification processes will need to be accompanied by targeted guidance and counselling. This is not always well understood.

More guidance and counselling will be needed when qualification systems become more fragmented and less transparent, for example when new providers start to issue vocational qualifications for different groups of learners. This may eat away at the economics of a liberalised education and training market unless guidance and counselling can be commercialised too. But this, in turn, might jeopardise access of vulnerable groups to such services, while it may indeed be them that need guidance and counselling most.

Country examples

Career education in **Turkey** is probably the most advanced among the EU neighbouring countries, where it is included in class guidance programmes in all types of schools and integrated with personal and social education. For all grades of secondary education, class guidance programmes have been introduced. These class guidance programmes are compulsory to prevent the use of these hours for other purposes. Teacher handbooks were introduced in 2000 to guide teachers through in-class activities in grades 9, 10 and 11. School guidance counsellors also offer support. On average, half of the guidance programme and the handbooks cover educational and career guidance topics and activities.).

The population of the **Russian Federation** is aging quickly. Today there are a quarter fewer pupils in schools than during Soviet times. In spite of this, Russia is potentially a dynamic growth economy, doing much better than its neighbours in the former Soviet Union. Guidance and counselling are considered strategically important because they can help to ensure that sufficient numbers of qualified professionals remain available. According to a road map for a national system of competences and qualifications developed during 2012 by the Agency of Strategic Initiatives, information, and guidance and counselling should start before young people choose their studies and support options for career development. Some Russian colleges and universities have already developed web portals that show all occupations for which they offer training and different career options of their qualifications.

[22] See: http://www.berufenet.arbeitsagentur.de/
[23] See: http://www.learningrecordsservice.org.uk/
[24] See: http://joboutlook.gov.au/

Conclusions

We said at the beginning of this chapter that we lack evidence to draw really firm conclusions about impacts on individuals so far of VET qualifications reforms in our partner countries. But we have some indications and so set out here some observations.

Most individuals will change career paths several times in a lifetime – so qualifications should balance core with more vocational skills. Unit-based qualifications are time and cost-efficient in development and versatile - they can be more easily developed, combined in many different "whole" qualifications, and allow learners to learn at their own pace without the requirement to undertake a full-length programme. Closely related, credit systems also support learner choice.

So we are encouraging flexibility in the qualifications themselves. Flexibility should also be maintained in systems so learners can move between providers and types of provision, especially between HE and VET. Early tracking – assigning students to one track or another too soon in their educational careers - should be avoided.

Countries should design qualifications and build qualifications systems which are recognised at home and abroad, so arrangements should allow for transparency, comparability and portability. Migration is commonplace but a fair and accurate matching of qualifications and competences to jobs is not. NQFs when linked will help this transparency and comparison and comparability. But the EQF and ECVET are still being implemented – many countries have still not referenced – so we are not able to state this as hard fact. Bear in mind, too that some countries with established QFs, such as Australia, use them as gatekeepers, as much to keep people out as let them in. To ensure portability countries therefore also have to develop dialogue with receiving countries or via wider international agreements (multilateral arrangements are preferable).

Most partner countries are in the early stages in career guidance but should develop guidance services in order to make it easier for individuals to choose their qualifications and pursue career objectives, beyond single qualifications.

NQF processes act as catalysts for wider VET reforms by commanding stronger involvement of different actors, a shift to learning outcomes and focus on competences. These developments are very visible in the partner countries. What is not yet visible is a long-term vision to enable citizens to do make better use of the full career and learning potential of their qualifications. This requires more attention in the years ahead.

Chapter 7 Recommendations

Start now

We urge countries to start work. Many partner countries have now made the decision to build an NQF for quality assured qualifications, or started its design, passed a law, or established coordinating institutions, and almost all have started to develop occupational standards. Yet these new frameworks are still largely empty of qualifications. This needs to change - frameworks need to be populated urgently with either new or revised vocational qualifications, otherwise they will not have any impact.

There are no perfect systems and because qualifications will be reviewed after some time and you will have a chance to correct the elements that are weak, it is actually easier to start the process, rather than to get stuck into complex exercises of conceptualising and planning the process and methodologies in detail. Experience shows that methodologies are changing and evolving in all the countries that have established outcome-based vocational qualifications.

Planning on paper has its limits as the development is not a technical process that only depends on a single actor. Developing qualifications is a collaborative process and countries have to use a learning by doing approach. Start with the easy qualifications, such as the smaller certificates for adult learning - not with the most important ones.

So start developing qualifications. Don't wait or plan for perfect conditions. Move off the start line rather than spend time on extensive theoretical debate.

Use one single definition of what a qualification is

That said, one overarching definition for qualification should be used - move away from curriculum-defined qualifications to qualifications that are defined by identified needs and compatible with the EQF definition of qualifications. This implies that all qualifications have to be based on learning outcomes.

"Qualification" means 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 given standards.

Integrate occupational standards into the national qualification system

Most partner countries have decided to develop occupational standards to define the needs of the labour market. Occupational standards can be used for many different purposes but if available they should be used for informing vocational qualifications. It is important to integrate them into the national qualification systems. The occupational standard process often starts independently of the qualifications development process. This means that it is necessary to streamline the production of occupational standards to the development of vocational qualifications. Standards are not automatically used for developing vocational qualifications, as we have seen in many countries.

Vocational qualifications can be developed from one, or more occupational standards and from parts of occupational standards. Only few vocational qualifications are based on a single occupational standard.

Translating the work-related competences from the occupational standards into learning outcomes is not an easy process. Vocational qualification types can be useful in ensuring that the purpose of the vocational qualification is clear and can standardise how the occupational standards are used to develop specific qualifications.

Build quality assurance systems

Trust in vocational qualifications is limited in all partner countries. Therefore a self-regulatory approach whereby different sectoral bodies, providers or awarding bodies submit qualifications for inclusion into the NQF without oversight will not work. In order to compensate for lack of trust, there needs to be a robust system of regulation and quality assurance, with external validation if we want to have more trust in qualifications. It is important therefore that countries consider what makes a good qualification and define criteria that can be used to determine if a qualification is good enough for the NQF. Suggestions for criteria can be found in chapter 3.

Quality assurance systems that are imposed top down have a tendency to become very procedural and bureaucratic, and do not encourage the implementing actors at "lower" levels to provide feedback on the issues that go wrong, or don't work well. This means that these systems cannot improve themselves. It is therefore important that quality assurance systems are based on collaborative models, granting responsibility to the implementing actors while observing commonly agreed guidelines. Feedback and suggestions for improvement as well as regular review processes should be encouraged, to build a quality culture.

Quality assurance systems are often identified narrowly with the accreditation of providers, but alone this is not a guarantee of the quality of the qualifications. In the end it is not the provider but the individual who is certificated. Hence, institutional accreditation processes only have limited value in assuring the quality of the assessment and certification processes. It is important that all institutions involved in assessment and certification systematically collect feedback and undertake regular review to improve their processes.

Engage the labour market

Vocational qualifications are meant to certify that individuals can perform specific professional skills in the labour market. This requires that they are defined involving those actors that understand the needs of the labour market. In all countries it is important to move beyond the ad-hoc involvement of representatives of the labour market to structural involvement, e.g. through sector skill councils. These bodies should get a real role in the development of qualifications, beyond an advisory function. If we want real involvement of the private sector, we must give them the opportunity to make decisions.

Build or designate dedicated bodies to lead on qualifications

Countries should not rely on the expertise of donors or foreign experts, but should build capacity and tell the donors what you want from them. Take control - designate a lead institution - it does not have to be built from scratch, an existing one can serve. Staff it with professionals whose sole or principal concern is qualifications.

Diversify assessment

With the introduction of NQFs and outcomes-based vocational qualifications, assessment needs to assume a more prominent role. It is the individual who is certificated through the qualification and not the curriculum or the provider. Without assessment of the individual against the qualification, it has no real value. This means that assessment in formal education needs to change and be brought into line with the learning outcomes in the qualifications standards. This means that that the range of methods used is increased, beyond traditional oral, paper and pen, and manual dexterity tests, to demonstrate competence in different situations.

In order to ensure coherent and fair assessment of candidates against the same national standards, it is important that assessors are competent in the appropriate field as well as in assessment methods. Involvement of practitioners from the field can increase trust.

To facilitate lifelong learning it is important that systems for the validation of non-formal and informal learning are established. In order to develop these systems there is a need for standards that clearly specify the learning outcomes and can facilitate recognition of partial qualifications. Unit-based qualifications are more useful and easier to assess than solid qualifications. Standards should clearly indicate when a person is competent.

There is a need for robust quality assurance processes. Competent bodies able and ready to issue certificates to successful candidates. It is important that partner countries pilot validation on a much wider scale. This can positively influence assessment processes in formal education too. The methods used for validation should be tried also in formal education. Candidates should have the possibility to appeal against the assessment results.

Develop national qualifications – limit the number of awarding bodies

When countries are moving towards systems for the recognition of lifelong learning, they are likely to increase the number of qualification types, qualifications and awarding bodies in the system. However, the increase in awarding bodies can undermine the familiarity of the public with the qualification. The number of awarding bodies should therefore never be allowed to a point where it becomes unmanageable and intransparent, that is where employers and learners do not understand anymore which qualification to trust or choose respectively.

Qualifications should drive curricula planning

Qualification types and individual qualifications are already setting a clear scope and specific learning outcomes for a curriculum. Partner countries should adopt the increasingly common EU trend to move away from highly centralised curricula to national core curricula, allied to more tailored implementation arrangements among providers which can respond to specific local needs and circumstances. This also creates the possibility for teachers to contribute more to the written and taught curriculum.

Always keep the individual in mind

Qualifications are tools to support the career and personal development of individuals. Qualifications need to be designed to be meaningful and attractive to individuals as well as employers and dead ends should be avoided at all costs. In order for individuals to benefit from them, information about qualifications has to be readily available on-line. The information should explain what individuals can actually do with these qualifications. Career guidance counsellors need to be consulted when new qualifications are introduced, to discuss what they are about and what they are for. Individuals should be informed if qualifications are obtainable in other ways than traditional training programmes.

Annex 1- Country Sheets

Georgia

The Framework

By order Nr 120 of 10/12/2010: "On the Approval of the National Qualifications Framework" the Ministry of Education and Science (MES) adopted the NQF.[25] The legal act consists of 5 separate annexes and takes its legal base from the Law on General education, the Law on VET, the Law on Higher Education as well as from articles of the General Administrative Code and the Regulation of MES. The VET Law defines the NQF as a "*document that unifies all qualifications existing in Georgia, including vocational qualifications*". The NQF is based on learning outcomes. These are described in three separate annexes covering sub-frameworks for general, vocational and higher education.

The NQF is a driving force for integration in the European Higher Education Area, for international recognition of Georgian degrees and qualifications and as such, for better learning and labour mobility. It is a response to international developments and is used to recognise and consolidate on-going reform processes. It also incorporates existing education structures as a result levels are by many still perceived as stages of training, rather than achieved levels of competence.

The NQF should make VET more responsive to labour market players and skills requirements. The VET law requires that VET programmes are based on occupational standards, and stipulates that internal and external quality assurance mechanisms for VET providers are implemented. An evaluation of the NQF and its components is planned in the new draft VET Strategy 2013-2020, and could occur indicatively in 2015.

The Ministry of Education and Science and the National Centre for Educational Quality Enhancement (NCEQE) led the NQF process and are responsible for implementing and maintaining the NQF. The NQF act only mentions MES and NCEQE and no other stakeholders. NCEQE is responsible for proposing updates of the list of qualifications (Annex 4 of NQF) to MES, and for quality assuring new programmes not yet reflected in the list of qualifications.

A multi-stakeholder Thematic Working Group on the vocational qualifications system was created in 2010 to support the National VET Council, hosting debates and providing inputs in the development of occupational standards; updates of the list of qualifications; changes to sector committees and inputs to the EU technical assistance project. The thematic group was coordinated by NCEQE.[26]

Government also established 14 sector committees, with a limited role in the design and review of occupational standards. VET providers are responsible for assessment and certification of individuals and subject to mandatory external and internal quality assurance procedures, in the form of authorisation and annual self-assessment.

[25] Available at: http://eqe.ge/uploads/LawsRegulaions/ENG/NQF_new.pdf

[26] Reports of the TWG are available at http://eqe.ge/eng/education/professional_education/themed_groups.

Definition, structure, types and levels of qualification

The NQF appears to have eight levels, although the legal act does not refer to eight explicitly. The vocational sub-framework (Annex 2) has five levels and the higher education sub-framework (Annex 3) has three. The general education sub-framework is not explicitly related to the eight-levels. The two sub-frameworks (vocational and higher) contain features that foster their separation rather than interconnection. For each level six domains are used to describe learning outcomes. These are a) Knowledge and understanding, b) Applying Knowledge, c) Making judgment, d) Communication skills, e) Learning skills and f) Values.

The NQF annex 3 defines higher education qualification as the "*learning outcome attainable through successful completion of an academic educational programme and is certified by a diploma, issued by the higher education institution. The higher education qualifications framework ensures the description of higher education qualifications through learning outcomes*". The higher education qualifications framework mentions four titles of qualifications: i) "Interim Qualification" (awarded upon completion of short cycle within first cycle); ii) "Bachelor"; iii) "Master"; iv) Doctor".

For VET only NQF levels are defined, and no titles are given. Level 1 VET qualifications are not considered full as they only provide an entry stage into an occupation with limited value for employment described in very simple learning outcomes. For most occupational areas there are occupational standards at each of the five possible levels. This proliferation of standards is problematic, as the NQF specifies that enrolment in each cycle (level) of vocational education is conditional to "*completion of the educational programme of the previous cycle or recognition of the knowledge, skills and values envisaged by the educational programme of the previous cycle*". In practice this means that all candidates have to start at level 1 in order to move up the ladder. This is an obstacle to progression and lifelong learning.

The VET law defines "qualification" as the "*level of mastering of vocational knowledge, skills and values that is confirmed by the vocational diploma, issued by the vocational educational facility*". Occupational standards are the central element of VET qualifications and a mandatory requirement for the preparation and approval of any VET programme. The NQF legislation stipulates that qualifications can only be legally awarded if they are part of the list of qualifications (Annex 4 of NQF).

Qualifications development processes

Occupational standards are used for describing occupational characteristics (functions) and learning outcomes that guide curriculum design. All VET curricula must be based on learning outcomes in line with NQF level descriptors and corresponding occupational standards. In 2011-2012 Georgia developed and registered 247 occupational standards.

There is an online register of occupational standards managed by the NCEQE informing key users and the wider public of the content and level of VET qualifications. The standards in the register are grouped in 9 groups. The group of "Engineering" includes over 50% of the existing 247 occupational standards. Interestingly, with almost 20%, the group "Fine Arts" is the second in number of occupational standards, followed by agriculture and business administration. [27]

All occupational standards of the first generation follow a common outline and were designed by working groups with active participation of representatives from industry, NCEQE, experts and some practitioners from providers. Drafts were submitted to a public consultation which in a number of cases resulted in useful

[27] This online registry can be accessed at: http://eqe.ge/eng/education/professional_education/occupational_standards_list

feedback and proposals from enterprises and employers' organisations. But the consultation process could not prevent that occupational profiles and learning outcomes are often considered too generic by employers and sometimes providers. The interaction with employers and industry are a critical factor to improve this: NCEQE cannot know the skill requirements for each occupation but employers lack the tools and competences to elaborate standards and qualifications. These problems are being addressed through capacity building.

In 2012, MES and NCEQE started a qualitative review of the structure and content of existing occupational standards, and of the overall VET curriculum policy and methodology. This review of occupational standards aims to redefine the place of occupational standards, liberating them from the large amount of education related information (credits, teaching); and deepening the formulation of learning outcomes and the allocation of levels to the qualification. This is part of a continuous process of improvement, which will gradually also placing qualifications at the appropriate NQF level easier.

Annex 5 of the NQF specifies the "procedure of formation of qualifications". The annex is very short is stipulating 2 main rules: 1) Only qualifications included in the list of qualifications can be legally awarded; 2) NCEQE is the entity that makes proposals regarding updates of the list of qualifications. If an institution proposes a programme leading to a qualification that is not listed, NCEQE has the discretion to approve the programme via the established quality assurance procedures. Since its adoption in 2010 the list was updated once in 2012, for which NCEQE used feedback from employers and VET providers, and notably from Sector Committees.

In 2008 the National Professional Agency created in 2008 was in charge of designing and managing qualifications, supported by 13 sector committees. The agency was closed down within a year. Renewed activity with 14 sector committees under the coordination of NCEQE started in 2011. The sectoral committees aim to contribute systematically to the design and further development of the qualifications system (catalogue of qualifications, occupational standards) aligned with labour market requirements. The efficacy of the committees varies and real involvement of employers is far from stable. The state and international organisations remain the driving forces pursuing matching between education outcomes and labour market needs.

The 14 sector committees are organised differently from the 9 categories of the online register of occupational standards. They cover: Agriculture; Architecture; Arts; Business Administration; ICT; Construction and Environmental Engineering; Energy and Commerce; Health; Marine, Railway, Airline, Road Transport; Mass Communication and Journalism; Machine building, Technology, Metallurgy and Material Science; Mountain and Geo-Engineering; Science and Natural Science and Tourism.

The authorities and business organisations opened the discussion on a more autonomous role for *sector committees* in developing and adopting occupational standards for their occupational areas, but progress is slow. Sectoral committees will first need to develop capacities for ensuring the quality of occupational standards and their interface with qualifications and curriculum, and in analysing skills changes and future demand.

The use of qualifications in the education sector

The amended VET law defines: "*Vocational educational program – educational program that is oriented on elaboration of practical knowledge, skills and values and ends with assignment of vocational qualification of appropriate step and issuance of diploma that confirms it. The program unites training courses/modules,*

necessary for receiving of qualification. It defines aims of program, results of learning, workload of students in credits, teaching methods and forms of evaluation; (21.07.2010. #3529 shall enter into force from September 1, 2010)"

With the NQF-related reforms Georgia has structurally linked VET curriculum with occupational standards. Learning outcomes represent this mandatory link, as all VET programmes are checked by the competent body for compliance with the legal framework, notably: level descriptors stipulated in the NQF[28] and the work-related competences of occupational standards.

VET programmes are designed at provider level**.** This ensures a degree of flexibility for the authorised VET providers, all of which still must undergo annual self-assessment, but programmes also need to comply with the NQF. This diversity is reinforced by the fact that the private providers largely exceed the number of public providers, of which some are VET colleges, and others VET community colleges and higher education institutions.

Curriculum reform since 2010 is based on occupational standards. This has its roots in the VET law of 2007 that introduced shorter 1-1.5 year programmes, strapped of their general education contents. The consequence has been a decrease in younger learners, who are too young to work upon graduation, but are also unable to progress in formal education.[29] After the adoption of the reform-oriented NQF and the amendments to the VET law in 2010, all VET qualifications were aligned with the 5-NQF levels. VET curricula had to comply with the level-specific learning outcomes. Credit value replaced time duration, but credits remained pegged with workload, rather than with learning outcomes.

With the support of international assistance VET curricula were improved in content and structure in 2012 and curriculum developers in Vet institutions were trained in using a common methodology. For a number of pilots, DACUM was used to formulate more detailed learning outcomes, introducing performance criteria and improving the approach to learners' assessment, but the pilots could not be tested as it lacked a legal basis.

In 2013 MES and NCEQE decided to shift completely to modular VET curricula starting 2014-2015. At the time of writing one pilot VET programme has been modularised ("Textile products specialist", level 3), coupled with continued development of the methodology and capacity building. The proposed methodology builds further on occupational standards, learning outcomes, and performance criteria. There is nevertheless an enormous challenge to mainstream these developments.

Assessment and certification

Learners' assessment is still less regulated and standardised than curriculum design. Currently the award of a qualification in formal VET requires successful passing of written tests and practical demonstration of competence, before an assessment committee including teachers and representatives from enterprises. The typical VET programme includes approx. 40% of credits for practical learning, which is still mostly performed in the workshops of providers. Sector organisations and Chambers are not yet systematically involved in the award of qualifications, except in specific fields, such as Maritime occupations.

The NQF contains no explicit reference to validation of non-formal and informal learning. Validation on non-formal and informal learning is nevertheless foreseen in the VET Law of 2010 (Art.10) which stipulates that *"State recognition of informal vocational education is performed in accordance with the order, defined by the*

[28] Access NQF at: http://eqe.ge/eng/education/national_qualifications_framework
[29] Unless they pass external exams or go back to secondary school, but these cases seem to be rare.

Government of Georgia and aims checking of knowledge, skills and values of a person having informal education. The second paragraph of the same article states that *"Recognition of vocational education, received in informal way is inadmissible for level 4 and 5".* There are some successful cases of validation of skills of returned migrants (e.g. in construction), after a process combined with short training in a VET college.

The MES Order (February 2011) specifies the requirements for authorised bodies, supporting documents, conditions for submission, decision-making processes and specific features for recognition at VET level 3. In 2012, NCEQE proposed more detailed recommendations for educational institutions. NCEQE held discussion meetings with VET institutions to clarify concepts such as the definition of learning outcomes in self-assessment reports, grading system, conditions for partial recognition, and organisational issues.

Contribution of the qualification system to lifelong learning

The reforms in the wider qualification system have not solved the obstacles for progression within the VET system and from VET to higher education. In the contrary, it has created new barriers as has been described above. Although the legislation officially allows a qualification of level 3 to be awarded via the recognition of prior non-formal and informal learning, the practical mechanisms for implementation of this process are not yet in place. The authorities have been adopting temporary and partial solutions to bypass obstacles to enrolment (e.g. into level 4 programmes), which would otherwise result in wide negative societal visibility. These barriers discourage learners and may contribute to inefficiencies such as dropouts from key levels (notably from level IV to V) as progression to first cycle higher education is linked with a further barrier. Statistical data that can confirm these effects are currently not available.

On the positive side with the curriculum reforms of 2007, many more adults have enrolled in formal VET programmes, attracted by their shorter duration and relatively improved position in the competition for jobs. According to a tracer study of 2012, a predominant share of 2011 graduates from VET levels 1 to 3 entered after secondary (60%) and higher education (15%), while the remainder were younger entrants after basic education (9 grades).

Country Sheets

Kosovo

The Framework

The Kosovo NQF was adopted by law in 2008. It consists of 8 qualifications levels and is a comprehensive, lifelong learning framework so that its descriptors are intended to accommodate all types of learning contexts and experiences: general education, higher education, vet; and formal, non-formal and informal. The NQF descriptors are learning outcomes-based. They are influenced by the EQF descriptors and indeed relating the national qualifications system to the EQF was a motive in establishing the Kosovo NQF. The VET qualifications within the NQF are regulated by the National Qualifications Authority (NQA).
The Kosovo NQF is in the implementation phase; currently, it is being populated with qualifications.

Definition, structure and levels of qualification

The 2008 Law on National Qualifications defines a qualification as "…an official recognition of achievement that recognises completion of education or training or satisfactory performance in test examination". Other documentation, such as the NQF Handbook makes a clear distinction between qualifications on the one hand and curricula on the other.
The NQF's 8 level s are intended to relate directly to the EQF's 8 levels, so that level 8 is the highest, open to HE, and VET qualifications.
VET qualifications, to be admitted to the NQF, or validated (the term used in the legislation), must be outcomes-based and consist of units/modules. 5 types of qualifications are defined in the NQF Handbook - HE, general, combined VET/general, skills-based qualifications based on nationally approved standards and skills-based qualifications not based on standards which are nationally approved.
Most VET qualifications currently offered are at levels 3-4.

Qualifications development process

The new outcomes-based, VET qualifications approved by the NQA are developed by private or NGO providers, the Ministry of Labour Vocational Training Centres and training centres attached to industrial concerns, and specialised public institutions such as the Police College. Ministry of Education schools – which cover the majority of VET students - remain, for the time being, excluded from applying for accreditation to offer outcomes-based VET qualifications as it is felt that the majority lack the capacity to meet the NQA's criteria.
Providers, to develop a qualification, must be accredited to do so by the NQA. Qualifications, to be approved by NQA for inclusion in the NQF, must demonstrate labour market demand, be based on occupational standards and be modular/unit-based in composition, in order to facilitate accumulation and transfer of credit. Providers apply to the NQA to undergo the accreditation and validation processes. The NQA's Board must endorse decisions of the NQA before validation is granted. In this way, the NQF has introduced a system of quality assurance previously absent.
The VET Matura, the standard school-leaving certificate taken by upper-secondary VET students, is the principal public VET school qualification.

The use of qualifications in the education sector

Outcomes-based qualifications development is still new. In some cases VET providers adapt qualifications from existing programmes, and it must be acknowledged that the number of accredited providers and validated qualifications remains small. The moves to outcomes-based qualifications, and related reforms to curricula and teaching, remains confined to this small number of accredited private or NGO providers and the Ministry of Labour Vocational Training Centres (which cater to adult returnees to the labour market). Most teachers, especially in the Ministry schools, are not equipped or trained to adapt to a more outcomes orientation. In effect, the Ministry schools are outside the modernisation process.

However, the new qualifications approved in the NQF are developed based on the national occupational standards, and the requirement to use a modular structure in qualifications development is influencing curriculum development. Outcomes approaches are widely accepted as the future.

Assessment and certification

Assessment is usually carried out by the providers/awarding institutions. NQA samples assessments through its verification procedures for most VET qualifications, while the Ministry of Education does so for the VET Matura. Certification is the responsibility of assessment institutions, but NQA then endorses all certificates which are to appear in the NQF.

The external verification procedures conducted by NQA essentially assess and validate the school's assessment decisions to ensure maintenance of national standards.

In many schools, especially those overseen by the Ministry, assessment methods tend to be very traditional i.e. formal, written examinations rather than based on a range of approaches (interview, practical tests, etc.).

Contribution of the qualifications system to lifelong learning

The thrust of the 2008 Law, the validation requirements of VET qualifications (unit basis, labour market demand) and RPL is to serve the learner or citizen. This approach is an attempt to break with the provider or supply-driven system of the past and which still prevails in many schools.

The NQF is lifelong learning in scope and opportunities for progression to related qualifications must be built into the design of any proposed qualification. The current obstacle for many learners, though, is simply the limited supply of qualifications e.g. none currently exist at post-secondary VET level.

While progression is provided for in the NQF, in practice transferring from a VET path to an HE programme remains difficult for students who wish to pursue this option. Existing programmes are mainly aimed at younger students learning full-time.

RPL is provided for and a new Administrative Instruction (secondary legislation) is due for signature at the time of writing. There is great scope for RPL in the country. During the country's recent history, a parallel underground system of education developed, resulting in many adults with useful skills which are not formally certificated. Additionally, many Kosovars work for periods abroad, and return home with useful skills, which are not formally recognised.

NQA's guidelines for providers seeking to develop new qualifications include the requirement that they must design qualifications in such a way as to ensure access and certification to RPL candidates.

Country Sheets

Tunisia

The Framework

In 1994, Tunisia developed an NQF that was composed of six levels. In 2010 a new NQF was approved but this has not been implemented yet. It is composed of seven levels, three of which are related to vocational qualifications.

Definition, structure, types and levels of qualification

In Tunisia there is no definition of qualification. Qualifications coincide with curricula. All of these which are designed using the competency-based approach are based on learning outcomes. A curriculum can cover any number of competences (specific and general). Each competency unit is assessed separately. To get a qualification, a learner should acquire all units of competence. This brings a degree of flexibility in the delivery of the qualification/curricula. Students can take longer to get certain competence awarded, when the fail the relevant assessment, but they can also seat at examination for a specific competence without attending the relevant course if they feel confident they possess the necessary knowledge and skills. This flexibility remains in the context of initial training, but follows the logic of a lifelong learning system and it has the positive effect of opening the mind of education professionals.

As mentioned above there is only one type of qualification related to initial training. Pilot projects on validation of prior learning have been carried out, but they haven't lead until now to legislative norming.

Qualifications development process

In Tunisia there is no legal basis for the qualification development process. For this reason needs analysis are not carried out on a systematic basis.

There are currently two different procedures for the development of qualifications, of which only one starts with needs analysis of the labour market and development of occupational standards. This first procedure is anticipated by an extensive analytical work done by sector federations which is composed of three phases:

- Sectoral studies
- Identification of new jobs or jobs requiring new training programmes
- Development of individual occupation standards (Analyse situation de travail)

On the basis of the training needs identified in the occupational standards the sector federations may require formally the development of new qualifications/curricula to the Ministry of Vocational Education and Employment. If this approves the request, the Centre National de Formation des Formateurs et d'Ingénierie de Formation (CENAFFIF), in cooperation with sector federation develops the qualification/curriculum dossier. This comprises the following elements:

- Study programme, expressed in terms of learning outcomes
- Pedagogical guide for trainers
- Organisational guide for principals
- Assessment methodology

Final approval is provided first by the same federation which has made the request and then by the Ministry.

At this point the qualification/curriculum is not yet accredited. Accreditation process (homologation) is in fact linked to the individual training provider which will request to include the qualification/curriculum in its educational offer. The provider will prepare a dossier which will is based on the qualification/curriculum developed through the competency-based approach by sector federations and CENAFFIF, but also include specific information on its own physical and pedagogical resources. Proposal dossiers are analysed by a labour expert who drafts a report. Both the dossier and the report are submitted to a commission composed of representatives of the employers' organisations (1/3) trade unions (1/3) and public bodies and ministries (1/3). If this commission approves the dossier, the Ministry is left with the final decision about its validation and if this is positive, an *arrête d'homologation* is published in the official journal, specifying the title of the qualification, the training provider delivering it and the corresponding level in the Tunisian NQF.
Although the approval of the commission and the Ministerial decision are two different procedures, in practise all qualifications/curricula approved by the commissions have been validated by the Ministry, making the second a formal step. It should be noticed that qualification/curricula developed through competency-based approach and based on labour market analysis mentioned before have almost never problems in getting accredited.

The second procedure is initiated directly by individual training providers. In this case the dossier is prepared without reference to occupational standards. The dossier goes through the same accreditation procedure, but in this case much this is much more selective.

The existence of two different procedures is linked to the complexity of the procedure for the labour market analysis and creation of occupational standards, which usually takes 18 months). Sector federations focus on major economic sectors, possibly in a growing tendency, and on specific jobs which are very strongly demanded by the labour market. On the contrary individual training providers tend to develop many qualifications/curricula for jobs have limited impact on employment.

The use of qualifications in the education sector

In Tunisia is not possible to separate curriculum from qualification. These are developed together through the competency based approach. The logical steps which links the development of occupational standards to the development of qualification/curricula are the same as those used by education systems where qualifications are defined as separate concepts from curricula. The use learning outcomes for the definition of all competencies/units which are part of the curricula and the development of specific assessment methodologies based on competencies and learning outcomes confirm the important role that qualifications/curricula have throughout the education sector.

It must be noticed that the teachers are still in the process of adapting their approach to the modernisation of qualifications/curricula

Assessment and certification

Each training provider has its own assessment procedures. These are a mandatory element of the dossiers which training providers have to submit to get the accreditation for a specific qualification/curriculum. For curricula/qualifications developed through competency based approach assessment procedures are heavily influenced by the concepts of competencies and learning outcomes.

All providers have to include in their assessment procedures an important role to the exams unit, established within the provider and in charge of carrying out the assessment of the specific competencies. The direct teacher of the student is in fact not involved in the assessment.

Private training providers have to set up jury of exams with the participation of a representative of the (regional offices of the) Ministry of Vocational Training and Employment.

Some pilots and plans have ventured into the area of recognition of the results of non-formal and informal learning but these have not yet been implemented.

Contribution of the qualification system to lifelong learning

The only way to get a qualification in Tunisia remains initial training. Pilot projects on validation of prior learning have been carried out, but have not scaled up until now.

Country Sheets

Turkey

The Framework

The development of a national qualifications framework in Turkey started from different initiatives that are now coming together. A higher education qualifications framework was developed after the proclamation of the Qualifications Framework for the European Higher Education Area in Bergen in 2005. The EQF descriptors for the levels 5-8 that were proposed in the EQF consultation document inspired the Turkish level descriptors for the HE framework that was formally adopted in 2010.

In the meantime another system was under the development that proofed to be the real motor behind the national qualifications framework, although it was developed outside the formal provision of general education, vocational education and higher education.

Since the mid-nineties Turkey has undertaken a series of initiatives to set national occupational standards, as minimal requirements for skilled workers. In 2006 the law on the Vocational Qualifications Authority was adopted that introduced a new quality assured system of national vocational qualifications based on national occupational standards. Economic sectors have been heavily involved in this system in developing occupational standards and qualifications as well as in the assessment of candidates from industry against the national vocational qualifications. The delivery of certificates based on training programmes is still to be developed through a system of accredited providers.

So far both VQA and the Ministry of National Education have been using the EQF level descriptors to determine the level of occupational standards, and qualifications.

Over the past four years government called for a system to recognise lifelong learning in several strategic documents and in 2011 the law on VQA was changed, mentioning an NQF in line with the EQF and making VQA responsible for its development.

All quality assured qualifications should become part of the Turkish Qualifications framework for lifelong learning that was consulted and finalised in 2013. At the time of writing it was not yet approved by government.

VQA, the Ministry of National Education and higher education institutions will be the principle awarding bodies in the new framework. An eight level structure of qualifications has been developed that go beyond the EQF descriptors. In addition there will be descriptors for all qualifications types that are part of the TQF. Common quality assurance guidelines are still to be agreed.

Definition, structure, types and levels of qualification

The amended law on the Vocational Qualifications Authority defines qualifications simply as “the knowledge, skill and competence possessed by an individual and recognised by the competent authority”. The qualification is not the same as the actual certificate, because the “vocational qualification certificate” has its own, separate entry and is described as “the certificate[s] approved by the Vocational Qualifications Authority and expressing the knowledge, skill and competence of an individual”

The TQF Concept paper (2013) identifies 19 different types of qualifications for which qualification type descriptors will be developed. The qualification types represent groups of qualifications widely acknowledged and utilised in the education and business community, which include similar learning outcomes and share common functions, size and orientations. The types are not associated with specific fields of learning. Four categories of qualifications have been adopted that can be used within types. They can be a principal qualification, a supplemental qualification, a qualification unit or a special purpose qualification. Type descriptors include also information on how key competences are addressed, what the typical assessment and evaluation methods are, how the qualifications are quality assured, what the entry requirements are, what progression paths exist, and what the most common career and employment paths are for people with that type of qualifications. The *TQF Concept Paper*[30] provides examples of qualifications at level 3, 4 and 7 to show how the types differ.

Qualifications development processes

Different processes are in use for developing qualifications, and the development and approval processes are expected to change once the TQF for lifelong learning becomes into force.

For higher education eight different qualification descriptors have already been pioneered to prepare qualifications, which include qualifications for three types of associate degree programmes (academically oriented and vocationally oriented degrees that are linked to an undergraduate programme of a university and self-standing vocationally oriented degrees of vocational colleges). There are also separate descriptors for vocationally and academically oriented bachelor degrees and master degrees) as well as PhDs. For different fields of learning national working groups have been established that define common outcomes as a guideline for qualification and curriculum developers. Links to specific programmes have been established that can be explored through a common register on the website of the Turkish qualifications framework for higher education[31].

In the National Qualifications System managed by the Vocational Qualifications Authority qualifications are developed from national occupational standards. First tripartite sectoral committees decide which occupational standards need to be developed, based on requests of sectoral organisations. Then a sectoral organisation representing either employers, or trade unions, or both voluntarily develops the occupational standard after signing a protocol with VQA and using the VQA methodology. The proposed standard is reviewed and validated by the sectoral committee and possibly adapted, before it is approved by the VQA executive board and published in the official gazette, making it a national occupational standard. From these a qualification is developed in a similar procedure, except that national vocational qualifications are not published in the Official Gazette. All occupational standards and vocational qualifications are published in a searchable database on VQA's website.[32]

The Ministry of National Education is responsible for qualifications for general education and for vocational high school diplomas as well as for "non-formal" education in the form of apprenticeships (journeyman and master certificates) and adult learning performed in the adult training centres of the ministry. The Ministry

[30] TQF Concept paper, April 2013
[31] http://tyyc.yok.gov.tr/

[32] http://www.myk.gov.tr/

has started to use occupational standards to develop modular curricula for school based VET and apprenticeship certificates, but there are no " national qualifications" that are quality assured based on common assessment requirements, like in the VQA system.

The TQF will need to bring the development and approval of qualifications and the use of qualifications in a common quality assurance framework. In the TQF concept paper there are proposals for the basic responsibilities of the Ministry of National Education, VQA and the Council of Higher Education, but the exact quality assurance arrangements could change these. The amended law practically nominated VQA as the National Qualifications Authority in charge of preparing, developing and updating the Turkish Qualifications Framework and gave VQA the power to ensure the quality of the vocational and technical qualifications. Designation of institutions and bodies responsible for ensuring quality assurance of other than vocational and technical qualifications, as well as the principles for the implementation of the TQF should be governed by a Cabinet Degree (art. 23A).

The concept paper on the contrary states that quality assurance of the general, vocational and academic qualifications shall remain under the responsibility of the Ministry of National Education in secondary education and under the Council of Higher Education in higher education. VQA shall be responsible for the quality assurance of the vocational qualifications which are outside the scope of the diploma programs. There is no legal basis yet that confirms this

The use of qualifications in the education sector

Qualifications and curricula are closely linked in the education sector. Curricula still drive the qualification process, rather than the other way around. But in VET occupational standards are used for curriculum development.

In higher education the use of fields of education and qualification types are used to develop curricula. For some vocationally oriented associate degree programmes occupational standards have been used. The continuing training centres of two universities have been authorised as VocTest Centres and use national vocational qualifications based on occupational standards for the recognition of prior learning.

VQA is preparing a system for the accreditation of training providers through authorised training accreditation bodies to make it possible to obtain national vocational qualifications through training. Curricula developed from national vocational qualifications will need official approval.

Assessment and certification

There is a national university entrance exam for people who want to enter university. The selection is very strict, given that there are not enough places to satisfy the demand for higher education.

Universities are responsible for the assessment and certification of students, but a number of quality assurance processes and bodies have been put in place to oversee these processes. A national independent quality assurance agency does not yet exist, but there are a number of quality councils for different disciplines. Recognition of Prior Learning has been impossible for many years, but is now slowly beginning in order to provide exemptions to students. Vertical progression is only possible for graduates from the associate degree programmes.

Sectoral assessment bodies called VocTec Centres or authorised certification bodies have been accredited according to the ISO 17024 standard for personnel certification and authorised by the Vocational Qualifications Authority for particular qualifications. They assess the skills of individuals in their sector. 11 centres have been accredited so far, covering around 80 qualifications out of the 221 that have been approved. The number of certificates that have been issued is till limited, but is expected to grow. 14 additional VocTest Centres are in the pipeline for accreditation and authorisation. This number needs to grow substantially in the coming years if Turkey wants to ensure national access to the validation of non-formal and informal learning, based on national vocational qualifications.

Under the Ministry of National Education assessment is still based on the curriculum rather than on qualification standards. Modules have been developed for teaching, but are not separately assessed. This is currently being reviewed by the Ministry as part of the EU project on quality assurance in vocational education.

Recently, the Ministry has started to pilot recognition of prior learning for 8 occupations using national occupational standards and journeyman and masters certificates. The use of the national occupational standards for RPL by the Ministry of National Education is being questioned as these standards are also at the basis of the national vocational qualifications that are issued by VQA.

It is foreseen that with the introduction of the TQF assessment and quality assurance procedures will be reviewed.

Contribution of the qualification system to lifelong learning

The TQF is seen as an important breakthrough in establishing lifelong learning systems in Turkey. Attainment levels in Turkey are considerable below the EU average, and the government is systematically working on raising participation in formal education, as well as in adult learning. So far the role of the qualifications in these efforts is not yet very clear. But it is expected that in the not so far away future qualifications will start playing an important role.

Annex - Further reading

There is a vast literature on qualifications. While preparing this study that is largely based on our own work with the partner countries, we have consulted many publications. Here below we are just mentioning a few that we consider interesting for further reading. Other publications are referenced in the text.

Bricklaying is more than Flemish bond, Bricklaying qualifications in Europe, *Michaela Brockmann, Linda Clarke, Christopher Winch (ed), 2010* provides a very useful comparative insight in bricklaying qualifications, curricula and institutional setting across the European Union, clearly documenting that there is more to qualifications than learning outcomes.

Changing qualifications, A review of qualifications policies and practices, Cedefop 2010, provides many important concepts that are useful in understanding qualification systems. It brings together many key ideas from the academic literature and perceptions on qualifications.

Curriculum reform in Europe, The impact of learning outcomes, Cedefop 2012 is a more empirical study that discusses curriculum reform developments in 32 countries and looks in particular how learning outcomes are used in the curriculum, in the planning, in the written curriculum and the taught curriculum.

The dynamics of qualifications: defining and renewing occupational and educational standards, Cedefop 2009, analyses the standards behind qualifications in the member states. It is to some degree a continuing on ETF's own work on standards at the turn of the century. Until 2000 ETF published four manuals on Development of Standards in Vocational Education and Training that were meant to inform the development processes in partner countries. They were followed as well by a World Bank, ETF and Ohio State University publication on A Framework for Defining and Assessing Occupational and Training Standards in Developing Countries.

ETF Yearbook 2007 quality in vocational education and Training: modern vocational training policies and learning processes looked in more detail at the teaching and learning processes in partner countries and is a useful source to understand the challenges of policy borrowing through international projects and the importance of building capacities and policy learning.

Qualifications that count: Strengthening the recognition of qualifications in the Mediterranean region, ETF 2009 looked at the value, use and potential of vocational qualifications in the partner countries in North Africa and the middle East.

How to teach vocational education: A theory of vocational pedagogy, City and Guilds, 2013. Although developed by one of the oldest awarding bodies of vocational qualifications in the world, there are surprisingly little explicit references to qualifications in this document that is written in an informal accessible style, explaining what makes teaching vocational education so special.