







QUALIFICATIONS FRAMEWORKS FROM CONCEPTS TO IMPLEMENTATION

Europe Direct is a service to help you find answers to your questions about the European Union

Freephone number (*): 00 800 6 7 8 9 10 11

(*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

More information on the European Union is available on the Internet (http://europa.eu).

Cataloguing data can be found at the end of this publication.

Luxembourg: Publications Office of the European Union, 2012.

ISBN: 978-92-9157-602-9 doi:10.2816/17557

© European Training Foundation, 2012.

Reproduction is authorised provided the source is acknowledged.

Printed in Italy

© Cover photos: ETF/A. Jongsma

QUALIFICATIONS FRAMEWORKS FROM CONCEPTS TO IMPLEMENTATION

FOREWORD

Dear Reader,

This study aims to provide insight into the implementation processes of qualifications frameworks in different contexts. The target groups are practitioners, policymakers and experts involved in the implementation of national qualifications systems reforms.

It has been developed by the European Training Foundation (ETF) Community of Practice on Qualifications for the international conference 'Qualifications frameworks: from concepts to implementation', which took place on 6 and 7 October 2011 in Brussels in the European Parliament.

The vast majority of the world's industrialised and transition countries are reforming their qualifications, while at the same time developing frameworks to relate these qualifications to each other and to generally reflect new demands in society and the labour market. More than just classification systems of qualifications, these frameworks try to strengthen the links and coherence between qualifications. The development of these systems is often linked to changes in higher education, technical and vocational education and training (TVET) and lifelong learning. The reasons for these changes and the impact on systems are subject to a widespread debate between experts but the trend is marked. The changes are described as a paradigm shift towards learning outcomes although the pace of change is slow and the impact is not yet clear. Some researchers have warned that the effects of these changes should not be exaggerated.

The ETF is neither encouraging nor discouraging its partner countries from developing national qualifications frameworks (NQFs). We have been trying to inform partner countries about these developments, and seek to promote policy learning with a strong focus on relevant qualifications, the need for cooperation between stakeholders and fit-for-purpose solutions. Qualifications frameworks can have a central place in qualifications systems, but in the implementation the real issues go beyond the descriptors, levels, learning outcomes, and are about linking up qualifications systems and stakeholders to discuss and decide what qualifications are needed, how they are developed, how they are managed and how they are used. The NQF process is a tool to kick start or speed up processes, bringing stakeholders together, building a common understanding and working towards agreed solutions, and this is affecting the vocational education and training (VET) reform in the ETF partner countries. Where these reforms will end is difficult to say, as they are not part of a linear process of working towards a single model, but much more a development process with the objectives, instruments and the role of stakeholders changing over time. Beyond the partner countries, similar developments are taking place in the European Union (EU), stimulated by the European Qualifications Framework (EQF) process, and around the globe in other industrialised, transition and developing countries on all continents.

Many of these qualifications frameworks are now growing out of their development phases and into implementation. That is why we want to better understand how frameworks are implemented. We intend to explore challenges and issues in areas such as governance, qualifications development, curricula and quality assurance. With this study we would like to bring more clarity into these issues, which could be relevant for all countries involved in these developments.

We decided that we needed a wider perspective on the implementation issues beyond our partner countries and the EU member states, to bring more value to the developments in partner countries. This study is therefore based on the experience of ten countries around the globe. It draws on ETF research, contributions from colleagues in the countries and international literature, including reports from Cedefop and the International Labour Organisation (ILO). The focus of the study is on the practical aspects of developing and implementing qualifications frameworks and their links to qualifications systems. Implementation arrangements are contextual. They may differ substantially from one location to another and they will change over time. They are different from each other even in what they consider relevant and trustworthy.

The study includes four of our partner countries, two contrasting models from EU countries, and four countries from other parts of the world. The countries are diverse in size and prosperity and are at different stages of development. We wish to explore common functions and try to understand why they are implemented differently, using living examples rather than abstract concepts. Information sharing and comparative analysis aim to inform the dialogue on NQFs. It stimulates countries to learn from each other's experience. The study does not intend to make any qualitative judgments on particular arrangements.

What we are interested in is how fit-for-purpose solutions are developed.

Good qualifications, whatever form they take, enable people to do more with their skills and competences. As such, the improvement of qualifications is the aim towards which frameworks are a tool.

This study is an improved version of the working document that was shared with the participants at the international conference 'Qualifications frameworks: from concepts to implementation' mentioned above, which was attended by representatives from 60 countries. The study has been extensively commented on by representatives from all the countries described as well as international experts. I am very grateful for these responses.

The conference showed that the study is providing a welcome contribution to the international literature on qualifications frameworks. The need to focus on qualifications rather than abstract systems was particularly appreciated. An NQF should become part of the DNA of a country's educations system, not isolated from it. The relationship between context, challenge and response is complex – as a rule, while national contexts remain diverse, challenges are similar, but responses – in the shape of implementation arrangements and the systems established – vary.

In the conclusions of the conference Pierre Mairesse of the European Commission highlighted the risk in building systems for the sake of systems – countries need to look at impacts on institutions e.g. schools, colleges, employers – and individuals. What impact do qualifications frameworks have on their lifelong learning opportunities, on their employability? Participants agreed that relevance includes relevance to the labour market and making qualifications attractive to learners.

Qualifications based on learning outcomes can be more useful to learners, but the use of learning outcomes and associated systems such as validation remains in many countries in its early stages. There is a need to support application of learning outcomes through engaging teachers, school leaders, etc. in their development.

We clearly need to intensify the sharing of experiences between practitioners involved in these reforms. There is a need to coordinate and join international research and actions to support the reform of qualifications systems. Because many of our partner countries are involved in these reform processes, the ETF is committed to continuing its support to these developments for as long as they take. This study is only a step in these developments.

I hope you will find the study useful.

In order to share your views and experiences I would like to invite anyone who is involved in the implementation of qualifications reforms to join the Qualifications Platform which provides a vehicle for continuous dialogue between practitioners. For more information on the platform, you can write to qualifications.platform@etf.europa.eu.

Madlen Serban Director, ETF

3

CONTENTS

FOREWORD

I. A	PPRO	DACH AND METHODOLOGY	
1.	KEY	ISSUES AND ASSUMPTIONS	7
1.1	Sour	ces of information and analytical framework	7
1.2	Key	questions	8
1.3	Intro	duction to the issues	8
1.4	Diffe	erent contexts and different stakeholders	11
1.5	Rese	earch questions	17
II. T	HEM	IATIC ANALYSIS	
2.	DEV	ELOPING AND MAINTAINING QUALIFICATIONS	<u>19</u>
3.	USII	NG QUALIFICATIONS	<u> 25</u>
3.1	Asse	essment, validation and certification	25
3.2	Impl	ications for the provision of education and training	31
4.	coc	ORDINATING QUALIFICATIONS FRAMEWORKS	3 <u>5</u>
5.		SS-CUTTING ISSUES: COMMUNICATION, QUALITY ASSURANCE AND OURCES	41
5.1	Com	nmunication	11
5.2	Qua	lity assurance	13
5.3	Reso	ources	16
6.	KEY	FINDINGS AND ISSUES FOR FURTHER ANALYSIS	19
6.1	Key	findings	— 19
6.2	Issu	es for further analysis	51
ANN	IEXES	S COUNTRY SHEETS	53
Anne	ex 1.	Australia	53
Anne	ex 2.	Chile	54
Anne	ex 3.	England	55

BIBLIOGR	APHY	69
ABBREVIA	ATIONS AND ACRONYMS	67
Annex 10.	Turkey	64
Annex 9.	Tajikistan	63
Annex 8.	Namibia	62
Annex 7.	Morocco	61
Annex 6.	Malaysia	60
Annex 5.	Kosovo	59
Annex 4.	France	57

I. APPROACH AND METHODOLOGY

1. KEY ISSUES AND ASSUMPTIONS

The purpose of the study is to obtain a better understanding of NQF implementation arrangements, and the role of stakeholders and institutions in these arrangements. This will enable the ETF to improve information and support to partner countries and contribute to mutual understanding of reform processes.

The target group of the study is first of all practitioners worldwide who are involved in the development and implementation of NQFs. A wider audience including education and training policymakers, social partners, education and training providers and experts who have an interest in NQFs can also benefit from the information and analysis in this study.

While there has been much debate about the usefulness of NQFs, or their underpinning concepts such as learning outcomes, this study will not address such issues. Taking the development of NQFs as a reality, the ETF intends through this study to deepen our understanding of their diversity, looking in particular at the social and institutional arrangements around NQFs.

The links between frameworks and the wider qualifications systems around them are important in understanding how frameworks of qualifications influence and change the role of stakeholders and institutions. So this study is about how countries develop relevant qualifications that can eventually be linked and classified, and how frameworks support these processes and objectives, not the NQFs as instruments in isolation. Qualifications are central and therefore we prefer to speak in this study about frameworks of qualifications. Qualifications may be useful without a framework; a framework is never useful without qualifications

Frameworks of qualifications are intimately linked to the qualifications systems they comprise. As such, they differ quite widely from country to country. But they seek solutions to a number of key questions that they all have in common. For the purpose of this study about the arrangements between stakeholders and institutions in different countries, a number of these questions were taken as a starting point.

1.1 SOURCES OF INFORMATION AND ANALYTICAL FRAMEWORK

The study covers ten countries: four ETF partner countries – Kosovo¹, Morocco, Tajikistan and Turkey; two EU member states – England as a distinct case within the UK

and France; and four countries from other geopolitical regions – Australia, Chile, Malaysia and Namibia. Practice in these countries illustrates key processes linked to the implementation of NQFs.

The study is mainly based on country surveys, a review of existing literature on the implementation of NQFs (including reports from Cedefop and the ILO), official sources of information from the countries and discussion directly with contact persons in the countries. These were mainly key people in the qualifications field in their respective countries, often working in the qualifications authority. They were asked to indicate milestones in a timeline and to identify actors involved in the implementation of the NQF. The information and data of the ETF partner countries is also based on ETF expertise developed through its work with partner countries on qualifications and qualifications frameworks. The document analysis was complemented by a survey to generate empirical data on how qualifications frameworks are implemented in various contexts.

Questions were formulated to cover the following issues related to the implementation of qualifications frameworks:

- qualification development,
- assessment, validation and certification,
- education and training provision,
- framework coordination,
- cross-cutting issues, such as communication, quality assurance and resources.

Not all questions were relevant to each of the greatly different contexts and realities in the countries that were the subject of this study. The aim, however, was to cover as many aspects as possible, not so much to compare the countries as to identify similarities and differences in arrangements for implementation of qualifications frameworks that are currently applied and under further development. The questions also addressed some of the social processes accompanying implementation of NQFs in terms of institutionalisation, looking at aspects of legitimation and social control.

The draft study was presented as a working document at the NQF conference mentioned above, where participants were able to comment on the study. In addition, all stakeholders from the ten countries were invited to comment on the working document and, on the Qualifications Platform, community members have been given the chance to react to the document. Therefore, the present study is the result of close consultation with stakeholders and experts.

1.2 KEY QUESTIONS

The questions that confront framework developers around the globe can be grouped into three key processes.

The development of qualifications

- What qualifications are to be included in a framework (or a system)?
- How are these qualifications developed or adapted for use within the framework?
- How are these qualifications approved, maintained and updated?

The use of qualifications for different purposes

- How are qualifications used in assessment and certification?
- How are qualifications used in education and training delivery?

Coordinating and managing a qualifications framework across subsystems

- How is the qualifications framework coordinated?
- How are the structure and functioning of the framework, as well as the qualifications it comprises, communicated to users and beneficiaries?
- How is the quality of all related processes assured?

From the above can be distilled a series of key issues that all require a brief explanation, both to set the scene and to introduce our starting assumptions on these.

1.3 INTRODUCTION TO THE ISSUES

A paradigm shift to outcomes-based learning?

A paradigm shift from education based on inputs towards education based on learning outcomes is taking place. Outcomes-based learning is a widely used term. According to the study *The shift to learning outcomes* (Cedefop, 2008), this is important for a number of reasons.

- It shifts focus from providers to users of education and training. By explaining what a learner is expected to know, understand or be able to do at the end of a learning process, individuals will be better able to see what is offered in a particular course and how this links with other courses and programmes. It is also an effort to increase transparency and strengthen accountability of qualifications for the benefit of individual learners and employers.
- It introduces a common language making it easier to address the barriers between different education and training sectors and systems. If lifelong (and lifewide) learning is to become a reality, there is an urgent need to see how learning acquired in one setting can be combined with learning acquired in another. In a situation where lifetime jobs have become exceptions and where moving between work and learning has become a significant factor in most people's lives, learning outcomes may help to reduce barriers and build bridges.
- It also provides an important tool for international cooperation, allowing us to focus on the profile and

content of qualifications, rather than on the particularities of the institutions delivering them.

Our experience is, however, that quite often 'outcome-based' is in fact more 'outcome-oriented'. The move towards outcome-based learning is not a radical switch, but rather a process of shifting focus from inputs towards outputs.

Qualifications describing curriculum, contact hours, subjects, duration of studies, workload, teacher quality and type of school are gradually being transformed through the increased focus on what we expect the learner will be able to do or apply at the end of the learning process.

This does not mean that suddenly all information on inputs will disappear from qualifications and educational standards, but rather that the orientation towards outcomes is becoming stronger, in such a way that it becomes a determining factor for a qualification.

Developing standards and qualifications

What makes qualifications meaningful and relevant and who defines this? If we can answer this question, we can tell what functions a framework must serve and who its main stakeholders are. First, some terminology must be agreed upon.

Within the context of ISCED 2011, a qualification is the official confirmation, usually in the form of a certified document, of the successful completion of an educational programme or of a stage of a programme. Qualifications can be obtained through:

- 1. successful completion of a full programme;
- successful completion of a stage of a programme (intermediate qualifications);

3. validation of acquired knowledge, skills and competences independent of participation in such programmes.

Successful completion of a programme is normally granted when a student has achieved specified learning objectives.

According to the European Qualifications Framework (EQF) definition², a qualification is 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. The EQF definition is narrower as it 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.

We can distinguish between many different types of qualifications that can be part of a framework of qualifications. Apart from those issued in formal education, qualifications developed by economic sectors and qualifications for adult learning often form part of NQFs. Many countries have introduced a national end-of-school certificate.

The Bologna process has been promising a common degree structure in Europe, but besides bachelor, master and PhD degrees, universities in many countries are still issuing other types of qualifications. However, in qualitative terms the widest variety of qualifications is actually not found in higher education (although almost all universities technically issue their own unique qualifications), but in VET.

The term qualification is often used in a general sense. In order to analyse qualifications and how they are developed, we need to really understand what qualifications are in the national context.

Vocational qualifications often relate to educational and occupational standards, but each of these has its own distinct position in the nomenclature of labour market-related education and training. Occupational standards are used to describe the skills requirements for occupations, not jobs. An occupation is seen as a more general concept than a job, which is time bound and tied to individual employers. A job description for a plumber may include a requirement to answer the office phone at certain hours. This has nothing to do with the occupation of plumber as such.

An occupational standard needs to be defined with the help of different sector representatives from different companies. Moreover, many occupations are not unique to only one sector and this should be taken into account.

Not all countries develop separate occupational standards. Sometimes the analysis of the employment requirements is built into vocational qualifications that are developed directly with economic sectors.

Both occupational standards and educational standards will be expressed in learning outcomes. In order to decide for which occupational profiles standards must be developed it is important to consider current and emerging needs in economic sectors and base decisions on the best knowledge available about changes that are expected to happen.

To move beyond guesswork by ad-hoc sectoral groups it may be important to develop structures and capacity among economic sectors that will allow them to accumulate experience in developing standards and gather feedback that can be used for improving these. Sectoral partners may be experts in what is needed in the labour market, but that does not mean they necessarily have expertise in learning and assessment. It is therefore important to bring different stakeholders together, making sure occupational standards are linked to labour market needs and labour market intelligence, and that training and assessment standards are formulated with people who have expertise in these areas.

Since young people do not enter the labour market as fully-skilled professionals, and since they are increasingly likely to opt for different jobs than they were originally trained for, it is important that the vocational qualifications for young people are not too narrow and specialised. As a result, occupational standards and educational standards will not necessarily be identical.

If coherence and comparability of standards are objectives of the qualifications development processes, the coordination of these processes become particularly important.

Using qualifications can be used for different purposes.

Assessment

Assessment is critical to ensure that individuals can demonstrate that they meet the requirements of standards. The move to a learning outcomes-based approach (and the emphasis on core skills and competences that this brings) and the development of the validation of non-formal and informal learning or recognition of prior learning also require that current assessment approaches are reviewed.

There needs to be a direct link between standards and assessment.

In order to ensure reliability, validity and objectivity it is important that competent assessors are involved in assessment processes. There should be special emphasis here on the methodology and the examining institutions, on the development of guidelines for assessment, and on including the recognition of prior learning if that is a goal of the qualifications framework.

Certification

Qualification requires some form of certification in order to validate the learning outcomes acquired by the individual. Certification normally follows a standard assessment procedure and is carried out by accredited awarding bodies.

Who will issue these certificates? This is one of the key questions in the development of qualifications systems. Often official certificates are issued on behalf of the education authorities and other line ministries. Should sectoral bodies and professional bodies also issue their own certificates? Should the institutions that develop the qualifications issue the certificates?

It may seem obvious, but certifying bodies have to ensure that the individuals to whom they issue certificates are the same as those who successfully passed the assessment processes. Therefore certifying bodies are often also in charge of quality-assuring the assessment and overseeing the transfer of data on learners.

Implications for provision

Each country has a huge variety of training providers, often including public and private training institutions, schools, universities, sector organisations, trade organisations and companies. In order to issue recognised qualifications there are typically formal demands on training institutions, such as accreditation requirements for teaching staff and facilities. Companies may also need to be formally recognised as training providers.

Some countries regard the move towards learning outcomes as a shift towards the needs of individual learners and local circumstances. These issues can, but do not have to be, part of the reform of a qualifications system.

Framework coordination

Qualifications frameworks cover qualifications that are developed, maintained, assessed and issued by different institutions and there is a universal need to coordinate the work of all the different parties with a stake in a qualifications framework. There may be different ways of coordinating the qualifications framework: through a nominated authority whose task it is to ensure that standards and principles are implemented or through a more partnership-oriented body that ensures that information and experience is shared among stakeholders. In some countries the education authorities take on the coordinating role, but in many cases the establishment of a special body that reports to all the main stakeholders has been opted for. In many countries this is called a 'qualifications agency' or a 'qualifications authority'.

There are technical and political aspects to this coordination. At a technical level, the coordinating body can help to promote the practical functions and the common principles of the framework. The political coordinating function relates not to politics but to reaching consensus and a common understanding among stakeholders, that can vary from employers and employees organisations, to ministries, schools and awarding bodies, and to civil society representatives. These coordinating functions will evolve during the development and implementation of the qualification framework.

One of our present assumptions is that the establishment or nomination of a coordinating institution can accelerate implementation. As soon as people are nominated whose full time task it is to make the framework work, the development of capacity and the achievement of objectives reach a more operational level.

The experience with existing coordinating institutions shows a picture of dynamic change. Recent Lithuanian and Georgian experiences, where newly established coordinating bodies have been abolished after one or two years of operation, have shown that before establishing such a coordinating body there should be clear agreement on the tasks and shared realistic expectations defined for this body. In Estonia the nomination of Kutsekoda (the Estonian Qualifications Authority) as the coordinating institution was carefully prepared through a working group and followed legislation on professional qualifications. In Turkey the Vocational Qualifications Authority (Mesleki Yeterlilik Kurumu – MYK) was established in 2007 as a result of a new law. It has grown into its new role since, but as Turkey is now working towards integrating different subsystems into an overarching framework, this law was amended in 2011, with a larger coordinating role for the MYK. In Ireland different coordinating actors - the Further Education and Training Awards Council, the Higher Education and Training Awards Council, and the National Qualifications Authority of Ireland – are merging, while the South African Qualifications Authority (SAQA) changed its role, losing some responsibilities when the framework was reviewed.

In several countries, sectors have started to play an important role and they clearly want to move ahead with the formulation of more relevant qualifications and occupational standards in the hope that these will be used to certify and train professionals. It is also clear that inter-sectoral dialogue is important to exchange experience, build joint capacity and coordinate common issues. In order to strengthen the voice of sectors it could be useful to establish an inter-sectoral coordination body. Examples of these are the alliance of Sector Skills Councils in the UK, the National Council for Adult Vocational Training of Romania (CNFPA, absorbed into the education ministry recently) and the SBB3 in the Netherlands. If developments start from sectoral frameworks, such an inter-sectoral body could be essential for the coordination and functioning of these frameworks.

Communication

Frameworks of qualifications can be used as both the object and the means of communication.

Communication about frameworks usually explains the added value a framework can bring and how the particular framework can be used both within a national and in an international context. The introduction and implementation of a national framework of qualifications as a new tool for improving the image of qualifications often requires a varied set of communication tools, each aimed at specific stakeholders and beneficiary groups. Apart from national campaigns that may be developed to market the new arrangements, stakeholder organisations may be using their own information strategies to inform their constituents. The information and communicating channels of different institutions and organisations involved in the development and implementation of qualification frameworks can be quite instrumental in reaching all stakeholders. However, in some cases re-branding can hinder understanding of a framework or its qualifications4.

By classifying and linking qualifications based on common criteria and standards, the framework also functions as a means of communication between qualifications systems and the stakeholders that are involved in the different systems.

Cost implications

The introduction of an NQF and its effect on qualifications systems has cost implications. The details of these depend largely on the existing arrangements in each individual country. Reliable and comparable data on the design and implementation costs of national frameworks of qualifications is scarce.

It is sometimes assumed that NQFs generate considerable development and maintenance costs, while benefits and savings are limited. On the other hand it seems that the extra costs incurred by the introduction of NQFs in some developed countries, such as Wales and Scotland, have been rather limited. Existing literature suggests that there

may actually be more benefits to lighter approaches than to radical changes introduced in conjunction with a new qualifications framework. At the same time, it should be borne in mind that the degree of change required will be determined by, among other factors, the conditions in which the framework is introduced.

There is likely to be a distinction here between different models of qualifications frameworks and different contexts, with more intrusive NQFs in poor and small countries perhaps generating excessive costs per capita.

While this study aimed to improve our understanding of cost implications, it achieved this only to a limited extent. Budgetary issues remain one of the key areas that will need further research.

1.4 DIFFERENT CONTEXTS AND DIFFERENT **STAKEHOLDERS**

In his 2007 Introductory Guide to National Qualifications Frameworks, Ron Tuck analyses different generations of qualifications frameworks (TABLE 1.1).

This shows that international drivers are becoming increasingly important for developing an NQF.

Based on a study of existing and emerging qualifications frameworks in 16 countries, Michael Young, Stephanie Allais and David Raffe argue that evidence-based policies cannot justify the surge in NQFs. Although the policy literature presents qualification frameworks as a consequence of rational policy decisions by countries in a globalising world, the fact that so many countries chose the same policy response to a wide variety of challenges, despite the limited empirical evidence for its effectiveness, suggests that other forces are at work. David Raffe uses the term 'institutional isomorphism' from other authors who wrote about global models of the organisation of education systems (Meyer, 2000; Chisholm, 2007; Karseth and Solbrekke, 2010). This term has been developed by sociologists who observed that

	Observatorists		
	Characteristics		
First generation	Developed from national perceptions, mainly determined by internal drivers, and often using experimental approaches.		
Second generation	Have tried to learn from first generation experiences, in terms of design and processes Seeking more communication with other NQFs on a bilateral basis, but influence of external drivers is limited.		
Third generation	Internal drivers remain important, but external drivers have a significant impact on the technical design of frameworks and the quality assurance arrangements.		

once a set of new organisations emerges, a paradox arises in that rational actors make their organisations increasingly similar to these new examples as they try to change existing structures. In other words, the fact that so many countries are using qualifications frameworks to adapt to changing and diverse needs does not prove that qualifications frameworks are the most appropriate response.

We will explore this further and attempt to illustrate that at a conceptual level it may seem as if many countries have chosen the same solution but that in practical application and implementation this is not the case at all. Different countries use different systems and for these to have a chance of success they must be rooted and embedded in local realities, traditions and culture. Decisions about implementation arrangements are very much influenced by to socio-economic and historical context: the role that social partners take in decision making, the level of decentralisation of the public administration, the way employers are organised and the way education and training is financed. For example, the existence of sector funds has enabled in several countries the development of a strong sector-based system for adult education and for the validation of non-formal and informal learning in sectors as integrated part of the framework of qualifications.

The introduction of frameworks itself may be a global reality, the individual interpretation of these in practice as functioning systems is so different from country to country that it is very difficult to identify a global trend of implementation models or even globally applicable good practice.

Why are so many countries developing frameworks of qualifications?

An analysis of the objectives of the countries described in the study show how different these aims are: Namibia and Kosovo, as newly established countries, use the NQF as an instrument to build new qualifications systems. Tajikistan is looking at adult qualifications, in particular for migrants and returnees. In England the NQF and the Qualifications and Credit Framework (QCF) are instruments for regulating the market of qualifications. In Chile and Malaysia NQF developments are supporting the need for quality assurance in higher education and the skills sector. In Morocco the NQF is linked to VET reforms, more relevant qualifications, and a tool for linking to the EQF and Europe. In Australia the NQF is a national reference system in a federalised country, a tool for migration policy and a regulated labour market and an instrument which is used for quality-assuring learning at different levels.

Because of the interaction between different stakeholders, NQF development processes are time-consuming but also dynamic tools and NQF objectives often evolve during the implementation of the NQF.

Different stages of framework development

TABLE 1.2 shows the developmental stage of the NQFs in each of the ten countries that are the subject of this study. Note how the last column (reviewed implementation) shows how qualifications framework development is a continuous, cyclical process. In fact, qualifications frameworks are never finished, as current developments with the English NQF, the French national register of professional certifications (Répertoire national des certifications professionnelles - RNCP), and the Australian Qualifications Framework (AQF) clearly show.

	Conceptualisation and design (no bodies nominated to manage and implement)	Implementation in progress (some bodies established)	Full implementation (all bodies actively involved)	Reviewed implementation (there has been a reshuffle of institutional roles)
Australia				X
Chile	X			
England				X
France			X	
Kosovo		Х		
Malaysia			X	
Morocco	Χ			
Namibia			X	
 Tajikistan	X			
Turkey		X		

Why do countries seek different solutions to a global trend? NQFs serve the needs of constituencies that differ in size, population density, labour market conditions, economic development, ethnic composition, culture and educational traditions. All of these factors affect their culture of qualifications and their actual qualification needs. As a result, they will affect the framework that relates these qualifications too.

Different rationales give different frameworks

One significant difference among the various frameworks that are either in operation or are ready to be implemented is how they came about.

Some countries developed frameworks in response to emerging needs, typically related to the ever-increasing demand for flexibility in the labour market. They gradually developed frameworks that related people's achievements in an organic way. These frameworks have a largely communicative role: they explain to people who work with qualifications what these entail and how they relate to other qualifications.

Other countries have more recently stumbled into similar problems and scouted the terrain for existing solutions. Some of them have been developing entire blueprints for frameworks before they were launched, starting from scratch. In such countries, qualifications frameworks have the added aim of supporting sometimes quite radical reform. In fact, in some young countries, such as Kosovo, new qualifications are being developed from scratch together with the framework in which they will find their place.

David Raffe has listed the key differences between extreme versions of these two approaches (FIGURE 1.1). This too is a conceptual schematisation. In practice the reality will always be found somewhere in between.

But regardless how a framework comes about, different economic, social and cultural circumstances will determine its shape. The needs of industrialised countries are different from those of developing countries. Regulated labour markets will require a very different qualifications system than deregulated labour markets. The status of VET qualifications will greatly affect their role and position in a national framework. Historical ties, such as between European countries and their former colonies often lead to policy borrowing and lending, perhaps with some justification because the education and training systems of former colonies are often grafted on those of the former colonial powers, but they also give rise to numerous problems because their labour markets are so different.

Because qualifications confirm that people have specific learning outcomes, they are perceived more and more as a proxy for the competences of individuals. Qualifications have their limitations. Qualifications are not the only evidence of competence. The value of qualifications in labour markets changes with the function of qualifications in these labour markets. There are labour markets where qualifications have traditionally played an important role in regulating the labour market. There are also deregulated labour markets, where the links between qualifications and jobs are fairly loose. Moreover, in transition and developing countries there are largely informal labour markets which obviously are slower to generally embrace nationally recognised qualifications. In times of global uncertainty, qualifications are nevertheless increasingly perceived as a determinant in people's career perspectives.

Finally, different qualifications frameworks may have a different scope. There are sectoral frameworks as well as comprehensive frameworks. There exist frameworks that only cover certain parts of the education system. International frameworks, important for small countries and net exporters of labour, have also emerged.

The differing roles of VET qualifications

Around the world, qualifications frameworks are increasingly seen as a tool for communicating qualifications systems and the pathways that link them.

COMMUNICATIONS	\leftrightarrow	TRANSFORMATIONAL
COMMONICATIONS		
starts from present system	\leftrightarrow	starts from future system
incremental change	\leftrightarrow	radical transformation
tool for change	\leftrightarrow	driver of change
stakeholder-led	\leftrightarrow	led by central agency
stakeholders include providers	\leftrightarrow	stakeholders exclude providers
voluntary	\leftrightarrow	statutory
'loose'	↔	ʻtight'

The first qualifications frameworks, however, emerged among vocational qualifications systems and attempted to link these to higher education. Originally, the focus was not on higher education qualifications, except for Australia's long history of qualifications systems. Higher education qualifications are typically certificates issued by higher education institutions and the discussion here has focused primarily on transparency.

In our study we deliberately focus on vocational qualifications including qualifications for continuing training more than on higher education and secondary general education qualifications as there is a huge variety of approaches towards such qualifications. In TABLE 1.3 we analyse the approaches to secondary education, initial VET, higher education and adult learning from the perspective of the qualifications and how they are used. There is a degree of similarity between countries when we analyse who develops the qualifications, and who is responsible for assessment and certifications when we look at secondary VET and higher education (although there are exceptions). In VET the exceptions are the rule however. This is due to the fact that VET has always had a much stronger focus on the economic and social relevance of qualifications, and has therefore seen a stronger involvement of different actors. As a consequence there is a much greater variety of VET qualifications than between higher education and secondary education qualifications between countries, at least in terms of structures.

In different VET systems qualifications play different roles. **TABLE 1.4** attempts to group these roles at a conceptual level. It must be repeated here that none of these models exist in a pure form.

Traditionally vocational education has its origins in a master and apprentice model that was organised through traditional local private associations, such as the guilds in Western Europe. These trade associations established principles for the incorporation of qualified trade persons. Admission into the trades was strongly regulated so as to ensure that the market was not oversupplied by tradesmen. The system was determined by traditional diversification of professions and practices and therefore sustained the status quo. Quality was ensured through the self-regulation of trade/professional bodies. Apprentices were employed. Learning by imitating or

identification was the norm. It was focused on tasks, going through different phases, including learning and understanding the principles, improving tasks and practices and mastering the trade. These forms of vocational training have not disappeared yet, on the contrary they are widespread in countries with poorly developed national VET systems.

Industrialisation has marginalised these forms of vocational education in many countries. Different VET systems have emerged that to some degree have incorporated elements of the traditional models. In line with the work organisation in industrialised societies VET has since focused more on training groups rather than individuals, and common training requirements were formulated.

In England the system of vocational education initially developed independently of the state, with charities specialised in arts and trades setting examinations for technical subjects. These awarding bodies are still a major feature of the VET system today. A market of qualifications has been created, which is mainly determined by the requirements of the labour market, rather than by public education and training policy. Successive governments have undertaken several attempts to regulate these awarding bodies and the qualifications that were developed by them. In the 1980s the government tried to break into this market by establishing national vocational qualifications (NVQs) based on occupational standards and reflecting the needs of industry, but the market of qualifications has not disappeared and a high number of different qualifications continue to exist.

The English example is seen as an archetype for a model of vocational education where market forces regulate supply and demand for qualified labour, even though this applies only partially to the VET system in England.

The market influence is nevertheless a useful distinction for different VET systems, although examples of a purely market-driven model will be difficult to identify. The main characteristics of this model are that VET qualifications are determined by existing jobs. The practical parts of the training are not highly standardised but determined by a market of suppliers. Training costs are mainly borne by individuals or employers. This applies in particular to specialised VET, which to a large degree is focused on the training of adults.

TABLE 1.3 ACTORS IN THI	E DEVELOPMENT AND	USE OF QUALIFICATIONS
-------------------------	-------------------	-----------------------

	Secondary education	on Initial VET	Higher education	Adult learning
DEVELOP	education ministry	varies	higher education institutions	varies
ASSESS	schools/ education ministry	varies	higher education institutions	varies
CERTIFY	education ministry	varies	higher education institutions	varies often not certified

TABLE 4 4 TVDOL	COLEO OF VET	OVOTERAD ARID	THEIR COVERNIANIOE
TABLE 1.4 LYPOL	OGIES OF VEI	SYSTEMS AND	THEIR GOVERNANCE

Туре	Definition	Characteristics	Implications for learning
Traditional apprenticeship models	Corporative models are organised through private associations establishing principles for incorporation of qualified trade persons.	 Strict regulation for admission into trades. Determined by traditional diversification of professions and practices. Self-regulation through trade/professional bodies. Apprentices are employed. Learning by imitating or identification is the norm. 	 The vocational socialisation model of medieval crafts and trades with first attempts of rationalisation. Task-oriented learning focusing on mastering the trade by learning principles, observing, imitating tasks, trial and error and perfection.
Market-oriente d models	Qualification is mainly determined by requirements of the labour market (e.g. occupational standards) and considered as a factor of the economy, rather than public education and training policy. Qualifications set conditions for the provision.	demand for apprentices. 7. Type of qualifications often determined by existing jobs. 8. Practical training is not highly standardised but determined by market of suppliers.	 Variants of instruction. Learning within 'learning organisations' (schools and companies). The model of competence as a model of orientation during qualification for employment. Competence-based training concept based on modules elaborated from units of competence from standards. Focus on employability.
Public school-based VET provision models	Qualification for employment is regulated by legal arrangements. Institutionally, the qualification system is determined by curricula of academic as well as vocational subjects. It is strongly intertwined with the general education system.	 11. Training needs are negotiated by the state. 12. Less oriented on companies' actual needs. 13. Academic criteria used for access and admission. 14. Publicly financed. 15. Specialised VET is shaped by agreement between market stakeholders. General VET is taught in (state) schools. 	 8. Subject-based curriculum in school for theory. Practice both in schools and companies. 9. Action-oriented vocational learning: conceptualisation of 'key qualifications', 'learning fields' concept as well as specific individual training.
Dual models (cooperative systems)	The dual model is governed by two regulating bodies: the state and industry, with contributions of private organisations.	company practice operate in relative isolation and are determined by independent organisational structures and regulated by VET Law. 17. Key focus is on in-company training. 18. VET practice in companies is	 10. Learning in the work place constitutes a systematic form of learning. The concept of workplace knowledge is added to vocational training school theory. 11. Productive work and high level learning facing shortage of skilled workers. 12. Introduction of new concepts like blended learning, multimedia learning and e-learning.

Source: Greinert, 2010 (adapted by the ETF)

In many of the countries with market models, general VET provision has appeared through public provision offering a mix of vocational and general education courses and facilitating progression for further learning. In the market model the content of the training is not predefined, but the quality of graduates is determined by standardised examination approaches, where candidates will have to show that they match the expected outcomes of the standards. These outcomes are closely linked to existing jobs in the labour market and tend to emphasise practical skills that can be immediately applied in a specific context, rather than generic occupational skills that may require some induction in a workplace. This model is therefore sometimes also characterised as the 'employability model' (Rauner, 2006).

The outcome-based approach has been developed by this market model and has influenced developments in many countries around the world, such as the national vocational qualifications framework in Bangladesh (based on the English model), the Caribbean Vocational Qualifications Framework, and the activities of the Caribbean Association of National Training Agencies (CANTA).

In Latin America there is an active network of training organisations that provide competency-based training for people in employment or seeking employment. Some of these organisations are established by private entities or social partners, while others are public bodies, often closely linked with labour ministries. The ILO is working closely with these organisations through ILO/Cinterfor⁵. Based on the model of developing national vocational qualifications with their unit-based structure, derived from the units of competence in the occupational standards, the ILO developed a methodology for developing Modules of Employable Skills that inspired many countries in the world. The outcome-based approach has since been applied in a variety of VET systems.

But before looking at the implications of these developments, let us have a look at some other VET models.

In the Soviet Union there was a direct link between the education system and enterprises. Many higher education institutions and in particular the specialised 'institutes' produced engineers for the big state companies; the 'technicum'⁶ trained technicians; and vocational schools (professionalno-tehnicheskoye uchilishche - PTUs) trained skilled workers. The latter were often linked to a specific company, the base enterprise that provided opportunities for practical training and future employment. As the main employer and the manager of the education system, the state would assign graduates to jobs. Occupations and qualifications for different levels of jobs were centrally regulated through tariff qualification guidelines including a centrally established list of occupations and a classifier of specialities. These tools described the qualification characteristics for graduates and determined both the conditions for education and for employment.

In Yugoslavia and other Eastern Bloc countries similar approaches existed.

In many countries with a strong and almost exclusive public provision of education, vocational school systems developed. Qualification for employment in such countries is mainly regulated through legal arrangements. Institutionally, the qualifications system is strongly determined by the curriculum, with a focus on academic as well as vocational subjects. These VET systems are closely intertwined with the general education system.

In transition countries where the traditional links with large enterprises have been broken this type of VET has become predominant. Training needs are negotiated by the state and less oriented to companies' needs. To prepare people for the uncertainties and unpredictability of the labour market, curricula are based on theorisation and stress the development of key competences and learning fields more than an occupation or job-specific orientation. Academic criteria are often important for access and admission to these VET programmes, which are publically financed. More specialised VET provision (especially continuing training) is determined by agreement between market stakeholders, but general VET dominates the systems and is mainly taught in (state) schools. Subject-based curricula are used in schools for theory. Practice is done in schools and companies, and in some cases in groups of students.

The traditional model has perhaps left its strongest imprint in today's dual systems that we find in most of the central European countries; Germany is often taken as the archetype of this arrangement. Dual systems are based on a strong and institutionalised cooperation between the state and industry. They regulate the system together. Training is predominantly organised in companies while general education and occupational theory is provided in vocational schools. The company practice and the theoretical training are relatively isolated from each other and determined by independent organisational structures. They are usually regulated by law - VET practice in companies is governed by chambers of commerce or industry and social partners and is overseen by the state. The costs of training are shared by companies or collective training funds. There is a very strong focus on the concept and the profile of the training occupation, with learning in the workplace as a systematic form of learning. The training occupation is laid down in training standards as a holistic concept. Once defined, this holistic approach is non-negotiable, making it less flexible. This form of VET often has a very positive effect on job insertion and the productivity of learners, who have worked while learning. The effects on youth employment are also positive, but progression from this form of training further into other parts of the education system is often difficult.

A shift to learning outcomes and an increased emphasis on relevant qualifications can be observed in all these different types of VET systems, albeit in different forms and producing different effects.

The Inter-American Research and Documentation Centre on Vocational Training (Cinterfor) is a technical service of the ILO located in Montevideo (Uruguay), supporting vocational training institutions in Latin America

Upper-secondary technical and vocational school in the former Soviet Union.

1.5 RESEARCH QUESTIONS

The study seeks answers to the following questions:

- How are the roles and responsibilities of institutions and stakeholders allocated in qualifications and qualifications framework development and implementation?
- What factors shape the actual or planned implementation arrangements of qualifications frameworks?

The study focuses on:

- the political and economic context of qualifications and their frameworks;
- the expectations and ambitions of different stakeholders;
- the implementation strategies adopted, and allocation of responsibilities and roles of stakeholders;

- governance and management structures and mechanisms;
- some early indications on costs and benefits linked to the implementation of qualifications frameworks.

Key questions on coordination of the framework processes include:

- To what extent are implementation arrangements based on existing roles?
- What are the coordinating and/or monitoring roles attributed to key institutions?
- How have they evolved and how are they expected to develop further?
- Has there been any transfer of responsibilities from existing bodies?
- What is the legal basis for the coordinating and monitoring functions?

II. THEMATIC ANALYSIS

2. DEVELOPING AND MAINTAINING QUALIFICATIONS

Our understanding of qualifications and how they are used is changing. The traditional understanding of a qualification was a certificate that was issued after the successful completion of a study programme. This definition is still widely used, and is included in the ISCED 2011 proposal⁷, but in practice qualifications are increasingly outcomes-led. The definition of the EQF illustrates this change. It defines a qualification as 'a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards'.

This move towards learning outcomes is changing the way in which qualifications are developed and awarded. Developers are now required to be much more conscious of the relevance of knowledge, skills and competences for a qualification. These changes have had a very profound effect on qualifications development in vocational education in many countries. They are now also beginning to affect higher education and general education qualifications. But different contexts change the perspective on quality and relevance.

In Turkey, initial VET is school-based. Professional sectors have limited confidence in these qualifications. Although a modular approach based on occupational standards has been introduced recently, examination and certification are mainly a local issue. Since the middle of the 1990s, sectors have been pushing for new VET qualifications that would be based on occupational standards. This has resulted in the development of a parallel system for adult training and certification: the National Vocational Qualifications System. This system is based on occupational standards and sectors play an important part in implementing it.

In Kosovo education and training must be provided to a growing young population. The economy is mainly based on small and medium-sized enterprises and is unable to generate jobs for all young Kosovars. Self-employment and migration are therefore important alternatives. The government is developing an NQF that draws on the EQF in order to facilitate the national as well as international recognition of qualifications.

In higher education, increased transparency of outcomes is leading to more comparability of qualifications and the definitions of subject-area benchmarks and other tools as a reference for the qualifications of individual universities.

As a consequence of the enormous increase in the number of students, employability is gaining importance as a comparable benchmark too.

Although the objectives that NQFs across the world are trying to achieve are wide-ranging, they have in common that they deal in one way or another with the *relevance* of qualifications. Qualifications must have currency.

There are several dimensions to this relevance. It may concern:

- the relevance for the learners in terms of access to learning, transfer, progression, mobility and entry into the labour market;
- the relevance for the education and training systems themselves in terms of increased communication and coordination between the stakeholders and subsystems (initial VET, continuing VET, etc.) and in terms of consistency and relevance of standards;
- the relevance for the labour market in terms of matching supply and demand of skills: most changes on the labour market are in existing occupations; the review of existing qualifications is an important opportunity to reconsider the relevance for the labour market:
- the relevance for the country in terms of competitiveness: a country without a qualifications framework may risk exclusion from a regional or even global market of skills; learners and workers from a country outside a network of frameworks could find their mobility hindered.

These different perspectives make it a challenging task to develop qualifications that are relevant and meaningful for all stakeholders. Moreover, beneficiaries of qualifications systems also have different expectations from qualifications as **TABLE 2.1** shows.

NQFs can contribute to the relevance of qualifications by enhancing transparency, the development of new pathways, more flexible forms of recognition through units and credit systems and an enhanced participation of stakeholders. Nevertheless, it seems that the key factors for relevance are determined more by the value of the individual qualifications, which can be enhanced through a stronger role of economic sectors and employers in the design of the qualifications, and by ensuring that qualifications are also attractive for individuals.

Employers	Individuals	Society
Recruitment	Mobility	Educated and active citizens
Relevance	Progression	Basic numeracy and literacy
Specificity	Portability	Cultural identity
Competence	Breadth	Accountability
Adaptability	Career development	Progression
Accountability	Individual development	Qualified workforce
Return on investment	Recognition	Employability
Legal obligations	Reward	Mobility

The key questions

- How do we know when an individual qualification is relevant?
- What criteria exist or should be developed by countries to determine a qualification's relevance?
- How can the development of qualifications be organised so as to make them more relevant? What institutions or stakeholders need to be involved to this end?

The study reviewed the following aspects of the development of qualifications:

- How are arrangements for qualifications development influenced by their context?
- What functions are performed and how are roles distributed for the development of qualifications?
- What aspects of continuity and change can be established for the development of qualifications?

Developing and maintaining qualifications in practice

In **Namibia**, the development of qualifications started before implementation of the NQF. However, since the adoption of the NQF Regulation in 2005, qualifications development has become more structured.

Since 2006, the Namibia Qualifications Authority (NQA) has experienced a gradual increase in the number of qualifications in VET, as well as in further and higher education training (by both publicly-funded and privately-financed providers).

The development of qualifications is the responsibility of the industry or professions. When training providers wish to develop a qualification, they should make sure that it meets the industry's needs. Their role is to identify the need for the qualification and to prepare it for registration in the NQF.

Relevant stakeholders provide input and advice on the composition and structure of the qualification. The NQA provides technical support and guidance to the qualification developer as a form of quality assurance.

The NQF Regulation of Namibia includes registration criteria for qualifications and unit standards to guide qualification developers. The Council of the NQA approves or rejects the registration of the qualification in the NQF.

There are no differences in the qualification development processes between compulsory education, general secondary education, initial and continuing VET and higher education. Neither are there any differences in qualification development between publicly-funded and privately-funded provision.

So, the institutional setting for qualification development in Namibia includes:

- Accredited bodies or training providers that are recognised by the NQA identify the need for a qualification and develop the qualification for registration on the NQF in line with the needs of industry.
- Relevant stakeholders provide input and advice on the composition and structure of the qualification.
- The NQA provides technical support and guidance as a form of quality assurance to qualification developer.
- The Council of the NQA approves or rejects the registration of the qualification on the NQF.

In Turkey, a qualifications framework for lifelong learning will link at least three subsystems. These are: (i) the National Vocational Qualifications System of adult qualifications based on national occupational standards and coordinated by the Vocational Qualifications Authority (MYK); (ii) the qualifications systems of the Ministry of National Education, which covers secondary general, secondary vocational and teacher qualifications; and (iii) the higher education qualifications framework which covers associate, bachelor, master and PhD degrees. Coordinated by the Council of Higher Education, an NQF for higher education has been under development within the framework of the Bologna Process since 2005.

Since late 2010 the NQF Commission, with representatives from MYK, the Ministry of National Education, the Board of Education and the Council of Higher Education, has been working on the development of a comprehensive NQF. This NQF should be adopted by the Council of Ministers in 2012 and enforced through secondary legislation. How the qualifications development processes in each subsystem will be influenced through the NQF is still to be clarified. Sectors are actively involved in developing the National Vocational Qualifications System. The work on standards has advanced rapidly with 206 national occupational standards adopted, but so far only 44 qualifications have been developed and 426 individual MYK certificates have been issued for a single qualification. The MYK has developed guidance for occupational standards and qualifications developers to work with experts from professional sectors and education. The translation process of occupational standards into units identifying learning outcomes and assessment criteria needs to be improved further. National occupational standards and qualifications are developed by sectoral organisations that are authorised by MYK. Sector committees supported by the MYK secretariat review and validate the draft documents, before they are approved by the MYK. Assessment and certification is the responsibility of authorised certification bodies. In 2009 the first certification body was authorised, but accreditation requirements have delayed implementation by other sectoral bodies.

The Council of Higher Education is currently coordinating the qualification areas in higher education. This includes two-year programmes delivered by post-secondary vocational institutions (MYOs). These short-cycle degrees serve mainly as access ports into the labour market. No more than 10% of students from these programmes progress to a bachelor degree. Most MYO students are students that applied for higher education but were not able to pass the national admission exam due to the limited capacity of higher education in Turkey. The two-year post-secondary programmes include practice periods in enterprises and are expected to be linked to occupational standards but no real qualification type has been developed yet. The quality of these programmes is very diverse. Some 750,000 people are enrolled in MYOs.

The Ministry of National Education has introduced curriculum reforms in secondary VET, introducing modular curricula which are partially derived from occupational standards. But there are no national qualifications in VET and students receive a school diploma that lacks the confidence of employers. The revision of the curricula based on occupational standards is under development. The pilot introduction of nationally assessed and certificated qualifications is foreseen as part of the EU-funded project for quality assurance in VET.

In Tajikistan, the main document defining and systematising the types of labour activities is the National Classifier of Occupations. It has been published by the Scientific Research Institute of Labour and Social Protection (under the auspices of the Ministry of Labour) in 2005. It classifies ten clusters of occupations and describes general characteristics of professions and

duties performed for a certain occupation. The National Classifier of Occupations provides neither a detailed description of functional duties, nor the level of knowledge and skills and competence of an employee. It does not specify qualification requirements either.

In Kosovo, the Law on Qualifications (adopted in November 2008) defines a qualification as an 'official recognition of achievement that recognises completion of education or training or satisfactory performance in a test or examination'. The structure of qualifications varies for the five specified qualification types in the framework of the country's qualifications: (i) higher education; (ii) general education; (iii) combined VET and general education; (iv) skills-based qualifications that are based on national standards; and (v) skills-based qualifications that are based on standards which are not nationally accepted.

The development of qualifications is organised differently for each type of qualification. The universities and other higher education institutions develop degrees and other higher education qualifications, and the Ministry of Education, Science and Technology develops the lower secondary diploma and the matura or proof of upper secondary graduation. The Council for Vocational Education and Training and the education ministry develop the National Combined Level 3/Level 4 Certificate and the Certificate of High Professional Achievement at NQF level 5. Ministries, employers, non-governmental organisations (NGOs), and the Council for Vocational Education and Training develop national certificates and national occupational certificates. Employers and NGOs develop certificates and occupational certificates.

The National Qualifications Authority, in cooperation with KOSVET V (the EU-funded project which has provided technical support to the Kosovar authorities) has field-tested accreditation procedures for VET providers and validation procedures for VET qualifications.

In Chile, ChileValora represents the National Occupational Competency Certification. This system's main objective is the formal recognition of the work skills of people, regardless of how they were acquired. This encourages lifelong learning and also helps to identify skills gaps and upskilling needs of the labour market. The system enables accreditation of occupational competency profiles identified by the productive sectors through the establishment of sector-specific labour competences, accreditation and supervision of the centres responsible for assessment and certification of persons. It creates and maintains a public register of certificates issued by schools.

Nowadays, ChileValora is the government office in charge of the Certification of Labour Competences. They do not view their work as a contribution to a labour competence framework, but merely as the implementation of relevant legislation.

The INACAP project for higher education develops its qualifications based on needs analysis of labour markets and competency profiles from different jobs in companies. The project has started with ICT qualifications and is now

extended to business administration. For the ICT sector they are using the Skills Framework for the Information Age, developed in the UK.

In Malaysia, there are many private providers in the skills and academic oriented higher education sectors. All programmes offered by higher education institutions are required to gain accreditation from the Malaysian Qualifications Agency (MQA) and skills training providers are required to gain accreditation from the Department of Skills Development. Another function of the accreditation system is to oversee and regulate self-accreditation processes. This has brought external scrutiny and endorsement to the programmes and qualifications development processes within institutions.

Certificate, diploma and advanced diploma level qualifications for the technical and vocational education sector are developed through processes that involve Course Advisory Committees (with industry representation) and Curriculum Development Committees under the coordination of Department of Polytechnics and Community College Education within the Ministry of Higher Education. They are based upon the broad standards and domains that have been established by the MQA. In the case of other private and public higher education institutions, the qualifications are developed through their own curriculum committees, advisory boards and the senate or its equivalent guided by the outline provided by the Code of Practice for Programme Accreditation (COPPA).

The approach for skills sector qualifications is rather different. They are based on the National Occupational Skills Standards developed under the responsibility of the Ministry of Human Resources with separate processes and committee structures. The national occupational standards system is formally governed by a National Skills Development Council under the ministry. This is a tripartite body with strong industry representation. It formally accredits all providers of the National Occupational Skills Standard qualifications and administers the Malaysian Skills Certification System. The qualifications can be classified in three levels of Malaysian Skills Certificates and two diploma levels across 29 industry areas. A Malaysian Skills Qualification includes a description of the occupation, the level, the duty and task, a description of the performance standard and sub tasks.

In Morocco, various donors (mainly the EU, Canada and France) have played a major role in the development of qualifications. The competence-based approach to qualifications started through a Canadian project which is still ongoing. The EU-funded MEDA II programme has joined forces with this Canadian project in three priority sectors: textiles, ITC and tourism.

The MEDA II programme resulted in a change of the interpretation of the term qualification. It now refers to a certificate testifying to the successful mastery of competency-based learning outcomes. This concept has replaced the traditional understanding of a qualification as any certificate awarded upon the completion of a course of a defined duration and defined content.

Qualifications are developed by the VET Agency⁸ which is under the supervision of the Vocational Training Department of the Ministry of Employment and Vocational Training in Morocco. There is no connection with higher education. In principle there is only one methodology for the development of qualifications at secondary level, officially called pilotage de la formation par la demande. This requires extensive mapping of the existing training paths leading to a particular occupation. This method is developed in priority sectors and there is no evidence that the method is used for other sectors. The methodology of qualification development covers a sectoral strategy, a skills needs analysis, and the development of the corresponding curricula expressed in terms competences.

This rather demand-driven approach is now prevalent. It is developed in partnership between public providers and companies and there is a wide agreement on its relevance for the country. Social partners are not directly involved in the development of qualifications, but they are represented on the board of the VET Agency in charge of them.

As a consequence of this mapping in priority sectors several training programmes have been shut down following the key principle that one occupation should be served by one training programme. This rationalisation has not been carried out for every trade yet.

In France, any institution (ministry, public body, university, private or public training centre and high school, chamber, professional association, company, etc.) that creates certificates/qualifications in its own name is responsible for the identification and distribution of roles in the development of qualifications. The involvement of social partners therefore varies from one institution to another. The national register of professional certifications (Répertoire national des certifications professionnelles -RNCP) procedure includes only a mandatory provision that the qualification(s) for which the registration is requested is designed with the involvement of representatives of the appropriate economic sector.

Three categories of qualifications are registered in the RNCP:

- 1. national qualifications issued by the state (various ministries) or in the name of the state (which is the case for higher education);
- 2. national qualifications issued by sectoral trade bodies (branches), so called certificats de qualification professionnelle (CQP);
- 3. all other qualifications issued by public or semi-public authorities (ministries without a consultative commission, Chambers of Commerce and Industry, Trade Chambers and Agriculture Chambers, etc.), public, semi-public and private VET providers for their own.

In **England**, there is a long tradition of charities and professional organisations developing qualifications and issuing certificates. These private organisations are called awarding bodies. The existence of different awarding bodies developing qualifications at their own initiative has created a market of qualifications. Government interventions into the complex qualifications market have been strong since the 1980s, in particular in the field of vocational qualifications. A series of agencies have been established to oversee or regulate the quality of standards, qualifications and assessment practices (NCVQ⁹, SCAA¹⁰, QAA¹¹, QCA¹², QCDA¹³ and Ofqual¹⁴). Other agencies have been established to articulate and coordinate the needs of the labour market (NTOs15, SSCs16 and UKCES¹⁷). It is currently the role of the Sector Skills Councils to confirm that vocational qualifications are in line with sectoral qualifications strategies.

At different moments in time, different types of qualification have been developed by government agencies to make them more relevant and easier to understand (NVQs, GNVQs, QCF qualifications, Access to Higher Education diplomas, Foundation degrees, diplomas, etc.). These initiatives have not led to a decrease in the numbers of qualifications and awarding bodies. Currently the register of regulated qualifications mentions 182 recognised awarding bodies and almost 13,000 qualifications. All qualifications have an expiry date.

Higher education institutions are autonomous in developing qualifications, but there are a number of reference documents developed by the Quality Assurance Agency for Higher Education (QAA), in cooperation with higher education institutions, to ensure quality and transparency. The most important reference documents are a Code of Practice for Quality Assurance, the Framework for Higher Education Qualifications (FHEQ, established in 2001 and reviewed in 2008), the Credit Framework for Higher Education that was adopted in 2008, and subject area benchmarks.

In Australia, the education and training systems are predominantly a state rather than a federal responsibility. Vocational schools are mainly funded by state governments, and in practice there is considerable diversity among the states. For higher education there is federal funding. Standards and regulations have traditionally played an important role in the schools sector and VET provision, while the higher education sector has been self-regulating to a large extent.

VET has an Australian Quality Training Framework focusing on the quality of provision by registered training organisations. These can be public as well as private. Training can take place in training institutions, in companies and through apprenticeships. Social partners are actively involved in VET. Together with industry representatives and organisations, 11 Industry Skills Councils are responsible for the development of Training Packages for VET. A Training Package is an integrated set of nationally-endorsed units of competency, AQF qualifications and assessment guidelines designed for a specific industry. Registered Training Organisations are responsible for delivery based on the requirements of the Training Packages.

In conclusion, the examples above illustrate that there are many different approaches to the development of qualifications. However, an outcome-led or competency-based approach exists or is in the process of being introduced in all of these countries.

VET and higher education qualifications

Most higher education qualifications are developed directly by universities, albeit with a degree of central guidance or based on a shared code of practice. Most secondary school qualifications are either defined by the education ministry or by schools when there is no national standard. But practices for VET qualifications are the product of a variety of solutions. VET is an area that is difficult to demarcate and has rather different meanings in different countries, but increasingly VET qualifications are understood to be wider than just qualifications for secondary VET. In this sense VET and higher education are not mutually exclusive definitions. We can see this in many of the countries studied. Higher education qualifications are issued by providers with degree-awarding powers. These can be classical universities, technical universities and sometimes research institutions, but also other institutions involved in the delivery of VET. France, Australia, England and Turkey provide clear examples of how the boundaries between VET and higher education are fading. In Australia, for example, the term tertiary education covers both VET and higher education.

Who is responsible for developing VET qualifications?

In higher education, institutional qualifications are normally issued and provided by a unique institution. In VET, traditionally qualifications are national qualifications, which

- National Council for Vocational Qualifications, one of the predecessors of the QCA dealing with the regulation of national vocational education qualifications, and exams.
- 10 School Curriculum and Assessment Authority, one of the predecessors of the QCA dealing with the regulation of secondary education qualifications, exams and curricula.
- 11 Quality Assurance Agency for Higher Education
- 12 Qualifications and Curriculum Authority. It became the Qualifications and Curriculum Development Agency in July 2009 when it lost formally the task of regulating qualifications and awarding bodies. Successor organisation to the School Curriculum and Assessment Authority and the National Council for Vocational Qualifications established in 1997 and closed down in 2011, which was responsible for regulating qualifications and exams for vocational and secondary general education that were part of the NQF (since 2000), the QCA also developed new qualification types and supported the development of the Qualifications and Credit Framework
- 13 Qualifications and Curriculum Development Agency
- 14 Office of Qualifications and Examinations Regulation (regulating general and vocational qualifications in England and vocational qualifications in Northern Ireland).
- 15 National Training Organisations, network of branch organisations (until 2002).
- Sectoral organisations in charge of developing occupational standards and providing inputs to the development and approval of qualifications (successors of the National
- 17 UK Commission for Employment and Skills, a non-departmental public body providing strategic advice on skills and employment issues, involving employers, trade unions and devolved administrations

means that they are awarded by one institution but can be issued by other institutions. There is often a single body that coordinates or regulates the development and approval of qualifications, but the development of individual qualifications is normally delegated to different permanent structures, while in countries that have changed their approaches recently projects or ad-hoc groups are in charge of the development of individual qualifications. Specialised bodies with permanent qualifications development functions have appeared in a number of countries. Examples include awarding bodies in the UK, industry skill councils in Australia, and authorised qualification-developing bodies in Turkey. In other countries the development of qualifications is seen as an integrated task for existing organisations with either a sectoral or public function. France is a good example of the latter.

In Morocco, Kosovo, Tajikistan and, to some extent, Chile new qualifications have been developed as the result of donor-funded projects.

A special role for sectors?

Australia's 11 industry skills councils are responsible for developing vocational qualifications and training packages that can be used by registered training providers. The Sector Skills Councils in the UK do not develop qualifications but occupational standards and sector qualification strategies. They have to approve qualifications before these can be accredited by Ofqual. In Namibia there are no permanent sectoral bodies although industry representatives and existing sectoral organisations and professional bodies are involved in the development of qualifications. Instead of a sectoral classification, Namibia uses fields of learning inspired by the Dewey library classification system.

In the National Vocational Qualifications System in Turkey there are 26 sectoral committees foreseen (20 of which are operating), which bring together industry and public institutions, including training providers. They recommend occupations for which standards should be developed and they validate occupational standards and qualifications. The development of occupational standards is done on a voluntary basis by existing specialised sectoral organisations, the so-called occupational standards-setting bodies. Authorised qualification-developing bodies develop vocational qualifications. In France, existing sectoral organisations are involved in developing qualifications which have their own specialists, but no special entities have been developed for this purpose.

Formal qualifications in the qualifications framework

The French example draws our attention to an additional issue: qualifications that are developed by the ministries

of education often find their way into the framework almost automatically. This is also true for the main higher education qualifications developed by universities. This interesting characteristic can be observed in the majority of countries.

Qualification types

Relevance is seen as a driving force for individual qualifications, but its influence has also led to quite different types of qualifications which share a common purpose and or format. These qualification types may share a common purpose (such as specifying specific skills for professionals, providing relevant skills for labour market entrants, or combining professional skills with progression requirements), but qualification types may also just describe the architecture, format and size of qualifications enabling improved links or combinations with other qualifications. Some types are addressing purpose, format and size.

The development of qualifications types lies at the heart of the question 'what qualifications we need in a country'. In the English Qualifications and Credit Framework (QCF), architecture has been the determining factor in the hierarchy of qualifications, distinguishing between awards as the smallest qualifications, certificates covering the middle ground and diplomas being the larger qualifications that would normally take more than a year to obtain. All QCF qualifications are based on units that can be assessed independently. Each qualification groups mandatory units and units of choice in a logical structure laid down in a Rule of Combination.

Another very well-known qualification type is the NVQ, which is a competence-based qualification derived directly from occupational standards. In France the certificats de qualification professionnelle are developed by sectoral bodies and are somewhat similar to the NVQs. They have an important function in recognising specific sector skills, but they have only a marginal place in the RNCP.

France has been one of the first countries to develop an outcome-based post-secondary vocational qualification the higher technicians' certificate (brevet de technicien supérieur or BTS) - that can be obtained through a variety of pathways (school education, apprenticeship, recognition of prior learning). Namibia has harmonised registration methods for all qualifications, hence there are no qualifications types that are significantly stronger than others. Turkey has recently started to develop its first competency-based qualifications in the National Vocational Qualification System and is exploring the possibilities for introducing different types of VET qualifications, which are under discussion with stakeholders in the framework of the NQF developments.

3. USING QUALIFICATIONS

3.1 ASSESSMENT, VALIDATION AND CERTIFICATION

The shift to an outcomes-led approach has many implications for assessment, validation and certification. It has meant a re-think of assessment approaches in formal education and has facilitated the development of validation of non-formal and informal learning.

In order to be awarded a qualification, an individual has to demonstrate competence against a learning outcomes-based qualification standard. Summative assessment and validation are gaining importance and are being detached from the curriculum. The validity and reliability of assessment approaches is being enhanced, and more relevant assessment approaches are being introduced to replace written tests. Learning outcomes can be used to define the levels of qualifications, qualifications descriptors, assessment criteria, and the expected outcomes of modules and programmes.

The development of qualifications based on learning outcomes regardless of learning path can have a significant impact on related processes of learning assessment, validation and certification.

Traditionally, assessment has been performed against the requirements of, and expected performance in, formal learning and training. This input-based approach can be explained with the help of **FIGURE 3.1**.

This process allows uniform assessment of any cohort of learners who follow the same programme of formal learning and go through the same process of examination. As it is very rigid, this process is only suitable in situations where there is hardly any diversification of learning paths. Typically, in this scenario the only actors beside learners are teachers.

The development of an approach based on learning outcomes and the distinction between learning that results from formal education and training on the one hand, and learning outcomes that can result from any

activity on the other hand, opens new perspectives for the processes of validation, assessment and certification.

It allows for:

- a diversification of courses leading to the same learning outcomes and qualifications, including school-based alone, school and work-based in any combination, slow learning processes and fast learning processes;
- a diversification of assessment methods of learning outcomes, depending on the type of course and according to the type of learning and learner;
- a diversification of the terms of validation;
- a relaxation of the rules for certification.

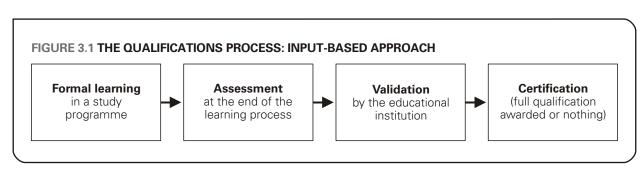
These diversifications can be represented as in **FIGURE 3.2**.

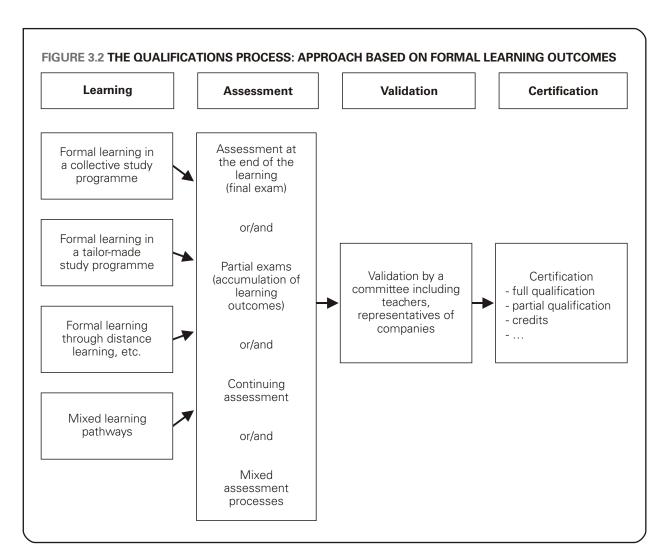
The outcomes-based approach can also take into account knowledge and skills acquired in non-formal and informal ways. These can be assessed, validated and certified just like formal learning outcomes, as shown in **FIGURE 3.3**.

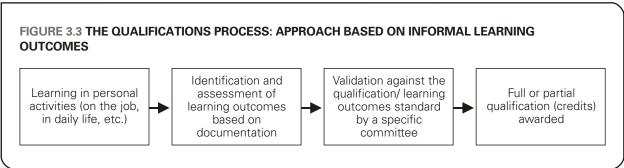
Procedures for the recognition of prior learning have opened many new pathways in qualifications systems. The general trend towards assessing learning outcomes rather than learning procedures dictates a fair treatment for those who have acquired skills and knowledge in other ways than through the established education and training system. Fair treatment of students who have achieved similar results in different ways must be guaranteed. This has implications for assessment procedures.

Diversified certification procedures (as opposed to a system in which all certification is handled by a single authority) ask for a reconsideration of roles and responsibilities of those involved in qualification.

Transparent agreements are needed for establishing who gives the certificates, (a ministry, schools, agencies, sectors or companies) and who controls procedures, such as double-checking assessment results and checking for coherence in assessment results. In a time of digitalisation and online communication, data protection is critical too.







The roles of authorities, awarding bodies, institutions and social partners must be agreed and published in a transparent way.

In France the individuals' right to accreditation of prior experiential learning (validation des acquis de l'expérience - VAE) is enshrined in the 2002 law and all qualifications that are part of the RNCP can be awarded through the validation of non-formal and informal learning. All organisations that issue qualifications registered in the RNCP must establish procedures for the VAE, taking into account the diversity of learning pathways. Thus the Ministry of Education may offer learners three/four different options for assessing and validating learning

outcomes to obtain a qualification, depending what type of learner they are and what learning path they followed. Recent developments of such validation systems across Europe and around the world are impressive if one considers developments a decade ago. In spite of this, the actual numbers of people receiving their certification after validation of non-formal and informal learning remain very low.

Central in any assessment is the qualification standard outlining the requirements for qualification. Summative assessment can take place at the end of the learning process but also after completion of a specific module or unit.

Reliability of assessment relates to the need for testing results to be coherent. If someone is assessed twice, the results should be similar. While this may be easy for practical skills, it can be a challenge for testing cognitive skills where questions must change from exam to exam but nonetheless yield similar results over time. But also assessors affect the reliability of results. Coherence among different teachers or assessors in one institution or even country must be ensured through internal validation.

This leads us to appeal procedures, which are a new area of interest that has consequences particularly for the authority of teachers and assessors. Since social and cultural issues may affect assessment results, appeal procedures are important, but they must be fair and transparent.

Validation is the process during which the assessment results and procedures are verified or double-checked before certification. In the case of national qualifications the assessing body is not always the one that issues the qualifications; hence it is important to ensure that the assessment process is objective, valid and reliable.

The quality assurance of assessment, validation and certification processes is an essential part of the arrangements of qualifications frameworks. It ensures the relevance and reliability of the assessment processes, the link between assessment and qualification standards, principles about the competence of assessors and validators, information and guidance for candidates, the rights of candidates, appeal procedures and procedures for the validation and certification process, including the handling of the personal data and the results of the assessment.

All these principles apply to assessment in formal VET as well as to the validation of non-formal and informal learning. FIGURE 3.4 shows different routes from learning to certification.

The majority of European countries do not have fully-fledged systems for the validation of non-formal and informal learning yet. France, Ireland, Portugal, Norway, the Netherlands, Belgium, Romania, Slovenia and Estonia are among the exceptions, but even among this group, practice varies greatly. In most countries some practice exists in certain economic sectors or in subsectors of the education and training systems. Uptake of validation of non-formal and informal learning among learners varies by country, and in some cases even where the national system is well-established the number of users remains small.

The key questions

- How does the trend towards outcomes-based qualifications affect assessment and what is the impact of implementation arrangements for NQFs, based on national standards?
- What are the roles of institutions (awarding bodies, providers, employment agencies, assessment centres, etc.), of stakeholders from the world of work, and of specialists in assessment?

- To what extent is assessment regulated and standardised?
- Have assessment approaches and methods from abroad been used or have they been developed

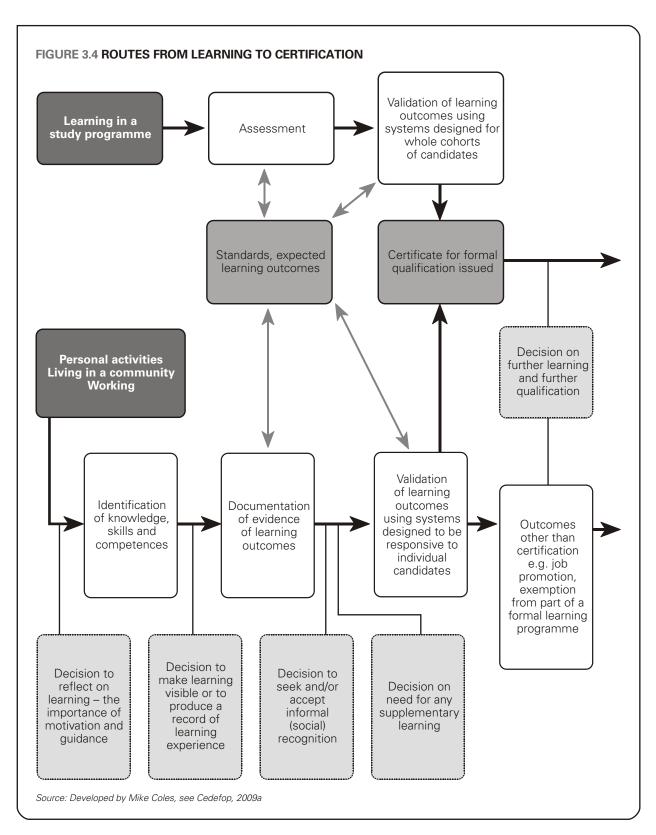
Assessment, validation and certification in practice

In Morocco, a diploma is considered to equal a qualification. The VET Department of the Ministry of Employment and Vocational Training oversees the training and assessment of trainees and the approval process for training institutions. Examination is organised in a centralised way. It is controlled by public services and has a high symbolic value among the general public. At present, there exist no specific arrangements to validate results of non-formal and informal learning, except in the construction sector on an experimental basis.

In Namibia, a variety of examinations are applied in different forms of education and training, including testing of theoretical knowledge as well as practical tests of skills. The Namibia Qualifications Authority (NQA) accredits education and training providers and programmes, registers assessors and conducts assessments, including those related to the recognition of prior learning. Qualifications can be issued by a range of providers, public as well as private, provided that they are accredited. Registration of qualifications on the NQF of Namibia requires a check of the institutional and programme quality assurance of the provider. The NQA has the responsibility for overall quality assurance of the education and training system. All awards are handled by the NQA, as are the evaluation and recognition of qualifications for articulation and further studies.

In Malaysia, the qualifications framework foresees the assessment of higher education students based on learning outcomes. These learning outcomes cover eight domains: knowledge; practical skills; social skills and responsibilities; values, attitudes and professionalism; communication, leadership and teamwork skills; problem solving and scientific skills; information management and lifelong learning skills; and managerial and entrepreneurial skills.

Learning outcomes are linked to the credit system. The Malaysian Qualifications Framework (MQF) has integrated quality assurance tools for assessment. The Code of Practice for Programme Accreditation (COPPA) details: (i) the relationship between assessment and learning; and (ii) assessment methods and management of student assessment. COPPA also clearly mentions the obligation of training institutions to inform students on appeal policies and practice. COPPA has been developed by bringing together good practice adopted by the National Accreditation Board (Lembaga Akreditasi Negara – LAN) and the Quality Assurance Department, Ministry of Higher Education (now merged as the Malaysian Qualifications Agency) with inputs from experts and stakeholders via a series of focus group discussions. COPPA was also benchmarked against international best practice from many countries. Both for vocational and higher education qualifications,



assessment should include portfolio assessment, project evaluation, demonstration, presentation, peer evaluation, student evaluation (such as through a final exam), personal reflection and, at degree level, dissertation.

Programmes that have been approved by the Ministry of Higher Education require accreditation from the Malaysian Qualifications Agency for purposes of recognition,

employment and for admission into higher level programmes. The Public Services Department and private employers are agencies that require accreditation of programmes for employment and recognition. The National Higher Education Funding Council (Perbadanan Tabung Pendidikan Tinggi Nasional – PTPTN) and other financial institutions also require that programmes must be accredited for students to be eligible for loans or fundina.

Whereas universities organise their own examination, the skills and VET sectors use a system of centrally developed tests and examinations that are supervised by the Ministry of Human Resource Development and the Department of Polytechnics and Community College Education respectively.

In Tajikistan, all final examinations of secondary schools are regulated by examination instructions issued by the Ministry of Education in May 2008. These detail the establishment of the state examination commissions, their functions, examination procedures and assessment criteria. The ministry has the sole authority to award licences for any educational and training activities and for validating certificates. Primary, secondary and higher vocational educational institutions select candidatures by specialty from among specialists and manager practitioners for the chairmen of the state examination commissions and submit them to the Ministry of Education. The ministry approves an examination commission chairman for each educational institution. Afterwards the heads of educational institutions confirm the composition of the state commissions themselves. Those who pass exams at secondary schools are awarded certificates, graduates from initial and secondary technical vocational schools, colleges and institutes for higher education get diplomas.

In Kosovo, assessment for qualifications which are registered in the NQF can only be carried out by institutions or bodies approved and accredited by the National Qualifications Authority, and, in Higher Education, higher education institutions accredited by the Kosovo Accreditation Agency for Higher Education. Assessment for higher education is carried out by the institutes for higher education themselves. Assessment for general and VET qualifications is carried out by providers. The Ministry of Education, the National Qualifications Authority and the Kosovo Accreditation Agency for Higher Education conduct external quality assurance of the assessments leading to awards. Existing assessment methods still tend to be very traditional (formal written examinations dominate) rather than comprising a range of assessment approaches (interviews, oral exams, etc.). The NQF allows vocational training centres to validate the results of non-formal and informal learning but these centres have to be accredited first.

The most important exam in **Turkey** is the national entry exam whose main purpose is to select students for enrolment in higher education. The use of outcomes however implies a change from selective mechanisms to systems that confirm the competences of candidates. In Turkey, assessment of the results of non-formal and informal learning has always been one of the drivers behind the National Vocational Qualifications System, but there is no practice yet. Some experience has been accumulated with the certification of professionals by the Turkish Standards Institute which has certified 5,000 candidates in different occupations and professions. Occupational standards are often not sufficient to support assessment. The translation into units identifying learning outcomes and assessment criteria is not straightforward, particularly where it concerns modular teaching and the

assessment of modules. The Ministry of Education has developed a modular approach for initial VET curricula, but assessment is still linked to the end of school exam. The ministry is considering how it could use the tree structure of the four-year VET curriculum to issue different national certificates at different levels. The first two years of the curriculum would be rather broad, leading to the outcomes of a separate VET certificate with some units derived from different national occupational standards and some general education modules. The third and fourth year would lead to additional levels of specialisation and complexity, increasingly linking in with national occupational standards. Summative assessment could take place at the end of the second, third and fourth year or, to reduce the assessment burden, only in the fourth year. The latter has also been proposed as a measure for reducing early drop-out rates.

In Chile, ChileValora represents the National Occupational Competency Certification. This system's main objective is the formal recognition of the work skills of people, regardless of how they were acquired. The system enables accreditation of occupational competence profiles identified by the productive sectors through the establishment of sector-specific labour competences, accreditation and supervision of the centres responsible for assessment and certification of persons. It creates and maintains a public register of certificates issued by schools. The evaluation and certification processes compare the level of competence of people to a predefined minimum satisfactory standard. These standards are called Labour Competence Units. They are associated with job profiles, representing different sectors of the country.

In the new system, the Centres for Evaluation and Certification of Labour Competences (CEECL) will be responsible for assessing the skills of those who request it, according to the standards. ChileValora will grant accredited certification where appropriate.

In Australia, 11 Industry Skills Councils are responsible for the development of Training Packages in VET. A Training Package is an integrated set of nationally-endorsed units of competency, AQF qualifications and assessment guidelines designed for a specific industry.

For all qualifications, assessment leading to the award of the qualification is the responsibility of the issuing organisation. For these organisations assessment guidelines provide the endorsed framework for assessment of units of competency in the Training Package. They are designed to ensure that assessment is consistent with the national framework of qualifications. Assessments against the units of competence in this Training Package must be carried out in accordance with these Assessment Guidelines.

Assessment within the National Skills Framework is the process of collecting evidence and making judgments about whether competence has been achieved, confirming that an individual can perform to the standards expected in the workplace as expressed in the relevant endorsed unit of competence.

Different arrangements are possible for assessment, such as partnership arrangements with non-registered organisations (schools, industry organisations, enterprises) for assessment within the registered training organisation's scope of registration.

In **England**, awarding bodies are predominantly private actors that develop qualifications, oversee assessment practice and certify individual learners. There are a handful of large awarding bodies that offer vocational and general qualifications, including City & Guilds, Edexcel and OCR. These coexist with smaller and larger branch-specific awarding bodies offering specialised qualifications. Currently the register of regulated qualifications mentions 182 recognised awarding bodies and almost 13,000 qualifications. There is cooperation among awarding bodies to ensure consistent assessment approaches. One of the objectives of the Joint Awarding Body Guidance on Internal Verification of the NVQs is to ensure valid and reliable assessment that meets national standards. Another aim of verifying assessment is to monitor the quality of assessment and to highlight problems, trends and development needs of assessors. In this way deficient monitoring of assessors, limited standardisation between assessors and programmes, and the lack of a sampling strategy have been identified. Ofqual has published regulatory arrangements for the Qualifications and Credit Framework (QCF) that contain clear criteria for assessment. The awarding organisation must have in place the necessary systems and procedures and resources to ensure that: assessment instruments and tasks are produced to the required quality standards; assessment evidence produced by learners is authentic; standards in the assessment of units are accurate and consistent across units and over time; people involved in the assessment process have the appropriate expertise and are adequately informed and supported to fulfil their responsibilities; suitable training is offered to people involved in the assessment process; performance management systems are in place to monitor and evaluate the effectiveness of people involved in assessment; for each qualification, the awarding body (or its centres) retains sufficient evidence of learners' work or assessment decisions to monitor them over time; achievement is recognised though the recognition of prior learning where this is appropriate; any claims for exemption identified by learners are considered and a record of any valid claims is kept.

Ofgual does not impose any restrictions on how the learning should take place. It has also published guidance on the recognition of prior learning within the QCF which aims to simplify recognition of prior learning processes in the UK. The guidance emphasises the role of the Sector Skills Councils, as promoters of recognition of prior learning in their sector, ConstructionSkills (the Sector Skills Council for construction) is using a large scale programme of on-site assessment to qualify workers in construction. The ConstructionSkills Certification Scheme (CSCS) card covers 220 occupations and list the holder's qualifications. They are valid for either three or five years. The card also reports on health and safety awareness, as

all cardholders have to pass the appropriate CITB-ConstructionSkills' Health and Safety Test.

The Quality Assurance Agency for Higher Education (QAA) has published a code of practice on quality assurance that contains a special section dedicated to assessment. It stresses information about assessment to students, the role of assessment panels and examination boards, the conduct of assessment, timing, and marking and grading, feedback, staff development, recording of the assessment, assessment decisions and formal requirements.

In France, there are three categories of qualifications registered in the RNCP: (i) national qualifications, issued by the state or in name of the state; (ii) national qualifications issued by sectoral trade bodies/branches; and (iii) all other qualifications, designed and awarded by any institution (university, private or public training centre, high school, chamber, professional body, company, etc.). Each institution is fully responsible for the design of the assessment and validation procedure. However, all institutions are obliged to develop procedures for validation of non-formal and informal learning.

The validation of non-formal and informal learning (VAE) is strongly embedded in legislation in France and is an integrated part of the NQF. This individual entitlement, instituted by French legislation in 2002, enables workers or job seekers to obtain all or part of a vocational certification in the same way as would apprentices or students in initial or continuing training. Guidance services to accompany the procedure can be financed through the vocational training funds, together with two days' leave to prepare for the actual assessment. Increasing numbers of companies are implementing collective assessment for their employees. They help their employees with the procedures and propose adjustments of working hours in order to raise their qualification levels.

Analysis and key findings

Slow change towards assessment of learning outcomes

Many countries still combine traditional ways of examination with pilots in which different types of assessment are applied. Often the introduction of learning outcomes-based standards and assessment criteria has not been supported with the necessary investment in the training of educational staff for the development and implementation of new and diversified assessment methodologies. It should also be mentioned that in some cases, there has been a retreat from learning outcomes approaches e.g. in South Africa.

Assessors

The learning outcomes approach requires assessors to play a different role and to combine different types of methodologies than they were accustomed to with traditional input-based assessment. There is clearly a lack of information on real changes in, and application of new ways of, assessment and the preparation and further professionalisation of assessors for their new roles.

The validation of non-formal and informal learning (or recognition of prior learning) is in many cases foreseen and in some cases partially (Chile, England) or fully implemented (France). If validation possibilities are in place, in most of the cases these are organised through educational institutions and based on the accreditation of their programmes and assessors. In several countries, recognition and validation is organised by and with sectors, but is not necessarily linked to an NQF (England).

Strong links to quality assurance mechanisms

Most countries strongly link assessment criteria to national standards for quality assurance that are part of the NQF (Kosovo, Malaysia, Namibia). Assessment centres or educational institutions all need to be accredited on the basis of national criteria and standards before they can issue certificates based on an assessment. In most cases appeal procedures must be introduced in the assessment policy of the training institutions.

New assessment approaches in formal education have often been developed on the basis of existing methodologies and approaches from other countries. Models that are often mentioned and used as sources of inspiration include those of the UK, Australia and New Zealand.

3.2 IMPLICATIONS FOR THE **PROVISION OF EDUCATION** AND TRAINING

This chapter deals with the implications of outcomes-based qualifications on learning. We have seen that these facilitate the validation of non-formal and informal learning and that they can visualise progress in learning, but learning outcomes have also found their way into the provision of learning.

People have always acknowledged that there are other ways of learning than through teaching in schools. Learning outcomes can support the recognition of these forms of learning but beyond the recognition of the learning outside schools, learning outcomes can be used to shape the learning in schools as well.

Labour markets entrants normally need some induction before they are productive in the workplace. Employers tend to complain about the quality of newly-qualified staff and their readiness to start performing. As a result, work activities have always been the focus of vocational education provision but with today's less industrialised forms of work, routine jobs are disappearing and preparation for the workplace has become even more complex than it was before. Apart from knowledge and technical skills, graduates need competences to face new complex situations in the work place. The competency-based approach of qualifications has started by identifying in work activities those processes that

made sense as a basic unit according to a logical and acceptable division of the work – basic units that have a clear start and finish. For these, learning outcomes can be identified that can inform learning.

These early approaches to competence-based or outcome-based learning have attracted a lot of criticism from educationalists, who find that they take the learning process too much for granted and promote a behaviourist model of learning. The de facto separation of learning processes and the results of learning were seen as the main problem. Learning outcomes developed in a context outside the place of learning could mechanically steer learning towards assessment targets detached from teaching and the curricula of the training providers (Young, 1995 and 2009).

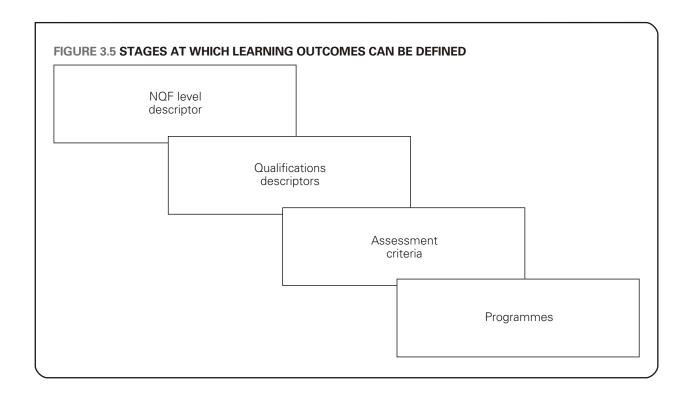
This would promote systems in which administrative bodies from outside would dictate the contents of learning and in which the roles of training institutions, of programmes and of teachers were no longer of central importance. Schools would thus be deprived of the freedom to do better and to be innovative, which would undermine institutions and staff. In particular in developing countries where a supporting environment for schools is lacking, providers are very much dependent on the quality of teachers. Thus, the emphasis on learning outcomes and standards could jeopardise the ability of schools to do better than average institutions.

But there is another side of the coin. Learning outcomes as part of standards create very clear expectations for all schools to perform at least against these standards. The intention is that this helps strengthen equity in countries where the quality of schools is variable.

In the meantime, the use of outcomes-based approaches in learning has evolved. This chapter looks at how they are affecting learning in the countries that were the subject of the study. Again, we need to bear in mind that these countries are at different stages of development and that these effects are therefore not yet visible in all countries. So we are not here attempting to measure impact.

The central idea of outcomes-based learning is that programmes and qualifications should be defined by the results the learner should achieve rather than by inputs from institutions e.g. teaching, duration of programme, assessment methods. By making those results clear in terms that focus on what the learner has gained, rather than what the institution has provided, learners should be able to transfer their achievements for further learning and career development.

Learning outcomes can be used to identify appropriate assessment criteria as evidence and to inform modules for the delivery of education and training. It is also possible to define learning outcomes for individual learners as a trajectory towards the completion of a module or a full qualification. It is even possible to use the level descriptors in a framework as the starting point for defining the intended learning in a programme or work activity.



At all these stages the learning outcome is written in a way that shows what a learner should know and can do, but while qualifications descriptors will still be rather specific depending on their purpose, qualifications framework level descriptors are likely to be more general. Programmes, on the other hand, will often be expressed in detailed learning outcomes. The key idea is that there must be transparency in requirements from the learning situation to the certification of that learning in a qualification at a specific level in an NQF.

Outcomes-based approaches offer providers an alternative to central control of the detailed content of the provision. A shift to outcomes-based approaches can instead allow providers more freedom in defining appropriate learning processes to achieve the outcomes.

Many qualifications still take as their starting point provision, rather than defining the intended results. The provider is seen as the main quality-shaper. But the emphasis on learning outcomes is changing their role. 'Rather than micro-managed schools, policymakers can dictate that content standards and performance standards be created to codify expected learning outcomes and then let teachers and school administrators determine how best to attain those outcomes.' (Haertel, 1999)

For frameworks to contribute to the quality of provision it is important that the reform mission and practice are in harmony and that demand and supply are coordinated. It is important to understand how outcomes can be achieved and what kind of learning opportunities generate better results with groups of learners.

For quality to be achieved it is important that the learning process is effective and that it enables learners to develop the knowledge, skills and competences they need. Moreover, it is in the interests of the learning provider and

the learner that this is done in a way that is efficient in terms of the time and resources that are used. At a national level it is important that equity in education and training is ensured in order to maximise access to, and benefits of, education and training. Many qualifications frameworks have links to systems accrediting learner providers.

Learner outcomes support changing paradigms from teachers, as the providers of knowledge to teachers, as facilitators of learning and as assessors. For the learner, learning can be made into a more relevant experience when it has a clear purpose linked to a targeted qualification, and when it is recognised that learning is focused on the learners and can take place in different settings including more learning in the work place.

The key questions

- How is the translation of qualifications into the provision of education and training influenced by the role of stakeholders, teachers and providers?
- How are teachers and trainers prepared to implement a new type of education or training provision? How is the translation of qualifications into curricula, learning materials and learning environments organised? Are there specific approaches for compulsory education, secondary education, vocational education, higher education and adult learning?
- Is the impact affecting pilots, or is there a system-wide adoption of learning outcomes, and how system-deep are they integrated into learning?
- What are the main challenges for introducing learning outcomes in curricula?
- Is there any link between the use of learning outcomes in learning and assessment?
- Are learning outcomes leading to large-scale modularisation?

Delivery of education and training in practice

In **Turkey**, the VET system is fragmented in different subsystems and is undergoing reform with substantial EU support, decentralising school management, strengthening the system of pre-service and in-service training of VET teachers and introducing modular competence-based curricula. These modular curricula have been highly appreciated, but assessment practices have not kept pace with curriculum reforms. Summative assessment is not linked to the modules, but to the final school exam, which leads to the school diploma. These school graduation diplomas have limited value in the labour market. The introduction of national qualifications is planned on a pilot basis, but there is a fear that a too rapid introduction of national qualifications standards will expose uneven performance of vocational schools across the country and that as a result many students might not be able to qualify. For the Vocational Qualifications Authority it is too early to specify how qualifications are translated into curricula, learning materials and education environments.

For higher education qualifications, curriculum development is left to universities overseen by the Council of Higher Education and different quality assurance councils specialised by discipline. The universities are now moving massively to developing outcome-based curricula and qualifications. Every university has an internal quality assurance unit that oversees these processes.

In Namibia, institutes for higher education are involved in the translation of qualifications into education and training. Instructors in Vocational Training Centres are not always formally trained and can have limited qualifications themselves in the subjects that they teach. Training providers develop their qualifications in consultation with relevant stakeholders and are responsible for certification in line with NQF regulations. Trainers and teachers are prepared by the relevant institutions and the Namibia Qualifications Authority is responsible for evaluation.

In Morocco, the translation of qualifications into programmes for education and training is carried out by the VET department of the Ministry of Employment and Vocational Training. In some cases a competency-based approach has led to a modular structure of the programmes. Teachers and trainers, however, are not yet being prepared to implement a new type of education or training for competency-based qualifications. Qualification development in Morocco has started to affect education and training in priority sectors through the EU-funded MEDA II programme, which follows a competency-based

In **Malaysia** the higher education curricula are based on standards approved by the Malaysian Qualifications Agency that include qualification descriptors and the domains of learning outcomes. The standards are developed through curriculum reviews and studies and consultation with all stakeholders that include teachers, learners, educationalists, industry and professional bodies.

Proposed standards are then evaluated by course advisory committees that include representatives from industry for that specific sector. These standards are then considered by Curriculum Development Committees that include subject or area specialist, including those from the university sector.

In VET in Australia, national training packages are based on AQF qualifications, competence standards and assessment guidelines, but they do not contain an endorsed curriculum component or learning outcomes. To receive public funding for their programmes, Registered Training Organisations must use training packages. The training packages have been perceived by some as a rigid framework, forcing teachers to re-examine what they do with their students. Teaching methods have changed but still allow teachers to exercise their skill, if in a different way. In secondary education the curriculum, assessment and name of the certificate is different in each state and territory. The curriculum must nevertheless address mutually agreed national competencies. In 2008, the Australian education ministers agreed that a national curriculum would play a key role in delivering quality education and committed to the development of a Foundation to Year 12 national curriculum. This is currently under development. In higher education the alignment of learning outcomes is promoted through the academic standards project, which also integrates the Tuning Australia project to define learning outcomes that are representative for higher education in specific disciplines.

In France, the initial VET curriculum continues to be organised in disciplines – even if inter and trans-disciplines approach are encouraged - but there is a clear link between the learning outcomes for an occupation (métier) and the curriculum. Key and technical competences are integrated in the curriculum but the holistic approach towards occupations has to an extent prevented modularisation. Context is seen as essential for competence development. Qualifications development starts normally from occupational standards (référentiel des activités) that are followed by the identification of appropriate competences in terms of knowledge, know-how and attitudes (savoirs, savoir-faire and savoir-être). These form the qualification standard (référentiel de certification) that informs the curriculum, the planning of courses and assessment activities. For each economic sector a specific consultative commission works under the responsibility of the ministry which is in charge of the qualification (education, health, employment, etc.) in order to develop qualifications. These commissions include professionals, inspectors from the ministry, teachers and researchers. The same type of procedure is applied in line ministries that develop their own qualifications (agriculture, sports, health, etc.). There are national guidelines for providers under the authority of the ministry. Curricula and programmes may be adapted to the local context to some degree, in terms of content and organisation. However, local enterprises and economic actors have only limited influence on it. Teaching has become more learner-centred. Since 2005 learning outcomes are also used in all subjects in secondary education.

In **England**, there is considerable experience with competency-based or outcome-based curricula. Clear positive effects have been increased collaboration among teachers and teachers becoming better at diagnosing learning needs and measuring progress. On the downside, the workload of teachers has gone up and there is a sense of bureaucracy that has been reinforced by the very technical nature of guidance documents and the emphasis on accountability. Learners have profited from more constructivist approaches of learning, encouraging them to actively acquire knowledge rather than passively following the teacher. Learners have become more strategic in the way they get to a qualification.

Translating learning outcomes from qualifications to curricula

According to Cedefop (2009) two conditions appear to be crucial when developing curricula. The first is the consistency in applying the learning outcomes that have been identified across different providers and in different contexts. The second is the proper alignment between the intended learning outcomes and the methods used to assess the extent to which they have been achieved. The examples above seem to illustrate these challenges.

A combination of input and outcome-based approaches in the curriculum

Learning outcomes can be achieved in different ways, but they are dependent on appropriate inputs. Without an appropriate learning context, including competent teachers and opportunities for practice, it is not easy to obtain learning outcomes. The identification of clear outcomes underpin the development of a flexible and modularised provision and credit systems that can support learners to accumulate and transfer credit from different learning experiences. There is only limited evidence of this in practice, although Australia and England have recently strengthened their approaches to credit.

Although modularisation exists as a component in practically all EU VET reform projects, it is not easy to implement, nor is it part of the logic of the existing systems. Among EU partner countries, most students and teachers prefer a modular approach but developing and maintaining it is hard work (Nielsen and Parkes, 2006). It creates stress and is often not supported by equipment resources. Critically, teachers are not always prepared to incorporate complex reform measures into their daily work.

There is a general trend for curricula to become broader and more general, covering key competences rather than specific skills and knowledge. This is in large part a result of the fact that much of what is learnt today can be outdated tomorrow. Flexibility and adaptability are some of the great measures of success in the labour market today. The aim is that students across all levels of education learn to acquire transferable knowledge and skills more than they learn specific technical and professional skills.

Support for teachers

In teaching and instruction, there is a clear trend away from traditional methods in which knowledge is transferred and towards methods that pursue a specific outcome, regardless of the process. Teachers are affected by these new approaches to assessment and teaching.

Some distinctive features of outcomes-led education

- The focus is on learning that combines knowledge and skills with personal and sociocultural competences.
- Knowledge is set in a context and is interdisciplinary.
- The focus is on relevant skill needs.
- Learning is encouraged in a wide range of locations and by different methods.

Teachers are key to these changes, but system-wide reforms are not always system-deep enough to affect all teachers. Teachers need to be competent, but attitudes are important too if curriculum change is to be brought about. A major challenge for reforming qualifications systems is therefore to choose an approach in which strategic objectives include the development of human resources. As this is often the most difficult and expensive part of reforms, it is often ignored.

4. COORDINATING QUALIFICATIONS FRAMEWORKS

The qualifications frameworks in some of the countries that were studied are still on the drawing board. As such, little can be said about the actual coordination of their implementation. But even in the development process there are important coordination issues between stakeholders. When developing blueprints, invariably issues emerge that show strong similarities to issues that other countries struggle with.

One key question is whether a national framework should be an overarching structure accommodating a variety of subsystems or whether it should be designed from scratch as one unitary framework for all learning and training. Another key question is implicitly hidden in this: do you develop a framework and make its contents fit it or do you develop (or have existing) subsystems and build the framework around it?

Such issues have important implications for coordinating structures. But there are many more factors that influence decisions on who does what in the coordination of NOFs.

We must recall an earlier conclusion here: frameworks only have value because of the qualifications they comprise. A more fundamental redefinition of most qualifications is more likely in countries where there are other radical changes in public policies, but more often change is incremental and builds at least partially on existing qualifications and structures. Depending on the traditional model of qualification and the traditional actors in the qualification process, different roles will be assigned in the coordination of a national framework. If social partners traditionally play a strong role in qualifications development, they will obviously come to play a strong role in a framework covering 'their' qualifications too. Most European frameworks are adopted via legislation; some are established by partner agreement.

The functions and objectives of a framework play an important role too. Each NQF has a principle function and derived functions. The coordination of the implementation of the NQF is often directly linked with its principle function. If the principle function of the framework is a reform of the qualifications system, political actors (ministries, qualifications authorities) are likely to dominate its coordination. If the main role is to promote the transparency and relevance of qualifications, social partners and other stakeholders must be far more deeply involved.

The scope of a framework is a very obvious issue affecting its coordination. Sectoral frameworks will need less broad involvement than comprehensive frameworks. International frameworks will need international representation in their coordinating structure.

Finally, the regulatory basis of a framework will influence its coordination structure. The organisational demands of a voluntary or collaborative system will be less prescribed than those of a system that has its statutory roots in national legislation. Many models have both regulatory and collaborative aspects, but it is fair to say that some models are predominantly normative, using a top-down process of standardisation, while others are predominantly collaborative with a more voluntary coordination process based on principles shared by the stakeholders involved. Within subsystems the approaches can be different from the overarching system, which itself can have a control function over these subsystems.

The coordination of the implementation of an NQF is a key function that should ensure a coherent approach between actors regarding the understanding and use of the levels, the development and functions of qualifications across the framework and, if appropriate, a registration process of qualifications. It should also involve the maintenance of the qualifications framework infrastructure and strategic choices about system development.

The key questions

- Who coordinates what and is this determined by the objectives or the function of the framework?
- What institutions are required and do new institutions need to be established?
- What are the implications of adopting an inter-institutional coordination body, an independent or autonomous qualifications authority, or a quality assurance agency?
- How can countries with limited resources best establish and coordinate a framework for qualifications? Should they build on the existing system and use existing institutions? Or should they establish new institutions?
- What stakeholder representation should there be in managing a framework? Is the state's sole leadership enough in developing countries where the practice of social partnership is limited or unknown?

Coordinating qualifications frameworks in practice

In **Kosovo**, the formation of an NQF is embedded in the Law on Qualifications (2008) that facilitates alignment with the EQF and related European initiatives. It was developed from scratch. Its aims are to provide transparency of qualifications, ensure the relevance of qualifications, stimulate lifelong learning, and improve the employability of individuals. The framework has been conceptualised and developed with the support of a series of EU-funded VET reform projects.

The National Qualifications Authority of Kosovo was established in late 2009 and its governing board appointed in 2010. They have produced handbooks and other supporting tools and manuals for the NQF with the support of another EU project.

Other related institutions which form part of the NQF's policy environment are the Kosovo Accreditation Agency for Higher Education, the Council for Vocational Education and Training and the new Centres of Competence for

As its primary function is one of reform, much of the coordination is organised from the government. There is, however, a clear understanding of the need for broad consultation that has been present throughout the design stages, and also of the broader positive contributions that a framework for qualifications can make to communication among stakeholders.

Over the past ten years in Chile, various initiatives have been taken for the development of qualifications frameworks or systems. Most of these initiatives were project based and focus on an economic sector or education sector. Some are started by Ministries or the economic sectors and other by educational institutions, but there seems to be no clear plan to connect these initiatives and develop a coherent and comprehensive NQF. There is lack of national drivers or coordinators. Government officials clearly state that for this Government an NQF is not within their priorities.

For the qualifications system National Occupational Skills Certification, ChileValora works together with Sector Bodies for Competency Standards which are formed by the most representative actors of an economic sector. These bodies aim to define and design sector participation in the National Occupational Skills Certification, identify priority occupational profiles for the sector, validate those, request ChileValora for their accreditation and ensure validity and maintenance.

In Morocco, an NQF as such does not exist, but the country is currently taking its first steps towards the design of a framework.

The first discussions about this framework started in 2006. Morocco participated in a project implemented by the ETF in the southern Mediterranean region with the aim to expose the countries to developments taking place in Europe. A technical working group was set up and identified levels and descriptors. This group consisted of representatives of the three components of the system of education and training Moroccan namely the Department of Vocational Training, the Department of Higher Education and the Department of General Education, and representatives of 'office of vocational training and promotion of work (main public operator training) and other projects.

In 2009, a steering committee composed of high level representatives of the departments of VET, general education and higher education, together with the high council of education was set up to look at the design of a framework. This committee has carried out a mapping of the current qualification provision within each subsystem.

The social partners are not represented in the steering committee and are involved in neither the design of the National Framework nor the ongoing discussions about its implementation. It is, however, recognised that their contribution will become necessary in the following steps.

The current national development plan of Namibia prioritises productive and competitive human resources, specifically in the domain of education and training. It sets goals for expanding access to VET, promoting lifelong learning among the public, and increasing the supply of graduates.

Coordination of the framework is guided by these functions and led by the authorities although stakeholders are involved. The Namibia Qualifications Authority (NQA) oversees the NQF and is responsible for overall quality assurance, the evaluation of qualifications, the accreditation of courses and awarding bodies and the registration of qualifications in the framework where these meet certain criteria. Its Governing Council includes 36 representatives from key stakeholders such as the Ministry of Education and other ministries, higher education institutions, industry, trades unions, professional associations and others. Industry stakeholders participate in boards and committees of the NQA. Currently, Council membership is being reviewed as part of amendments to the 1996 Act which established the NQA; it is planned that the Council will be reduced to 7 members.

The Namibia Training Authority oversees VET provision in Namibia and is responsible for registering training providers in VET.

Qualifications can be developed by public institutions, higher education institutions, the Namibia Training Authority, private providers or industry-led bodies such as the Namibian Construction Academy. The development process is usually guided by NQF regulations.

In **Turkey**, the development of a (not yet completed) an NQF is closely linked to the improvement of skills, with a long-term objective of developing an internationally competitive workforce, supporting economic growth and enhancing employment.

The Assembly of the Vocational Qualifications Authority (MYK) provides an institutional home for the discussions between all interested stakeholders and the main players. The Ministry of National Education, the Council of Higher Education, the Ministry of Labour and the social partners are represented in its executive board.

The MYK is an autonomous tripartite institution linked to the Ministry of Labour. But the Ministry of National Education has not yet initiated the integration of its VET qualifications with the MYK's National Vocational Qualifications System. The Action Plan for Strengthening the Relationship between Employment and Vocational Education and Training, adopted by the Council of

Ministers in July 2010, states that the Ministry of Education and the Council of Higher Education should align their curricula to National Occupational Standards within a one-year period and the Ministry of Education has recently established a procedure to achieve this aim. The Council of Higher Education looks for cooperation with the MYK to link short cycle post-secondary education programmes to national occupational standards but at undergraduate and graduate level there is not yet much cooperation. Representatives from economic sectors have been very supportive to the MYK but they may disengage if the progress is not producing benefits in time. There is a need for a bringing these institutions together, a role that has been relegated to the NQF Committee.

The NQF Committee will complete the design of the NQF by June 2012, leading to a formal decision by the government. The NQF Committee receives technical support through an EU project that started in 2010 to support the MYK.

In Australia, the AQF is the single quality-assured national framework for qualifications in general, vocational, and higher education. At the national level, the Australian Qualifications Framework Council (AQFC) is responsible for technical development and management of the qualifications system in Australia and for the provision of expert advice to the Ministerial Council for Tertiary Education and Employment. The AQFC does not regulate individual qualifications. These are accredited by separate national regulators for VET and higher education and for the schools sector by individual states.

In **England**, the liberalised nature of the qualifications market ensures very broad stakeholder involvement but presents challenges in coordination. Over the past decades different solutions and setups have been tested. Four qualifications and credit frameworks are in place

The NQF is the national qualifications framework of accredited qualifications established in 2000. Since 2008 vocational qualifications have been migrated from the NQF to the Qualifications and Credit Framework (QCF), but the NQF still contains important general education qualifications. The NQF and QCF are regulated by Ofqual, the independent regulator of qualifications in England. Ofgual recognises awarding bodies and accredits qualifications that are registered in the Register of Regulated Qualifications.

In higher education degrees can be issued by universities and in some cases colleges. Higher education institutions are autonomous in developing qualifications, but there are a number of reference documents developed by the Quality Assurance Agency for Higher Education (QAA) and higher education institutions to ensure quality and transparency.

The levels of the four frameworks mentioned are aligned, but there are four different sets of level descriptors. In 2008 the Framework for Higher Education Qualifications

was self-certified against the Qualifications Framework of the European Area for Higher Education, while in 2010 the QCF and NQF were referenced against the EQF. There have also been arrangements with the framework authorities in Ireland, Wales and Scotland to align the different frameworks.

In France, all certificates, titles and diplomas can be listed in the national register of professional certifications (RNCP) by the National Committee for Professional Certification (Commission nationale de la certification professionnelle - CNCP). Thus, there is no monopoly for the design and award of qualifications but there are two categories of qualifications: those officially registered in the RNCP by the state and those not registered. The framework covers qualifications regardless of the certifying authorities. However the CNCP can refuse to insert qualifications in the register that are not developed by the state or by institutions representing the state.

The CNCP operates under the authority of the minister responsible for employment (for all professional education levels, including higher education). It is composed of 43 members, including representatives of ministries, regions, social partners, chambers and experts.

In Malaysia, the Malaysian Qualifications Agency (MQA) was established in 2007. The MQF was established in the same year as a basis for quality assurance of higher education and as the reference point for the criteria and standards for national qualifications. The MQA is responsible for monitoring and overseeing the quality assurance practices as well as the accreditation of higher education programmes.

Malaysia has three separate post-general school sectors i.e. higher education, technical and vocational education, and skills. A large number of the private providers represent the higher education and skills sectors. Two separate systems were established in the past to build quality assurance into these sectors: the MQA for the higher education sector and the National Occupational Skills Standard for the skills sector. These two systems are now covered as one under the MQF.

Coordinating agencies and public authorities

The study did not find in any of the ten countries a case where an independent national qualifications authority alone drove or determined developments. The coordinating tasks were different from country to country. In the majority of the cases these are specified in legislation. The degree of centralisation and integration of systems differs from country to country but the qualifications authorities operate without exception in collaboration with other bodies. In many cases they share with other institutions coordinating power and, where this is part of their role, regulating power. In that sense the national qualifications authority typically stands between, rather than above other players. In all countries that have moved from design to implementation, permanent coordinating structures exist.

No examples were found of coordination directly and exclusively by an existing department or ministry, although in a number of cases coordinating bodies report directly to a specific ministry.

The most centralised models were perhaps found in Namibia and Malaysia. In Malaysia, the MQA implements the MQF whilst the National Skills Development Council administers the Malaysian Skills Certification System. The MQA and the National Skills Development Council use quite different structures and approaches for VET and higher education.

In England, the QAA and Ofqual have very different functions. The QAA has a facilitating and external quality assurance role that builds on different practice across higher education institutions that have a very high degree of autonomy. Ofqual recognises and monitors awarding bodies and accredits qualifications. Ofqual's role has evolved from that of its predecessors which were responsible for modernising qualification types and regulating qualifications. It is now only responsible for regulation in order to 'maintain standards'. Ofqual operates quite independently, reporting directly to parliament, but recently the Wolf Review of Vocational Education in England (2011) suggested that legislation should be changed to bring it closer to the government again.

The Australian framework offers an interesting example of a situation where coordinators have developmental and technical roles but no regulatory power. For VET and higher education delegated to agencies that oversee provision at the federal level. For general education, agencies operate only at the state and territory levels and there are no federal (commonwealth) level structures.

In France the CNCP works by committee and has an important role in discussing and probing the relevance of individual qualifications that are proposed but it does not accredit qualifications. It reports to the minister of education.

The MYK in Turkey is governed by a board that includes representatives from social partners, the Ministry of Labour, the Ministry of National Education and the Council of Higher Education. It is elected every three years by the assembly of members. However, the MYK reports also directly to the Minister of Labour.

Evolving and changing responsibilities

The coordinating functions of different institutions are defined by the progress of NQF implementation and evolve over time. In the framework of this study we can observe a (partial) strengthening of the role of central bodies in Australia and England, both countries with a long history of qualifications frameworks. This trend towards central coordination can also be observed in Scotland and Ireland, but in South Africa a decentralisation of central functions from the South African Qualifications Authority to new quality assurance bodies for subsectors is taking place.

It is clearly recognised that a supporting entity can enhance the ownership and identity of the framework and accelerate its implementation. NQF development therefore often starts with the establishment of an authority like in the case of the MYK in Turkey or the NQA in Namibia. However, recent developments in, for example, Lithuania and Georgia, where new agencies were closed again soon after they had been established, shows that setting up a coordinating body before the implementation arrangements are clarified is risky.

The role of social partners and providers in coordinating structures

Stakeholders that are involved in the coordination of an NQF vary from country to country and may include different line ministries, private and public providers, social partners, sectoral organisations, special interest groups, different types of awarding organisations, and individual national or international experts nominated on behalf of different organisations.

In almost all countries universities participate in framework management, while VET providers are usually not involved.

In Chile, Turkey, Australia, France social partners have had a clear role in developing and managing the framework. In Tajikistan, Malaysia, and Morocco they have had a developmental role so far but are not involvement in management. In England, Namibia and Kosovo, their role is limited and they are not involved in coordination.

The National Vocational Qualifications System in Turkey has established a strong role for sectors, which subsequently are expected to have more leverage over the qualifications systems of the Ministry of National Education and the Qualifications Framework for Higher Education.

Ministries of education and labour as driving forces

Following on from the previous paragraph, no models were found where the NQF is driven by social partners, employers or chambers; although outside the scope of this study, examples from Estonia, Russia and Ukraine demonstrate that employers can be the driving force in nascent developments.

Two models appear. The first is a model that is driven by a labour ministry with a clear employability and adult learning agenda, participation of social partners (particularly through sectors) and a focus on occupational standards and competency-based qualifications. The second is a model driven by an education ministry or a higher education community that focuses on educational standards and in which providers (often only universities) have been given a clear role. Obviously, mixed systems exist too.

In some of our country cases (Chile, Malaysia, and Turkey), we can see how these different approaches are applied to subsectors that the NQF tries to integrate to a differing extent.

International coordination

International coordination is an issue in its own right as, typically, transnational frameworks are voluntary in nature and yet, because of the regionalisation and even globalisation of labour markets, the pressure to participate in them and adapt national frameworks to fit the requirements of international frameworks can be enormous.

A well-known example of such an international framework is the EQF whose process of development bears testimony to the difficulty of designing a system that does not shackle subsystems and yet remains useful.

However, Europe is not alone in its efforts. Regional frameworks exist elsewhere in the world too and just like in Europe, their design is usually driven by an increasing need for international transparency arising from cross-border student and labour mobility. According to the ETF's study Transnational Qualifications Frameworks (2011) the extent to which transnational qualifications frameworks contribute to the increased

recognition of qualifications internationally is yet to be determined. Great expectations of increased recognition exist, but evidence at the level of employers and individuals to support such claims remain very limited. This may be due to the relatively short period in which the various transnational qualifications frameworks have been implemented.

Namibia is part of the Southern African Development Community (SADC) Qualifications Framework. It is represented through its NQA which sits on the SADC Technical Committee on Certification and Accreditation. Namibia is also part of the Transnational Qualifications Framework of the Virtual University of the Small States of the Commonwealth.

Chile participates in the ILO's Inter-American Research and Documentation Centre on Vocational Training (Cinterfor) which deals with training organisations in Latin America. It also participates in the Bologna Forum, satisfying the growing desire for signatory and non-signatory countries of the Bologna Agreement to interact more closely.

5. CROSS-CUTTING ISSUES: COMMUNICATION, QUALITY ASSURANCE AND RESOURCES

5.1 COMMUNICATION

Communication is a critical part of the development of qualification frameworks that offers both challenges and opportunities. Frameworks can be the object of communication, but they can also be a tool *for* communication. This chapter discusses how the frameworks are communicated and how they are being used as communication structures.

Communication *about* a framework for qualifications normally serves to explain its added value and how it can be used in different contexts. The process of referencing a national framework against a regional framework is also a form of explanatory communication about the framework. Communication around a framework for qualifications is a way of sharing fundamental principles on qualifications among the various partners in society, including all types of user (individuals, institutions, economic sectors, etc.) and for developing real and effective awareness.

But the qualifications framework also represents an opportunity to stimulate dialogue among partners that perhaps traditionally do not communicate about qualifications.

In principle, all specified aspects of NQF implementation (coordination of the framework and development of qualifications, alignment of the provision of education and training, the assessment of learning outcomes, the certification and recognition of competences) offer opportunities for reaching out to various target groups.

But different target groups have different communication needs from the qualifications framework. Different approaches can and should be developed for these different groups. It is important to develop a targeted communication policy that answers some critical questions.

Beyond specialised bodies and the providers, how are (or will be) individuals and employers informed about the qualifications framework? What are (or will be) the implications for counselling and guidance? What is (or will be) the impact on individuals?

Access formats for citizens, such as Europass¹⁸ and the generic EQF levels have been developed to make frameworks accessible and more user-friendly for non-specialists.

Qualifications frameworks can present powerful opportunities to establish lines of communication between the world of learning and individuals. Particularly in the Internet era, if the framework can hold retrievable learner records, it can open links to tailored guidance opportunities and other forms of outreach that traditionally only respond to people who actively seek assistance. Today, there are few ways of finding out whether those who do not seek assistance fail to do so because they do not need it or because they do not know that such assistance is available. Access points into the framework, such as online interfaces, hold the potential to create a much broader awareness of such opportunities.

The contents of qualifications frameworks can also be applied in other forms. Tailor-made and comprehensive information can be retrieved on qualifications and on providers. Recognition and performance can be checked. With such functions, a framework can open new ways towards general quality assurance as it will increase the need for public accountability of institutions.

The key questions

- Who are the stakeholders the qualifications framework needs to be communicated to? All citizens? All learners? Providers? Government departments and agencies? Sectors? Employers? Social partners?
- What should qualifications frameworks communicate to the different stakeholders? How can a common language of the framework be promoted? How can learners decipher the framework and translate its information into potential learning pathways?
- Do the communication tools serve the requirements of different groups of citizens? Are they all addressed and reached adequately?

Qualifications framework communication in practice

In **Chile**, in the past few years there have been projects which have initiated work on qualifications frameworks. The Division of Higher Education of the Chilean education ministry financed a project through the Competitive Fund of the Mecesup programme. This project, implemented in 2009 and 2010, was coordinated and lead by vice-provosts for academic affairs at eight Chilean universities. It allowed for Chilean university authorities to learn of international experiences with frameworks of qualifications, to discuss the problems currently faced in the country's higher education system, the role of a

possible national framework, and some of the key elements which would be needed for a national framework to be successful. This example illustrates some of the potential for communication, even before the actual planning stage.

In Kosovo, communication on the NQF is handled by the Council for Vocational Education and Training and through the members of the board of the National Qualifications Authority. The authority also sets up meetings to engage other stakeholders. Communication to schools is channelled through Regional Boards for Education and through local authorities. The EU-funded project KOSVET 5 supports NQF-related communication through working group meetings and national and regional awareness raising events.

In Namibia, the Namibia Qualifications Authority (NQA) often hosts consultative and information-sharing conferences with stakeholders and representatives of the public at large. Media used for announcing developments include official government notices, the Internet, flyers, other publications and trade fairs.

In Morocco, there is no strict policy that governs communication related to its initiatives. This has proved to be problematic, in that teachers and trainers have been slow to embrace and engage in the reforms. Qualification development in Morocco has started to affect the provision and training in priority sectors through the competency-based approach of the EU-funded MEDA II programme in the country. In the development process of a national framework for qualifications, communication has been marked as a separate phase, together with mapping, designing and testing.

In Malaysia, the Malaysian Qualifications Framework (MQF) has an important communication function towards stakeholders and learners. There is a direct link between outcome-based qualifications and delivery and this is communicated to learners and stakeholders. All accredited qualifications and programmes are registered in the Malaysian Qualifications Register which can be viewed and consulted online (www.mqa.gov.my/mqr). The register is also the reference point for credit transfer between accredited programmes and qualifications. It plays a significant role in facilitating recognition of accredited qualifications locally and internationally for purposes of employment and further study. The national framework builds on the quality assurance systems for higher education, the skills and the TVET sector polytechnics and community colleges by providing the descriptors such as learning outcomes, credits, nomenclature and levels for developing new programmes. The TVET sector intends to strengthen its links to both higher education and industry. One of the difficulties of further integration is due to the fact that the systems and structures are different under the ministries in charge of the skills sector, VET and higher education.

In **Turkey**, information about the National Vocational Qualifications System is communicated through the website of the Vocational Qualifications Authority (MYK, see www.mvk.gov.tr) as well through press events involving members of the government and sectors.

Although the Council of Higher Education, the MYK and the Ministry of National Education cooperate closely with the employment services and social partners in the implementation of the National Vocational Qualifications System, the links to vocationally-oriented qualifications that are developed within the systems of the Ministry of National Education and higher education have not been established yet. The Turkish Qualifications Framework for lifelong learning and its communicating powers may have the potential to facilitate coordination.

Given the present stage of development there is no specific communication strategy to learners yet. Accredited qualifications and occupational standards can be accessed through the MYK website, as well as a list of authorised certification bodies. The website of the Council of Higher Education (www.yok.gov.tr) offers information to students on provision and recognition but does not allow for any programme comparisons. Turkey is widening the guidance and counselling provision beyond schools and employment services to local lifelong learning centres that should stimulate demand in regions.

In **England**, UCAS coordinates and provides information and guidance about access and admission to universities (www.ucas.com). Big newspapers, such as The Guardian, The Times and the Financial Times provide ratings of programmes offered and the Quality Assurance Agency for Higher Education (QAA) publishes its reports online. For non-higher education qualifications The Register of Regulated Qualifications (register.ofqual.gov.uk) provides a complete list of accredited qualifications that are part of the Qualifications and Credit Framework (QCF) and the NQF, and very detailed search functions.

Existing advice and career guidance services are under reorganisation, but a new National Career Guidance Service integrating all guidance provision into one body is planned for 2012. This will provide mainly web-based and telephone services. The Learning Records Service (www.learningrecordsservice.org.uk) allows learners, providers, awarding bodies and employers to obtain information about the achievements of learners through a single independent source, provided that third parties have the agreement of the learners. Learners with QCF qualifications can also use the information online to explore different learning paths and credit transfer to other qualifications.

In France, the national register of professional certifications (RNCP) also has many search functions (www.rncp.cncp.gouv.fr). The website of the employment service (www.pole-emploi.fr/accueil) does not only provide information on jobs but also on career management, including training opportunities and validation of non-formal and informal learning. The employment service pioneered web-based information on occupations, career opportunities, skills competences and qualifications more than 15 years ago through a directory of professions (the Répertoire opérationnel des métiers et des emplois - ROME), which took the occupations in the labour market as a starting point and allows people to search by sector, occupation and competence. ROME is linked to the RNCP.

Onisep¹⁹, the counselling and guidance service established by the education ministry (ministère de l'Éducation nationale), collects, archives and distributes information to students, families and professional career guidance counsellors.

In Australia, the register of qualifications that are part of the AQF does not have a single public entree point but on the AQF website there are links to different organisations for school and higher education qualifications. There is one single link for VET qualifications (training.gov.au). Job Outlook provides information on the prospects for hundreds of occupations and allows for detailed searches (joboutlook.gov.au). Websites such as My Future (www.myfuture.edu.au) and Careers Australia (www.careersaustralia.edu.au/home) have been developed to help young people to plan their career, but there are also many commercial sites. All have references to qualifications, jobs and education in an integrated way.

The redevelopment of the AQF has been a highly interactive, transparent and accountable process as the AQF Council sought the involvement of all stakeholders and made public the outcomes of each stage of development. The AQF Council conducted three national consultations, used the expertise and experience of many AQF stakeholders, and commissioned two major pieces of research to assist with the development of its advice to the Ministerial Council for Tertiary Education and Employment. It also considered other national policy directions and international developments in qualifications frameworks. It is, for example, also a reference tool to support international student mobility and skilled migrants. (Australia has the highest proportion of foreign students among OECD member states.)

In conclusion, these examples show that all countries have recognised the importance of communication but are struggling to find instruments that can help them to mobilise stakeholders, users and final beneficiaries to maximise the potential of the qualifications and their frameworks.

Navigation tools

As markets, education and training systems are not quite perfect. When a new qualification in the NQF is not offered by any providers, no learners will take it. Providers often control the main information channels about education programmes and qualifications. Although learners are the 'consumers' of education and training programmes and qualifications, they rarely ever have any influence on the offer and contents of qualifications. Nor are NQF coordinating institutions and educational providers fully aware of the type of information that is needed by learners. Therefore, learners are often poorly informed about expected learning outcomes and the career options that these offer.

Qualifications are changing, but communicating these changes requires good marketing and information exchange with learners and employers. There is a need for targeted information about new qualifications that addresses career counsellors, providers and employers as well as families and individuals. Web-based navigation systems are a possible tool. Most guidance tools provide information on training programmes and providers, but there is a growing interest in systems that provide information on qualifications and career opportunities.

Stakeholder strategies

Qualifications frameworks can link different stakeholders together and try to bridge different well-established subsectors, such as in Malaysia, Chile and Turkey. It is important to demonstrate the added value of these linkages. Targeted communications strategies, consultation, feedback mechanisms and research are needed to ensure that the instruments are in line with the expectations of stakeholders and beneficiaries. Malaysia e.g. is using on-going discussions with the stakeholders and the beneficiaries to realign their qualifications.

Reaching the beneficiaries and users

Individuals, individual employers, career advisors, counsellors in employment services, parents, students, school directors, trainers and teachers are all users and beneficiaries of the qualifications in the framework. Many of these groups are far removed from the institutions that manage the qualifications frameworks. Making the frameworks and the qualifications accessible for these groups is one of the biggest challenges for successful implementation.

Communication strategies and tools are essential to achieve impacts on institutions (e.g. schools, colleges and employers) and individuals. These tools should mobilise beneficiaries and enable them to judge how they can use qualifications (and qualifications systems and frameworks) to enhance lifelong learning opportunities, and the employability of individuals. Without deliberate policies and means to reach beneficiaries countries risk building systems for the sake of systems, as was stressed by Pierre Mairesse of European Commission during the conference conclusions.

5.2 QUALITY ASSURANCE

Quality assurance is one of the most critical elements of any qualifications framework. It represents a challenge because all qualifications must be quality-assured before they can be entered into the framework, but precisely this obligation is also a huge strength of frameworks. If stakeholders and end-users of qualifications can be convinced of the effectiveness of quality assurance processes related to the framework, this will greatly boost the market value of qualifications. In the end, such confidence will benefit one of the core aims of qualifications: to allow people to employ their knowledge, skills and competences across different settings in the worlds of learning and work.

This confidence hinges on three key aspects:

- the relevance of the qualifications contained in the framework:
- the competence of those who deliver the required
- the objective assessment of acquired knowledge, skills and competences.

From this we can deduce the three key elements of quality assurance related to qualifications frameworks:

- the validation of qualifications;
- the accreditation and audit of education and training
- the validation and continued control of assessment procedures.

To achieve and maintain broad confidence in the relevance of qualifications, all stakeholders must be involved in an accountable and transparent way. Broad stakeholder involvement can lead to endless procedures. Defining and agreeing on these beforehand (and sticking to these during the development process) is therefore essential.

The same applies to assessment procedures, where broad involvement under broadly agreed and transparent procedures will support confidence.

Where the accreditation of providers is concerned, similarly transparent benchmarks must be used, but the professionalism of trainers and educators must also be trusted. This can be achieved by using agreed learning outcomes as the measure of their assessment.

Evidence quite overwhelmingly suggests that overly centralised control of procedures leads to a lack of confidence from stakeholders and end-users. Only broad involvement of stakeholders and a sense of ownership and responsibility on their part can generate a true quality culture. This is essential for broad recognition of the qualifications that a framework comprises.

In order to achieve such recognition, qualifications frameworks must:

- ensure that qualifications are relevant to perceived social and economic needs;
- ensure that qualifications are based on education and training standards that are defined by agreed learning outcomes and applied consistently;
- ensure that education and training providers meet certain quality standards;
- secure international recognition for national qualifications.

Although modern qualifications are based on learning outcomes, they play only a limited role in the quality assurance of learning. The quality of learning is (still) predominantly measured by the quality of providers, even if the influence of qualifications is increasing as some examples below will show. Quality and related quality standards need to be redefined continuously in order to assure quality.

Quality assurance in the development of qualifications in practice

In Kosovo, four aspects of quality assurance have been specified: the validation of qualifications to be placed in the NQF, the accreditation of institutions, quality assurance of assessment procedures and endorsed certificates. Proposed qualifications must pass four stages before they can be included in the NQF. These stages are overseen by the appropriate authorising authority (the National Qualifications Authority, the education ministry or the Kosovo Accreditation Agency for Higher Education). A validation panel of educational and occupational experts decide whether a qualification can be included in the NQF. Four criteria are applied to inform this decision: the need for the qualification, whether the design is fit for purpose, whether the qualification is of the required technical quality and level and whether the credit value of the qualification and its component units has been correctly identified. Once included, the qualification must be reviewed at least every five years. The National Qualifications Authority accredits vocational schools, while the Kosovo Accreditation Agency for Higher Education accredits higher education institutes.

In **Morocco**, quality assurance processes have been designed for the development of qualifications in three priority sectors that are piloting the competence-based approach. The main actors are the inspectors in charge of programme implementation and of the organisation of exams.

In Namibia, the registration of qualifications on the NQF requires a check of the institutional and programme quality assurance of the provider. The NQA has the responsibility for overall quality assurance of the education and training system. All awards pass through the NQA, as do evaluation and recognition of qualifications for articulation and further studies. Qualifications submitted by institutions, organisations, industry or professional bodies are checked against registration criteria to confirm a placement on the NQF, so as to be available for award by appropriately accredited bodies. Evaluation involves the consideration of qualifications already awarded. These may be Namibian qualifications developed before the establishment of the NQF or foreign qualifications.

The NQA maintains 'parallel' database registers showing the alignment of pre-NQF Namibian qualifications and the NQF, and qualifications from abroad and the NQF. Individuals may also approach the NQA to request evaluation of their qualification(s). The NQA also has the responsibility for accrediting programmes and courses and for registering qualifications in the NQF. These can be from VET or higher education and from public or private providers. Accreditation is based on the Regulations for Accreditation of Persons, Institutions or Organisations, Namibian Qualifications Authority Act No 29 of 1996.

In Turkey, in the newly established National Vocational Qualifications System, quality assurance plays a very important role. All authorised certification bodies need accreditation based on the ISO/IEC 17024 standard provided by Türkak (the single national accreditation body for conformity testing and certification of all types of services) as well as authorisation of the MYK. Certification will be conducted by the authorised certification body, using the MYK logo. The latter will oversee and assure the quality of certification procedures as well as the provision, for which the MYK is developing general guidelines.

In higher education the universities issue certificates, with a controlling role for the Council of Higher Education, and for three existing discipline-specific quality assurance councils. The establishment of an independent Quality Assurance Agency for Higher Education is planned. This body is expected to deal with the external quality assurance of qualifications, programmes and institutions and will accredit new universities and colleges. Provision of higher education in Turkey is far below the demand for it, which continues to expand. Given Turkey's young population and the increasing numbers of students in post-compulsory education, quality assurance in higher education will require quality development policies for new faculties, colleges and universities.

In Tajikistan, the Ministry of Labour and Social Protection, which is responsible for adult education and training, intends to establish within its system a department or unit for qualification recognition that will also be in charge of quality assurance.

In England, Ofqual is the independent regulator of recognised qualifications that are part of the QCF or the NQF. It regulates the quality of standards, qualifications and assessment practice but awarding bodies are in charge of developing and maintaining qualifications and for the assessment and certification processes. Sector Skills Councils confirm that vocational qualifications are in line with sectoral qualifications strategies. Awarding bodies quality assure centres (schools, companies, NGOs or assessment centres that are responsible for education and training provision).

As a rule, assessors and internal validators are accredited. Awarding bodies are predominantly private actors that develop qualifications, oversee assessment practice and certify individual learners.

In higher education, quality assurance is mainly based on internal quality assurance processes of institutions. The QAA is responsible for external quality assurance. On average, higher education institutions are visited once every six years and the external quality assurance is focused on the processes within each of the institutions. There is a Code of Practice and subject area benchmarks, which are qualifications descriptors that together with the Framework for Higher Education Qualifications and the Higher Education Credit Framework are part of the academic infrastructure for quality assurance. Degree-awarding powers can only be granted by the Privy Council, a high-level advisory body to the Queen whose history goes back to the 17th century.

In Malaysia, there are different processes for quality assuring higher education, TVET and the skills sector but all quality assurance begins with the MQF. All programmes and qualifications must be in compliance

with the MQF if the higher education provider seeks accreditation from the Malaysian Qualifications Agency (MQA). All qualifications must have a credit value and must be based on the eight domains outlined in the Framework.

For higher education, the MQA has developed the Code of Practice for Programme Accreditation (COPPA) and the Code of Practice for Institutional Audit (COPIA). These codes of practice are benchmarked against international good practices and accepted nationally by stakeholders through various consultations.

The MQA assures the quality of programmes through two distinct processes i.e. Provisional Accreditation and Full Accreditation. These two processes are to ensure that higher education providers achieve the set quality standards. Accreditation is a formal recognition that the qualifications awarded by higher education institutions are in accordance with the set standards.

The Ministry of Human Resources is responsible for coordinating and ensuring the quality of all of the skills qualifications delivered by other ministries as dictated by the Malaysian Skills Certification System.

For a skills qualification to be included in the Malaysian Qualifications Register (MQR) of the MQA, it must be accredited by the Department of Skills Development through the Malaysian Skills Certification System based on the National Occupational Skills Standard.

In **Australia**, the AQFC is not responsible for regulation and quality assurance. This is in the hands of different bodies. In 2011, a national VET regulator was established. In higher education, the Tertiary Education Quality and Standards Agency (TEQSA) has been established to oversee the self-accreditation by universities. Since both VET and higher education are considered part of the tertiary sector in Australia, it is foreseen that the national VET regulator and TEQSA merge in 2013. School education remains very much the responsibility of states and territories, although joint work on a national curriculum was initiated recently. In VET the Australian Quality Training Framework focuses on the quality of the provision by Registered Training Organisations. These can be public providers, including technical and further education institutes or private providers. Training can take place in training centres or in companies, for example through apprenticeships.

In France, the CNCP is not a quality assurance body as such. All qualifications covered by the RNCP must be first accredited by tripartite councils or committees, must be achievable through a process of validation of prior learning (VAE), and must be described in terms of learning outcomes in a common format. Registration is done without questioning (de droit) for those qualifications accredited by the state or in name of the state. For the other qualifications, registration is done on demand and after a procedure led by the CNCP. In higher education and post-secondary education, the main accreditation authority is the Ministry of Higher Education and Research. There are different procedures for private and

public institutions: all institutions can issue higher education certificates or diplomas but national degrees can only be issued in name of the ministry. There is a separate commission for the grandes écoles. In public initial VET provision in France, representative of the economic sector are usually involved in the assessment procedure and validation is always carried out by a committee which comprises at least one representative of the economic sector. Specific validation committees for the system for recognition of prior learning are organised regionally by qualification, bringing together approximately 12 persons combining inspectors, providers' staff, employers and employee representatives. In 2007 the national accreditation organisation – Agence d'évaluation de la recherche et de l'enseignement supérieur or AERES - was established with the task of evaluating all higher education and research in France. The Engineering Titles Commission (Commission des titres d'ingénieur - CTI) is responsible for schools of engineering, with assessments that take place every six years. There is a separate commission for business study programmes, the Commission d'évaluation des formations et des diplômes de gestion.

A slowly changing quality culture

Quality assurance is starting to develop beyond the traditional inspection duties, though in many cases it is still too early to speak of quality assurance systems. The terms 'quality control', 'quality enhancement' and 'quality assurance' are often confused. Although the term 'quality assurance' is increasingly used, in reality many countries are looking for ways to control quality and to ensure compliance. A culture of quality assurance and quality improvement in which weaknesses are recognised and addressed but not sanctioned takes time to develop.

Normally the arrangements for quality assurance come into place once qualifications are certified as part of a framework. Many countries are still at an early stage of developing their systems. They have clear aspirations to raise quality through the reform of qualifications systems and are developing aspects of quality assurance systems.

Qualifications frameworks as quality assurance instruments

Qualifications and qualifications frameworks are normally reference tools for quality assurance but in most countries quality assurance systems continue to focus on the capacities of providers to provide quality education, rather than on the processes linked to developing, and using qualifications. Although there are national guidelines of which qualifications systems form part, quality assurance is often decentralised to the provider level. There are nevertheless a number of areas in which we can see a clear role for qualifications frameworks in quality assurance.

There are guidelines for the development of qualifications and procedures in every qualifications framework. These judge the quality of qualifications in order to approve, recognise or accredit those that will be included in the framework. Moreover, there are procedures for

recognising, authorising or accrediting the bodies that are involved in the development of qualifications.

The quality assurance of assessment and certification processes is an essential part of the arrangements of qualifications frameworks, ensuring the relevance and reliability of the assessment processes and the link between assessment and the qualification standards, principles about the competence of assessors and validators, information and guidance for candidates, the rights of candidates, appeal procedures and procedures for the validation and certification process, including the handling of personal data and the results of the assessment. Often, specific guidelines and procedures exist for the validation of non-formal and informal learning.

In turn, national guidelines and procedures on assessment, validation and certification are reflected in the internal quality assurance procedures of awarding bodies and providers. There are also procedures for the institutions that perform the external quality assurance of awarding bodies, providers and assessment centres.

5.3 RESOURCES

How much does it cost to develop and maintain a national framework for qualifications? Is it worth the investment?

Some countries clearly believe it is. Countries such as England and France are using the frameworks to bring some system into their liberalised qualifications provision. But this has taken time to develop. Kosovo has chosen to reform its qualifications system around the blueprint of a framework. But for many other countries, the decision to introduce a framework for qualifications represents a considerable investment, often of scarce resources.

An assessment of the institutionalisation of the implementation of frameworks requires a review of the financial and human resources that have been or must be allocated for the coordination of the framework, for the development of qualifications, as well as for the alignment of the delivery of education and training, the assessment of learning outcomes and the certification and recognition of competences.

This study intended to generate indications of resources allocated or budgeted for framework implementation. It has proven to be difficult to get precise figures, but some indications have been generated. The financial resources for implementation identified in this study focus on the coordination of the framework and the development of qualifications.

Allocating resources to framework implementation in practice

In Namibia, the NQA is fully government-funded and has 40 staff working in three different sections: Qualifications; Accreditation, Audit and Assessment; and Corporate Service. The Qualifications Section is headed by a chief higher education officer with ten quality assurance officers of whom five are responsible for NQF

coordination. These officers received on-the-job training in quality assurance. Half of them have been trained as assessors. According to the Namibian Qualifications Authority Act (1996), the NQA funds shall consist of: (i) all monies appropriated by parliament for the realisation of the objects of the NQA; (ii) monies received by virtue of the provisions of any work performed or services rendered by the NQA under the Act, or for the use of its facilities; services and fees must be consulted with the minister; and (iii) such other monies as may from time to time accrue, become payable, or be donated to the NQA.

In **Turkey**, the state has made considerable investments in the MYK. Private contributions from stakeholders have also been used. Sectors have invested considerable time in developing occupational standards. A number of EU and bilateral projects are supporting the development of a national framework for qualifications, including the EU-funded projects 'Strengthening vocational education and training' (SVET, completed in 2007), 'Quality assurance in VET', 'Support to quality assurance and the Qualifications Framework for Higher Education' (implemented by the Council of Europe), and the project to support the MYK with grants. The MYK is governed by an assembly with around 40 paying members, including different ministries, chambers, employers' organisation and unions, and sector-oriented bodies. The assembly elects the six-person executive board for a period of three years. The executive board meets monthly and the chair of the executive board is also the president and chief executive officer of the MYK. The MYK is foreseen to grow into an organisation with 90 staff with developmental as well as coordinating functions. Its four departments are Occupational Standards, Testing and Certification, International cooperation and Administrative and Financial Affairs. Many of the current staff are young and require further training. Some of them have developed considerably during the past three years. In the Council of Higher Education at least seven people are needed to support universities and coordinate the work regarding quality assurance procedures, assessment and the formulation of learning outcomes. Each university is estimated to need at least two extra staff for quality assurance procedures, assessment and the formulation of learning outcomes. Sectors need to have qualification developers and unit writers to develop qualifications from the occupational standards. There is a need for additional quality assurance officers who can assist assessment, assessors in assessment centres, and providers. Some additional teachers and trainers are needed, in particular for the training of adults and for new qualifications. Also guidance officers and administrators are needed. Sectors are expected to lead the development of qualifications, but they need competent staff to do so. The MYK will develop guidance for qualification developers and unit writers to work with experts from sectors and education. There is an urgent need for training of qualification developers to provide guidance and develop examples. Financial resources for the development of qualifications come from EU funding (IPA projects), contributions from sectors (for the voluntary development of occupational standards and for developing the Voc-Test centres), and state budget support to universities. EU support has been and remains very substantial. Five European projects are

expected to support the development and the implementation of the NQF involving the MYK, the Council of Higher Education and the Ministry of National Education. The NQF implementation is part of these projects which also have other aims. The total value of the five projects is EUR 120 million.

In Kosovo, the National Qualifications Authority has six members of staff and its governing board counts 13 members representing the various stakeholders. The Kosovo Accreditation Agency for Higher Education has four members of staff, but also calls on the services of approximately 60 international experts to carry out specific accreditation tasks for education and training institutions, as required. Among the 200 staff of the ministry, five are employed in a specific VET unit. The Government of Kosovo supports the Council for Vocational Education and Training financially. The NQA was initially funded by the ministry; from the beginning of 2012, it will receive its own budget line direct from the national Treasury and will also generate income from fees for accreditation services, for example. A small expansion in staff numbers is also foreseen.

In Morocco, the competence-based approach to qualifications started with a Canadian project which is still ongoing. As indicated above, the EU-funded MEDA II programme has joined forces with the Canadian project in three priority sectors. The development of qualifications is provider-driven. The human resources allocated are the same as before the formation of the National Framework for Certification.

In England, the coordinating institution Ofqual has 166 staff including four directors and one chief executive officer. This is one-third of the number that worked for the Qualifications and Curriculum Authority (QCA) in 2008. Seventeen staff work in strategic management. They manage internal systems, including finance and procurement, IT, governance, legal, internal audit and building facilities, and support the chief executive, chair and board. Thirty-one staff work for Internal and External Affairs, dealing with human resources, customer services, investigations, communication and stakeholder relations. Another 62 staff work on regulating vocational and general qualifications. This covers the regulatory approach in line with legislation, cooperation with stakeholders, the recognition of awarding organisations, accreditation of qualifications, and monitoring of delivery. Finally, 55 staff work on standards development, maintaining and monitoring standards in national assessments of 3-14-year-olds, monitoring and reviewing the standards of operational general and vocational qualifications, accrediting qualifications used by 14-19-year-olds and providing general expertise in assessment.

The Malaysian Qualifications Agency is a large organisation with 317 staff members: 18 in the directorate, 184 in quality assurance and standard setting departments, and 133 in management, operations and services. The large number of staff can be explained by the fact that the agency replaces two previously existing agencies: (i) the National Accreditation Board (LAN), for accreditation of private higher educational institutions; and (ii) the Quality Assurance Division of the Ministry for Higher Education for public universities.

The Australian Qualifications Framework Council was established in 2008 to govern and monitor the AQF. The council is a committee of the Ministerial Council on Education, Employment, Training and Youth Affairs. It is comprised of experts from all education sectors, employers, unions and government. The chair is independent of the sectors and the council includes an observer from New Zealand. It has 12 members and is supported by a Secretariat of four staff. The Council meets approximately four times a year.

In **France**, the coordination of the NQF is done by the CNCP which comprises the different ministries' civil servants related to the qualifications development represented in the CNCP and representatives of social partners involved in the CNCP already present in the CNCP working groups.

The commission itself is composed of 43 members. These are departmental officials, representatives of regions, social partners, representatives of chambers and qualified persons. The CNCP operates under the authority of the minister responsible for VET. It is supported by a permanent secretariat (17 staff) and a network of regional correspondents.

Analysis and findings

Qualified human resources are crucial for the effective coordination and operation of a framework. All operators involved will have to adapt to a new role and to new mechanisms where the issues of switching to learning outcomes, base standards, curricula, delivery methodologies and assessment have a major impact.

It is difficult to distinguish between the capacities that are necessary to maintain, coordinate and implement the framework and the wider reforms that are linked to the reforms of the qualifications systems and the qualifications.

Implications for existing institutions

Most of these people work within existing institutions that are adapting their arrangements to the requirements of the frameworks. The effects on staffing are limited in highly industrialised countries where new demand-driven and outcomes-based approaches and a focus on lifelong learning have already been introduced.

In developing countries or countries in transition, where the integrated functions do not exist yet existing institutions need additional staff resources and new institutions and authorities need to be established. In many cases the new bodies are supported with funding and technical assistance from large donor projects, but they need to be sustainable.

Implications for coordinating institutions

There is a clear difference in the number of staff employed for the coordinating functions between frameworks with a centralised regulatory quality assurance approach, such as Namibia (NQA), Malaysia (MQA), Turkey (MYK) and England (Ofqual) and frameworks where the central level organisation is not directly responsible for quality assurance, such as France (CNCP) and Australia (AQFC).

However, in the case of the latter the regulatory and quality assurance functions are often delegated to institutions in subsectors.

6. KEY FINDINGS AND ISSUES FOR FURTHER ANALYSIS

This chapter brings together findings and elements from the previous sections.

6.1 KEY FINDINGS

Many countries have decided to develop frameworks of qualifications. Although this seems to be part of a global trend towards remarkably similar solutions, in practice the development, implementation and coordination of qualifications frameworks, in fact even the rationale for introducing them, vary considerably from country to country.

This is not a sign that some countries do things better than others. It is a logical consequence of what is perhaps the key condition for the success of a framework: that it fits its purpose and environment and that it develops and keeps developing together with this purpose and environment.

The latter implies that frameworks of qualifications are not static. The arrangements change not only depending on the state of development of the framework, but also on developments in society, the economy, education and the (international) labour market.

The precise way in which frameworks of qualifications are implemented and the roles that institutions and stakeholders are assigned matter very much in shaping them.

Development and coordination

There is a distinct difference between concepts and implementation arrangements. The blueprint for any framework should anticipate strong interaction between different stakeholders in the implementation phase. As a result, some evolution and related surprises during the implementation process are a natural part of frameworks of qualifications.

Looking at the timelines in the country sections below, one can see that it takes a lot of time to develop qualification frameworks and that they are never finished. Australia and England, for example, both have a long history of working with frameworks and yet, they continue to keep restyling and reshaping their systems. It is therefore important to continue the work on qualifications development in parallel and not wait with this work until the framework is finished. It will never be finished, least of all if it has no qualifications in it.

Moving from concept to implementation, or from pilot to mainstream, qualifications frameworks become more

complex. This has implications for the way in which the framework takes shape and for the success of its adoption. Indeed, in the shaping of a national framework of qualifications its governance is more important than the meta-language of the descriptors, the levels and the learning outcomes.

Just as different environments shape different frameworks, different environments give different meanings to the word relevance. While working within an agreed framework that all partners understand increases the chances for qualifications to be developed that are meaningful, success is never guaranteed if key questions are not asked and borne in mind throughout the process of developing qualifications. Who should be involved and how should qualifications be developed? Are the qualifications designed for employers or for employees? In a post-industrial society that requires extreme flexibility and personal initiative, it is crucially important that the focus remains on individuals and creating opportunities for them

Frameworks of qualifications are no magic solutions for ensuring seamless progression. Pilots limited to one economic sector or one subsector of the education system are more likely to succeed than more comprehensive frameworks because they fail to test some of the most essential elements of the framework: its potential to support mobility between and across sectors and between and across different parts of the education system. Pilots focused on a specific segment of education and training systems are useful, but only as one stage of a longer process towards system reform.

Sharing experience among sectors, education providers and indeed countries is tremendously helpful, both for developing ideas and for test-referencing qualifications against other systems.

Assessment

The development of qualifications based on learning outcomes regardless of learning path has had a significant impact on related processes of learning assessment, validation, and certification.

But other recent developments have also shaken up assessment and related certification traditions. Appeal procedures have become more common, changing the traditional hierarchy and seniority principles in education and training.

A much more important innovation is the adoption of procedures for validation and recognition of prior learning. This comes quite naturally with the shift from input-based

teaching towards output-based teaching. If the process is subordinate to the result, anyone who can prove that they can do what is required for qualification should be able to receive recognition for this. Qualifications frameworks offer good opportunities for regulating how such prior learning, be it through work or general life experience, should be assessed, validated and acknowledged.

The professionalisation of assessment based on learning outcomes implies that approaches to assessment will diversify beyond traditional written and oral exams. This requires competent assessors, and validation procedures to ensure the authority and reliability of the results. The purpose of assessment is to evaluate learners' knowledge and skills. This means that learners should be properly prepared to do the best they can.

Delirvery

In teaching and instruction, there is a clear trend away from traditional methods in which knowledge is transferred towards methods that work with a specific outcome in mind, regardless of the process. These outcomes are defined as learning outcomes.

As indicated earlier, the idea behind the outcomes-based approach learning is that programmes and qualifications should be defined by what results the learner should achieve rather than by inputs from institutions e.g. teaching, duration of programme, assessment methods. By making those results clear in terms that focus on what the learner has gained, rather than what the institution has provided, learners should be able to transfer their achievements for further learning and career development.

Learning outcomes can be used to identify appropriate assessment criteria as evidence and to inform modules for the delivery of education and training. It is also possible to define learning outcomes for individual learners as a trajectory towards the completion of a module or a full qualification. It is even possible to use learning outcomes for defining the intended learning in a programme or work activity taking a starting point in a qualifications framework.

The study does not prove a linear relationship between the shift towards learning outcomes and the introduction of frameworks. The frameworks of qualifications are seen as a step in the paradigm shift to systems based on learning outcomes. In reality this is a gradual process with learning outcomes being introduced in different degrees into qualification descriptors, qualifications, assessment and learning processes. We therefore prefer to speak of learning outcomes-led rather than learning outcomes-based approaches.

The evolving context in which learning and the acquisition of qualifications takes place, introduces the relevant authorities (and stakeholders) in different countries to new paradigms in education and training. This forces them to rethink long-established procedures along logical paths and leads to the faster appropriation of new ideas in learning and training, such as that of the gradually shifting focus towards learning outcomes.

From national reform strategies to the provision of learning, there is a need for measures to ensure that teachers develop both the competences and the attitudes that are important to bring about curriculum change. This is the most difficult and expensive part of the reforms of qualifications systems and requires an appropriate strategic approach.

Communication

The very process of developing a framework or rethinking existing qualifications systems is an opportunity for communication and learning. Indeed, communication in a much wider sense is a critical part of the development of qualifications frameworks that offers both challenges and opportunities. Frameworks can be the object of communication, but they can also be a tool for communication.

Many countries have used and are still using the process of developing frameworks of qualifications as an opportunity to establish much needed lines of communication between authorities, education providers, employers, workers' representatives and civil society.

But frameworks are also being used to develop links to guidance opportunities and other forms of outreach that traditionally only reach people who actively seek assistance. Access points into the framework, such as online interfaces, hold the potential to create a much broader awareness of guidance opportunities. New tools have been developed to empower individuals to become true customers of qualifications systems and support career development.

The contents of qualifications frameworks are also used in other forms. Tailor-made and comprehensive information can be retrieved on qualifications and on providers. Recognition and performance can be checked. With such functions, frameworks enforce quality assurance as they increase the need for public accountability of institutions.

Quality assurance

All qualifications must be quality assured before they can be entered into the framework. Precisely this obligation is a huge strength of frameworks. If stakeholders and end-users of qualifications can be convinced of the effectiveness of quality assurance processes related to the framework, this will greatly boost the market value of qualifications. Their currency, portability and transparency will allow people to better employ their knowledge, skills and competences across different settings in the worlds of learning and work.

In order to achieve such recognition, qualifications frameworks must ensure that qualifications are relevant to perceived social and economic needs. They must also ensure that qualifications are based on education and training standards which are defined by broadly agreed learning outcomes and applied consistently. Qualifications frameworks must ensure that education and training providers meet certain quality standards. Finally, they must secure international recognition for national

qualifications. Qualifications frameworks have already become key to managing legal migration of skilled workers in the cases of England and Australia.

Resourcres

Capacity development is crucial and, just as communication and quality assurance, both a condition for the effective operation of a framework and a direct result of it. Professionals, people developing qualifications, people coordinating, people assessing, people validating, guidance counsellors, teachers and trainers that have been adapted to their new roles, people in enterprises that support apprenticeship or continuing training - the human resources component of national frameworks of qualifications is huge.

Most of these people are within existing institutions that are adapting their arrangements to the requirements of the frameworks. Many of the changes associated with the introduction of a framework of qualifications, such as occupational standards, new qualifications, modular curricula, new approaches to assessment, more cooperation with the world of work, guidance and counselling, improved access, quality assurance procedures, and student-centred approaches are integral parts of modern education and training systems. In developed countries that do not have a framework of qualifications yet, such changes have often been introduced already.

As we have seen, the staffing resources of specialised agencies that have been established to coordinate frameworks vary considerably in size, between 6 and 166 permanent members in the countries that were the subject of this study. These coordination costs are only a fraction of the staff costs related to the implementation of frameworks. It seems that most costs must be made anyway, but the potential for transparency, coordination and communication that a framework offers suggests that it could reduce, rather than increase such costs, if only because it so clearly maps where (often considerable) duplication exists.

In terms of capacities, developing countries are particularly challenged, as they lack both capacities and resources at many levels and may need to prioritise their investments carefully. Qualifications system reform is a long-term process, particularly when the basic requirements are missing. There is often a degree of dependency on short-term donor projects to develop and reform systems in developing countries. This raises serious questions about the sustainability of reforms. Existing systems often reach only small parts of the population as many work and are trained in the informal sector. Qualifications frameworks are not an appropriate way of 'fast-tracking' the reforms that may be needed, but qualifications can have an important function in creating new opportunities for people. Reforms need to build on local capacities and it is important that they focus first of all on developing these.

Final words

A framework of qualifications must be fit for purpose. As we have seen in the previous sections, what exactly 'fit for purpose' entails, depends to some extent on the setting. To put it simply, whether or not a framework is 'fit for purpose' depends on its purpose.

This purpose differs in different countries, but as globalisation reaches ever closer to the heart of societies and national economies around the world, these differences are diminishing.

So, general statements can be made if we allow ourselves some space for local variations.

- A framework of qualifications is fit for purpose when all relevant stakeholders are involved and continue to be involved.
- A framework of qualifications is fit for purpose when the capacity of these stakeholders is sufficiently strengthened and continues to be developed.
- A framework of qualifications is fit for purpose when it links with existing institutions.
- A framework of qualifications is fit for purpose when it leads to a more dynamic qualifications development system.

In the end, what matters is that qualifications frameworks are transparent and meet the quickly changing needs for skills in the economy, that they contain qualifications that enable individuals to do more with their knowledge, skills and competences in education and in the labour market, at home and abroad, and that they enable governments to gain efficiency by avoiding overlap, improving the relevance and quality of education, improving flexible pathways and equal opportunities, and promoting lifelong learning.

Above all, a framework of qualifications is always a tool, never a goal.

6.2 ISSUES FOR FURTHER ANALYSIS

Some issues need further analysis before hard and fast statements can be made. This could concern resources issues, but the fact that reliable data on resources invested is hard to obtain may also be symptomatic of the nature of qualifications frameworks. As they touch on all aspects of qualification development, the boundaries of investment that is strictly related to the development of the framework and investment that would (or should) have been made anyway are vague. After all, qualifications development, assessment arrangements, capacity development and coordination of stakeholders cost money, are inevitable expenses for a country that takes the development of its human capital seriously, yet cannot be ascribed directly to the development of a national framework of qualifications.

But costs are important, not least for countries that are considering the development of a framework of qualifications. Even if exact figures cannot be found, it will be useful to see who bears the costs and how such expenditure is divided among stakeholders, public and private, from the government all the way down to the end users of qualifications.

One issue that deserves further attention, particularly in the partner countries of the ETF is the current availability of capacity. Many countries do have capacity for parts of the qualifications development process but the actors that possess this capacity lack recognition for it or are insufficiently heard. This holds particularly true for countries that have not involved a broad representation of stakeholders (yet), such as trade unions and NGOs. More information on the availability of such capacity and how it can be capitalised on would be useful for governments as well as for agencies considering support to these countries.

A more systematic analysis of the qualifications that will fill the framework would also be useful. As the above sections indicate, some countries have chosen to build a framework around existing qualifications (although the existing qualifications inevitably seem to evolve as a consequence of the adoption of a framework), while others first design a framework from a blueprint and then fill the empty box with tailor-made qualifications.

The evidence on the implications of a framework for the provision of learning shows that it is difficult to downstream qualifications reforms in order to influence

the learning process. There is a need to understand these processes better – in particular the interaction with teachers, trainers and school leaders as possible agents of change. There is also a need to identify barriers and enablers, and to share good practice between teachers, trainers and school leaders in reducing the negative effects of reforms on their profession.

Qualifications reforms should enable learners to do more with their qualifications, and there needs to be more evidence to show how this can be done. In order to mobilise individuals and families to actively determine how they can make better use of these new opportunities, guidance and counselling systems, and in particular web-based tools such as the learner record database or the directory of professions (Répertoire opérationnel des métiers et des emplois - ROME) in France need to be better understood. So do new funding schemes to support demand-led provision.

Finally, this study does not go into details about how countries make their frameworks future-proof. What mechanisms are built into the system that safeguard the continued currency of both framework and qualifications? Since one of our key conclusions is that frameworks are never finished and that this is not a design flaw, but rather a characteristic, a strength, or even a plain necessity of anything related to qualifications, different countries must have found different ways of anticipating such constant change. This study hints at some of these processes, but case examples of successful forms of flexibility built into the system would be tremendously useful for countries that are in the process of developing frameworks.

ANNEXES COUNTRY SHEETS

ANNEX 1. AUSTRALIA

Main challenges

Australia is a large federalised country with more than 20 million inhabitants. About one quarter of all current Australians were born overseas.

Australia has six states: New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia. It has two major mainland territories: the Northern Territory and the Australian Capital Territory.

More than 60% of the population is concentrated in the larger urban areas. Economic growth has been consistently high over the last 15 years. In 2008 Australia produced over 50% more goods and services than it did 15 years before. Wealth is mainly urban and the wealthiest 20% of households have more than 60% of the national wealth, while the bottom 20% has only 1%.

Australia is less affected by the current financial crises than most other industrialised countries. Employment rates are high. The labour market is deregulated and people in permanent employment contracts are in the minority. Unemployment is low at around 5%, although the situation has deteriorated somewhat recently. Australia has traditionally been a country of migrants. 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.

Australia's education and training systems are predominantly the responsibility of states, rather than of the federal authorities. VET and schools are mainly funded by state governments and there is considerable diversity between the states. For higher education there is federal funding. Standards and regulations have traditionally played an important role in the schools sector and VET provision, while the higher education sector has to a large extent been self-regulating. VET has an Australian Quality Training Framework which focuses on the quality of provision by registered training organisations. These can be public as well as private. Training can take place in training institutions, in companies and through apprenticeships. Social partners are actively involved in VET. Together with industry representatives and organisations, 11 Industry Skills Councils are responsible for the development of Training Packages. A Training Package is an integrated set of nationally endorsed units of competence, AQF qualifications and assessment guidelines designed for a specific industry. Registered training organisations are responsible for delivery based on the requirements of the Training Packages. In higher

education there are 39 universities (which are self-accrediting) and four self-accrediting non-university higher education providers, and more than 100 other non-self accrediting higher education providers, two of which are foreign university campuses. There are many international students. Comparative indicators show that the Australian education system is performing well in comparison with most OECD countries. The main challenges are to ensure quality and recognition for learners across the country as a whole, to address emerging skills shortages and to provide better opportunities for the disadvantaged, in particular for indigenous Australians. There is a clear agenda for improved access to tertiary education, and a clear aim to raise attainment levels further.

Drivers for NQF development

In the federal Australian context, the AQF seeks to ensure that there is a national system of qualifications overarching the decentralised responsibilities. It was originally established in 1995 as a framework linking the subsystems of general schools, the VET system and the higher education system. Before 2010 the system contained generic qualifications descriptors but no levels and the links between the subsystems were weak, with separate quality arrangements and regulators for each subsector. Recently, the AQF has been reviewed and strengthened, introducing levels and more precise qualifications descriptors and credit values for 14 types of qualification. This is seen as an important step towards a better integration of the VET and higher education sectors and enabling the widening of participation in tertiary education.

The AQF is also clearly a tool to make the Australian system of qualifications better understood abroad. It is a reference document for people who want to study or migrate to Australia. The strengthened AQF is seen to facilitate stronger links to other international developments such as the EQF and the Qualifications Framework of the European Higher Education Area, the Pacific Qualifications Register, the New Zealand Qualifications Framework, and possible frameworks for the ASEAN and APEC communities.

The AQF is a tool to support lifelong learning and is a policy matrix bringing all of Australia's education and training qualifications into one comprehensive framework. It defines the relationships and pathways between qualifications through descriptors and specifications for each qualification and through policies regarding issuance of qualifications and pathways between qualifications. The application of AQF qualifications and requirements is underpinned by state-level legislation for the accreditation of qualifications and the registration of providers and recently introduced national legislation for higher education and VET.

Scope

The AQF is the single quality-assured national framework for qualifications in general schools, VET and higher education in Australia. The AQFC is responsible for technical development and management of the qualifications system and provides expert advice to the Ministerial Council for Tertiary Education and **Employment**. The council does not regulate individual qualifications. These are accredited by separate national regulators for VET and higher education and for the school sector by states.

Timeline

1972-95

- Pre-existing frameworks and registers for higher education are used.
- The Register of Australian Tertiary Education references qualifications in the VET and higher education sectors.
- Regulation of qualifications is decentralised.
- Higher education institutions are self-regulating.

1995

- The AQF is phased in and replaces the Register.
- The AQF describes qualifications across Australia for school sector, VET and higher education.
- The AQF Advisory Board is established. It advises on implementation of the AQF but does not accredit qualifications.

2000-08

- Full scale implementation of the AQF.
- It is used by Australian Education International, the National Office of Overseas Skills Recognition, professional associations and others when assessing overseas qualifications.

2008

- The Bradley Review of Higher Education proposes to transform the scale, potential and quality of higher education and to provide wider access and a voucher system of higher education funding.
- An OECD review of VET in Australia recommends changes in funding, improving labour market intelligence, and an outcome-led approach for all VET standards, including apprenticeship schemes.
- The AQFC replaces the AQF Advisory Board and becomes responsible for technical development and management of the qualifications system in Australia and provides expert advice to the Ministerial Council for Tertiary Education and Employment on strengthening the AQF.

2009-10

The AQF is redesigned. A 10-level framework is introduced. Generic outcomes for 14 qualification

- types are described, including an indication of the volume of learning involved.
- Regulations for VET and higher education are strengthened.
- Legislation is passed for the establishment of a national VET regulator and higher education regulator.
- The Skilled Occupations List is introduced by the Department of Immigration and Citizenship to define skills requirements for migrants. The list is updated every six months to match current skill shortages.

2011

- The amendments to the strengthened AQF (approved by the Ministerial Council for Tertiary Education and Employment in November 2010) are approved in March together with the AQF Council's advice on implementation.
- On 1 July the implementation of the new AQF starts.
- On 1 July the implementation of the national VET regulator starts.
- The Tertiary Education Quality and Standards Agency (TEQSA) is established on 30 July to regulate all Australian higher education providers.

2013

A possible merger of the national VET regulator with TEQSA.

ANNEX 2. CHILE

Main challenges

Over the last decades Chile has moved from being a relatively poor country to becoming a modern and prosperous economy benefiting from the efficient exploitation of mineral resources. However, Chile still faces some challenges related to the labour market and education and training. These include strong income inequality, low skills levels and labour productivity, limited possibilities for continuing education, and uneven quality and fragmentation of the education and training supply. This fragmentation is caused by a strong presence of the private sector and the limited role of the education ministry in planning and quality assurance.

Drivers for NQF development

In recent years there have been several separate initiatives from different stakeholders for the development of qualifications frameworks or systems. Most of the initiatives are project-based and focus on one economic sector or one education sector. Some are started by ministries or economic sectors and others by education institutions, but there seems to be no clear plan to connect these initiatives and develop a coherent and comprehensive national framework for qualifications. There is a lack of national drivers or coordinators and except for the Certification of Labour Competences, there is no structural implementation. Officials clearly state that for the current government, an NQF is not one of the priorities.

ChileValora represents the National Occupational Competency Certification. This system's main objective is the formal recognition of the work skills of people, regardless of how they were acquired. This promotes lifelong learning opportunities for people and also helps to identify skills gaps and upskilling needs of the labour market. The system enables the accreditation of occupational competency profiles identified by the productive sectors through the establishment of sector-specific labour competences, accreditation and supervision of the centres responsible for assessment and certification of persons. It creates and maintains a public register of certificates issued by ChileValora. However, those certificates do not have recognition or equivalence in the formal education system, and therefore do not lead to any educational progression.

Nowadays, ChileValora is the government office in charge of the certification of labour competences. They do not view their work as a contribution to a labour competence framework, but merely as the implementation of relevant legislation.

INACAP is the largest institute for higher education and training in the country. It offers post-secondary courses of long duration (two years and up) and all sorts of courses for continuing education. In 2010, INACAP started a pilot framework project together with the Chile Foundation, a non-profit public-private partnership dedicated to economic and social development. Their intention was to develop a qualifications framework in two specific sectors: ICT and business administration. For INACAP the purpose of this qualifications framework was to be able to organise their academic supply and align it with the needs of the labour market. It should also promote lifelong learning as well as horizontal and vertical mobility

It is expected that the experience of INACAP will serve as an example for other institutions and that the government will decide to move in the same direction in the future.

The Mecesup improvement projects for higher education are financed by the education ministry. In 2010, they made a feasibility study for the design of a qualifications framework for the system of higher education in Chile. It was coordinated by eight universities. A final report with recommendations was drafted but follow-up is not foreseen at the moment. In the meantime, many Chilean universities are working on several projects that contribute to improving programme transparency, legibility, flexibility and mobility.

Scope

All of the initiatives try to systemise, articulate and link the levels of qualifications in different education and economic sectors. However, so far attempts from the Ministry of Education to connect the single initiatives have failed.

Who is involved

INACAP works directly with the private sector for the development of its qualifications in the different sectors.

ChileValora is developed by the Ministry of Education, the Ministry of Labour and the social security services. The system implemented a commission of tripartite composition, with three employee representatives, three employer representatives, three public sector representatives from the ministries of education, labour and economics, and an executive secretariat.

The Chile Foundation was strongly involved in ChileValora and also supports the INACAP initiative.

Stage of NQF development

In Chile, NQF development is still in an exploratory phase. As described above, different attempts have been made by various stakeholders or subsectors but no coordination or continuation at the national level is foreseen.

Timeline

1999

Start of ChileValora with experiments in assessing labour competences.

2009

- Implementation of the National Occupational Competency Certification based on the ChileValora
- The initiative for an overarching NQF is officially announced by the Minister of Education in September, but current authorities do not prioritise this issue.

2010

Start of INACAP pilots for a qualifications framework in higher education.

ANNEX 3. ENGLAND

In this study we have chosen to describe the NQF developments in England rather than in the UK for two main reasons. Since devolution in 1999 we can see different systems developing in Wales and Northern Ireland, while Scotland always had its own qualifications system. England is a particularly interesting example of a 'market of qualifications' developed by a large number of awarding bodies and universities in a large country.

Main challenges

Employment and education and training

England has one of the least regulated labour markets in Western Europe, favouring employers more than the work force than in other European countries. Although England faces similar challenges as other countries as a result of the financial crisis, the situation still seems relatively favourable compared to other countries.

There is significant social diversification. There are strong disparities between the rich South-East and other parts of the country. Participation figures in secondary education and higher education have improved over the last decade but one in six young people aged 16-24 are still not in education, employment or training. Additionally, a significant number of those young people in employment are in low-skilled jobs that do not offer any training or progression opportunities.

Participation in VET is traditionally lower than in other European countries with less than one in three students enrolled in initial VET. Participation in adult learning and continuing training is relatively high. There is a highly diversified higher education sector with a large number of universities competing for new students and a small group of influential and prestigious universities that can handpick hopeful applicants from all over the world.

Qualifications

England has sought to bring its education and training system more in line with the changing needs of the labour market and to offer opportunities to young people for a career and social mobility. There has been a tension in the VET provision between the aspiration to provide young people with ready to work skills and progression opportunities, leading to some VET qualifications with low value that failed to achieve any of these objectives. There has been a strong preoccupation with standards, qualifications, assessment and certification (credentialism) in education policies, with frequent policy changes. Many actors are involved in the development of standards and education and training provision in England. The VET system initially developed independently of the state, with charities specialised in arts and trades setting examinations for technical subjects. These awarding bodies remained a major feature of the VET system. Thus, a market of qualifications has been created, based on labour market requirements, rather than on public education and training policies. Through private initiatives, England always has great examples of good practice, but governments have been looking continuously for system solutions promoting equal opportunities and labour market relevance. They have undertaken several attempts to regulate the awarding bodies and the qualifications that were developed by them.

Drivers for NQF development

Qualifications have played a central role in education and training policies in England. There seem to have been four main drivers for the NQF developments.

Bringing order in a fragmented system of qualifications and making the linkages between qualifications more explicit, so that the system could be better understood and learners could make more informed choices about their career opportunities. In VET and general secondary education this has been achieved by regulating the qualifications offered, while in higher education and privately provided education the use of voluntary reference tools has been promoted.

- Developing systemic approaches to the process of identifying and describing what is a good qualification in order to improve qualifications relevance.
- Strengthening public confidence in qualifications through a focus on standards, assessment and certification procedures, and quality assurance.
- Creating linkages between the different parts of the qualifications system and improving the links between vocational and academic education in order to raise attainment levels and to support access and progression.

Government intervention into the qualifications market has been strong since the 1980s, in particular in the field of vocational qualifications. School league tables distorted the market for vocational qualifications in the school environment.

A series of agencies have been established to oversee or regulate the quality of standards, qualifications and assessment practices: until 1997 for VET and secondary general education, NCVQ²⁰ and SCAA²¹, succeeded by the Qualifications and Curriculum Authority (QCA); since 2009 Ofqual and the Quality Assurance Agency for Higher Education (QAA). Other agencies have been established to articulate and coordinate the needs of the labour market: the National Training Organisations (NTOs), a network of branch organisations (until 2002); Sector Skills Councils (SSCs); and the UK Commission for Employment and Skills (UKCES).

It is currently the role of Sector Skills Councils to develop national occupational standards and to confirm that vocational qualifications are in line with sectoral qualifications strategies. Different types of qualifications have been developed by government agencies at different moments to make qualifications more relevant and easier to understand. These have included NVQs, GNVQs, QCF qualifications, Access to Higher Education diplomas, foundation degrees, and others.

Awarding bodies are predominantly private actors that develop qualifications, oversee assessment practice and certificate individual learners. There are a handful of large awarding bodies that offer vocational and/or general qualifications, including Edexcel, OCR and City & Guilds (only vocational qualifications). These coexist with smaller and larger branch-specific awarding bodies offering specialised qualifications. Currently the register of regulated qualifications mentions 182 recognised awarding bodies and almost 13,000 qualifications.

Scope

There are four qualifications and credit frameworks in place in England at the moment.

The NQF is the national qualifications framework of accredited qualifications. It was established in 2000. It originally had five levels, but since 2004 there are eight levels as well as separate entry levels. Since 2008 vocational qualifications have been migrated from the

²⁰ National Council for Vocational Qualifications, one of the predecessors of QCA dealing with the regulation of national vocational education qualifications, and exams

²¹ School Curriculum and Assessment Authority, one of the predecessors of QCA dealing with the regulation of secondary education qualifications, exams and curricula.

NQF to the Qualifications and Credit Framework (QCF), but the NQF still contains important general education qualifications.

In the QCF all qualifications are unitised, have a credit value and the titling has been standardised. The QCF is promoting the reuse of units in different qualifications. The NQF and QCF are regulated by Ofqual, the independent regulator of qualifications in England. Ofqual recognises awarding bodies and accredits qualifications that are registered in the Register of Regulated Qualifications. Government funding is linked to the award of regulated qualifications.

In higher education degrees, can be issued by universities in exceptional cases some colleges have been allowed to issue Foundation Degrees (short cycle higher education). Higher education institutions are autonomous in developing qualifications, but there are a number of reference documents developed by the QAA (in cooperation with higher education institutions) to ensure quality and transparency. The most important reference documents are a Code of Practice for Quality Assurance, the Framework for Higher Education Qualifications (FHEQ, established in 2001 and reviewed in 2008), the Credit Framework for Higher Education that was adopted in 2008, and subject area benchmarks.

The levels of the four frameworks mentioned are aligned, but there are four different sets of level descriptors. In 2008, the FHEQ was self-certified against the Qualifications Framework of the European Area for Higher Education, while in 2010 the QCF and NQF were referenced against the EQF. There have been also been arrangements with the framework authorities in Ireland, Wales and Scotland to align the respective frameworks. Northern Ireland, Wales and Scotland have aligned their frameworks to the EQF alongside England in a single coordinated exercise.

Timeline

1986

- De Ville Review of Vocational Qualifications.
- National Council for Vocational Qualifications established.
- Development of the five-level National Vocational Qualification (NVQ) framework, based on occupational standards.

1995-97

- Beaumont report published; new rules for NVQs
- Merger of the National Council for Vocational Qualifications with the School Curriculum and Assessment Authority to form the QCA.
- The Dearing Report Inquiry in higher education recommends a credit-based NQF for higher education.
- The Quality Assurance Agency for Higher Education (QAA) is established

2000/01

- The NQF is established. Qualifications in the NQF are accredited by the QCA and become part of the National Database of Qualifications.
- The Framework for Higher Education Qualifications (FHEQ) is published.

2004

- The NQF is expanded from five to eight levels to better align with the FHEQ.
- Consultation on a Framework for Achievement.
- A credit-based framework for all kind of achievements is proposed.

2008

- The QCF is introduced, initially only for vocational qualifications, while general qualifications remain in the NQF.
- The FHEQ is reviewed and its numbering levels are aligned to the NQF.
- The Credit Framework for Higher Education is published.
- The FHEQ is self-certified against the Qualifications Framework of the European Higher Education Area.

2009-10

- Ofqual becomes the independent regulator of qualifications reporting to parliament.
- The Qualifications and Curriculum Development Agency (QCDA) continues curriculum and examination functions of the QCA.
- The QCF and the NQF are referenced against the EQF.

2011

- The QCDA is closed down.
- The Wolf Review of Vocational Education recommends curtailing some pre-16 vocational qualifications; Ofqual to accredit only awarding bodies and not qualifications and proposes a reduced role of Sector Skills Councils with a stronger role for awarding bodies.
- The government partially agrees to strengthen the role of awarding bodies, but still wants Ofqual to accredit qualifications, reopening the door for vocational qualifications that are not following QCF compliant.

ANNEX 4. FRANCE

Main challenges

France is facing similar challenges to other countries in terms of the impact of the financial crisis on the economy and on the employment situation. The unemployment rate is above 9%. In addition, France has specific problems such as youth unemployment and unemployment among older people. Almost 25% of the young people who have left school or university are unemployed, while the

employment rate of 55-64-year-olds is 40% in France, against 46% in EU. Another challenge is the high proportion of young people who leave school without any qualification or official certificate. Their number stood at 140,000 in 2008, or 17% of 20-24-year-olds.

In France, there is no state monopoly for designing and awarding qualifications. Any institution (university, private or public training centre, high school, chamber, professional body, company, etc.) is entitled to create certificates and qualifications and to award these in its own name to people after a training session or a process of assessment. This very liberal approach to certification has resulted in a proliferation of qualifications, degrees and titles of which there are an estimated 15,000 now. In a country where the 'culture of the national diploma' is deeply rooted, the challenge is to ensure transparency in this market and safeguard the relevance of the proposed qualifications in the labour market. Rules are needed to inform and protect the individual users.

Drivers for NQF development

Even if the term 'qualifications framework' is not used in France outside the world of qualifications experts, a French national framework of qualifications has existed for a long time. The first classification of (five) levels - the Nomenclature des niveaux de formation - was created in the years 1967-69 and is still used. The first body in charge of accreditation and registration of qualifications the Commission technique d'homologation – was created in 1971. However, in 2002 the need for a more effective and more easily understood qualifications framework, and for a quality-driven registration process and the introduction of a validation of prior learning (validation des acquis de l'expérience - VAE), led to the adoption of a new structure, including a national body (CNCP) and a new instrument for the registration of certifications with new procedures (Répertoire national des certifications professionnelles - RNCP). The reinforcement of the outcomes approach and the increased need for qualifications to be more labour-market oriented have resulted in a real reform of the NQF, followed some years later by other reforms, such as the introduction of more vocationally oriented higher education. The development of a structure of new levels is enshrined in the 2002 law but it still seems in limbo. One can assume that the adoption of the European Qualifications Framework for lifelong learning and the exercise of referencing existing French qualifications will be one of the drivers for reshaping the classification.

Scope

All certificates, titles and diplomas can be listed in the RNCP by the CNCP and can thus be legally registered by the state and officially referenced to the national qualification levels. As such, there is no monopoly for the design and award of qualifications but there are two types of qualifications: those officially registered in the RNCP by the state and those that are not registered. Registration in the RNCP and consequently the referencing of each

qualification (or type of qualification) against the five levels of the classification, can take place for these qualifications under several conditions and technical criteria.

Main conditions

- All qualifications covered by the framework must be first accredited by tripartite councils or committees, including representatives of social partners.
- All qualifications covered by the framework must be achievable through a process of validation of prior learning.
- To be registered, qualifications must be described in terms of learning outcomes in a common format.

The CNCP is under the authority of the minister responsible for VET. The commission is composed of 43 members, including representatives of ministries, regions, social partners, chambers and qualified persons.

At present, around 1,500 qualifications have been identified and CNCP has published 5,000 qualifications.

Timeline

1969

 Approval of the five-level nomenclature, based on a six-level training scale adopted in 1967.

1971

Creation of the Commission technique d'homologation des titres.

1992

Introduction of validation of on-the-job learning achievements.

2002

- Establishment of the CNCP and RNCP. Registration procedure based on learning outcomes and value of the qualifications on the labour market.
- Introduction of the validation of prior learning.

2009

The CNCP is empowered by new legislation to provide opinions on all qualifications to be designed and registered in the RNCP.

2010

The levels of the French nomenclature are referenced to the EQF.

2012-13 (planned)

A new basis for the levels of the NQF that is more coherent with the EQF levels.

ANNEX 5. KOSOVO

Main challenges

Following the war years, Kosovo is rebuilding its economy and education system. It is seeking to develop institutions as a newly-independent state. While economic growth has been impressive in recent years, unemployment remains high at approximately 45%. Providing quality education and training for Europe's youngest population (the average age is 24) is a state priority, but it is widely acknowledged that the educational infrastructure needs to be developed and expanded. Most VET instructors, for example, hold no formal teaching qualification and participation among the relevant cohort in higher education is a quarter lower than in most other European countries. Another challenge is that the education and training system needs to become more responsive to labour market needs.

Drivers for NQF development

The NQF is a component of the Kosovo Education Strategic Plan 2011-16 and the national education strategy. It is a key tool in the government's plan to build and structure the national education system. Objectives set out in 2008 legislation creating the NQF include greater transparency of qualifications, making qualifications relevant to employment needs, building learning pathways between different subsystems and stimulating lifelong learning.

Integration with EU education and training programmes and policies is also a clear incentive for Kosovo to develop its qualifications framework. Kosovo ultimately wishes to link its NQF to the EQF.

Scope

The Kosovo NQF is a lifelong learning framework, covering qualifications from all learning contexts, including informal and non-formal learning. It consists of eight qualifications levels and six specific occupational sectors, plus one general occupational sector. The eight levels correspond to the eight levels of the EQF and the descriptors draw on the EQF descriptors plus some existing qualifications frameworks, such as the Scottish.

Who is involved

The National Qualifications Authority, created in 2009, has overall responsibility for the NQF. While it leads and coordinates, it shares responsibility for the development and implementation of the NQF with the MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY, the Kosovo Accreditation Agency for higher education and the Council for Vocational Education and Training managed from within the ministry.

The National Qualifications Authority is responsible to its governing board which includes representation from education, industry, trade unions, private sector providers and NGOs.

Qualifications from public institutions, private providers and voluntary bodies can all be placed in the levels of the NQF, provided they meet the criteria specified by the National Qualifications Authority, the education ministry and the Kosovo Accreditation Agency.

The National Qualifications Authority quality assures and registers in the framework VET and adult qualifications developed by e.g. ministries, employers, private training organisations and public agencies. It is also responsible for the accreditation of VET providers. Generally, VET qualifications are developed and offered at levels 3, 4 and 5 of the NQF, but in principle they can be offered up to level 8.

The MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY oversees and develops secondary-school level qualifications such as the matura (level 4 in the NQF).

Higher education qualifications are developed mainly by colleges and universities. Kosovo now has 3 public universities, 17 private providers of higher education, 10 colleges, 3 institutes, 5 professional higher education schools, and the American University of Kosovo, a private non-profit university. The total number of higher education students in Kosovo is estimated at approximately 79,000, of whom approximately 58,000 attend public higher education institutes. The Kosovo Accreditation Agency conducts quality assurance processes, accrediting the higher education institutions and validating their programmes and qualifications which are offered at levels 5-8, consistent with the Bologna Process. (Kosovo is not yet a signatory of Bologna but is pursuing the technical measures necessary for membership.)

The qualifications framework was developed in close cooperation with EU-supported projects, including KOSVET II, III and currently V.

Outside the key institutions, stakeholder involvement is developing but still quite limited. A key priority is engaging social partners in the development of occupational standards and VET qualifications.

Stage of NQF development

Kosovo's NQF already exists and is being implemented. The EU-funded project KOSVET V will complete its work at the end of 2011. After that, Kosovo's agencies and institutions will have to operate more independently.

Current priorities include the technical testing of accreditation procedures for providers and the validation of qualifications, a review of this testing, the development of new qualifications, strengthening institutions with a qualification remit such as the Council for Vocational Education and Training, converting occupational standards into qualifications, and quality assurance of qualifications.

Timeline

2005

■ First formal proposals for an NQF in Kosovo.

2006

■ Work begins on draft law for an NQF.

2007

Development work on the NQF.

2008

NQF provided for in Law on Qualifications.

2009

Kosovo National Qualifications Authority established.

2010 onwards

Further development and implementation of Kosovo's NQF.

ANNEX 6. MALAYSIA

Main challenges

Malaysia is a middle-income economy with approximately 28 million inhabitants that has experienced strong economic growth in the last 20 years. The combination of a deregulated labour market and the use of low skilled immigrant labour have contributed to this fast economic growth but also had a negative impact on innovation and on skills development. In order for it to compete with the other Asian 'tigers' that produce at lower costs, Malaysia is aiming to raise productivity and move towards a knowledge economy to achieve a high-income nation status based on innovation and investment in research. Since early 2000, the government has attributed a major role to higher education to achieve this target. Consequently, there is less emphasis on improving the training of skilled workers.

However, many in the private sector claim that industry still depends on low-skilled workers and ask for more focus on this real need of industry. There appears to be limited trust in some vocational and higher Malaysian qualifications, amongst many private and public providers operating in the country. The growth in qualifications on offer is related to Malaysia's rapid advance from a developing to a middle-income economy, a small and now defunct apprenticeship system, and a largely relatively low-qualified industrial workforce.

Drivers for NQF development

A large variety of unclear, poor quality and often irrelevant qualifications existed previously. Because of the official focus on higher education, the government started its attempts to improve quality and the understanding of qualifications in this sector.

Post-secondary education has three distinct sectors, all reflected in the Malaysian Qualifications Framework

(MQF): higher education, the polytechnics and community colleges, and the industry training or skills sector.

The higher education sector consists of public universities and a large number of private universities and colleges, including branch campuses of universities from abroad.

The polytechnics and colleges are all publicly owned and administered and are under the responsibility of a division of the Ministry for Higher Education.

The MQF is the initiative of the Ministry for Higher Education. The Malaysian Qualifications Agency (MQA) is located within the Ministry of Higher Education.

Malaysian ministries operate quite independently from each other. Each of them is governed by its own set of legislations. The responsibility for skills training has been spread across four major ministries i.e. Ministry of Higher Education, Ministry of Human Resources, Ministry of Culture, Arts and Heritage and Ministry of Youth and Sports responsible for pre and post employment skills training.

The skills sector is part of the MQF, but is regulated by the Ministry of Human Resources on the basis of National Occupational Skills Standards. The skills sector consists of public and private training centers. Skills sector used to fall under the responsibility of different government agencies. There are currently initiatives to move all of skills sector to come under the Ministry of Human Resources. This is seen to be a step forward.

The MQF aims to develop greater consistency among qualifications across sectors and types of providers, public as well as private. More than mustering the support of industry and providers, the main challenge has so far been the harmonising of differences among government agencies.

Scope

The MQF was developed on the basis of several subsystems including the National Occupational Skills Standard, the Technical and Vocational Education sector and the National Accreditation Board (LAN) for private higher education.

The MQA and the formation of the MQF aim at bringing these systems together and to include all publicly recognised Malaysian qualifications within the MQF and its qualifications register. Although the MQF still represents rather separate sets of qualifications, there are also links between the sets, mainly through levels 3, 4 and 5. The framework does not include the senior secondary qualifications.

The MQF is an instrument that develops and classifies qualifications based on a set of criteria that are approved nationally and at par with international practice. It clarifies the academic levels, learning outcomes of study areas and credits based on student academic load.

The formal purposes of the MQF are to:

- establish a single structure for all higher education qualifications, issued by public as well as private universities and colleges;
- secure standards and reinforce policies on quality assurance;
- build mechanisms for progression and lifelong learning;
- support collaboration among sectors;
- build parity of esteem of different qualifications;
- facilitate credit system transferability and external linkina:
- establish greater clarity of information so as to facilitate evaluation;
- facilitate qualifications comparison.

Who is involved

For the coordination of the MQF, the private sector is represented on the MQA board. The largest group of board members are from government agencies. A smaller number represent providers and users. Industry and trade unions are represented in councils of educational institutions, course development committees and standards committees. However, the role of industry in the general development and infrastructure of the MQF has been rather limited.

Malaysian industry representatives support the objective of establishing a better mechanism for the recognition of workers' skills, including those of immigrant and guest workers. About 80% of the workforce enters the labour market in low-skill jobs. Consistent with international patterns, most of the low skill-workers do not progress in their qualifications level throughout their working lives and therefore need post-employment training. Industry representatives have pointed out the need to have workforce skills recognised and continually upgraded. Workforce skills can be upgraded through a publicly funded and flexible system of assessment and training.

Stage of NQF development

Implementation of the MQF is advancing, although the links between the subsectors still need to develop.

Timeline

1993

■ The Malaysian Skills Qualification Framework (MLVK) introduced under the Department of Skills Development, Ministry of Human Resources for the skills sector.

1996

National Accreditation Board (LAN) created to quality assure private higher education.

2002

Quality Assurance Department created for public and private higher education.

2007

■ The Malaysian Qualifications Framework officially introduced, together with the establishment of the Malaysian Qualifications Agency that was to manage the framework and its mechanisms.

ANNEX 7. MOROCCO

Main challenges

The challenges Morocco faces are similar to those of other transition countries in the southern Mediterranean. Competiveness is low and the capacity to create quality jobs is limited. This is reflected in the high percentage of workers in the informal sector and the importance of the agricultural sector.

A high percentage of the active population is illiterate, particularly in rural areas and among women.

The Moroccan economy suffers from a considerable mismatch between outcomes of the education and training systems and the needs of the labour market. As a result, the unemployment rate among university graduates is high.

Finally the education system is not performing well. Drop-out rates are high at all levels.

Drivers for NQF development

Morocco's advanced relationship with the EU has given a major impetus to the development of a Moroccan qualifications framework. The Moroccan authorities see a national framework for qualifications as a tool to make qualifications more understandable, transferable, and comparable with European qualifications through the

An NQF is also seen as a tool that can make qualifications more relevant to the labour market and that can promote prior learning validation schemes. It also has the potential of reducing the fragmentation between the different subsectors of the education and training systems.

Scope

The first discussions about an NQF started in 2006. Morocco participated in a project implemented by the ETF that aimed to expose southern Mediterranean countries to qualifications framework developments taking place in Europe. A technical working group was set up and identified levels and descriptors. The process was led by the department of VET with low participation from the departments of general and higher education.

In 2009, a steering committee composed of high level representatives from the departments of VET, general education and higher education, together with the high council of education was set up to look at the design of an NQF.

The Union of Employers or CGEM (Confédération générale des entreprises du Maroc) is officially associated to the project and a technical team is constantly contributing to the discussions and he elaboration of the tools. Trade Unions are expected to be involved at a later stage.

A future Moroccan qualifications framework would cover the whole qualifications system. The design phase of a provisional framework is completed. The pilot experimentation of the NQF is planned in 2012 after the issue of the political steering is resolved.

Timeline

Five phases are foreseen in the Moroccan NQF development.

2010

 A first preparatory phase consisting of a mapping of qualifications offered by the three education subsystems. This mapping focuses on how qualifications are designed, their legibility to the learners and the labour market and quality assurance systems supporting them.

2011

Design of the NQF.

2012

Testing the new NQF features.

2013

- A communication phase is foreseen.
- A first assessment and impact analyses is foreseen.

ANNEX 8. NAMIBIA

Main challenges

The Namibian qualifications framework and the Namibia Qualifications Authority (NQA) are a response to both the challenges of the global economy and to domestic priorities such as national efforts to tackle unemployment, social inequality, and past discrimination. The NQF is an element in Namibia's overall economic development strategy, which is chiefly guided by two initiatives: Namibia Vision 2030, a policy framework for long-term national development and the National Development Plan.

Drivers for NQF development

The Namibian NQF aims to improve the quality of education and training, to improve the transparency of Namibian qualifications nationally and abroad, to support the development of standards-based qualifications, to integrate the different parts of the education system to facilitate learners' progress vertically and horizontally, and to promote quality assurance.

Regional cooperation is also enhanced by the NQF. Namibia is part of the Southern African Development Community (SADC) Qualifications Framework. The NQA represents Namibia on the SADC Technical Committee on Certification and Accreditation.

Scope

The NQF consists of ten levels and takes as its point of departure a lifelong learning philosophy. It covers all sectors of education, at all stages, from early childhood upwards. All types of attainment - formal, non-formal, and informal – are eligible for recognition in the NQF through certification. Qualifications developed by private providers can also be placed in the NQF. The framework's level descriptors are described in terms of learning outcomes and can, for example, refer to the types of knowledge and levels of autonomy and responsibility.

Qualifications developed prior the establishment of the NQF and foreign qualifications can be aligned with the Namibian NQF using a process known as evaluation. Such qualifications are not registered in the NQF but 'evaluation' allows for these qualifications to be compared with those within the NQF.

Who is involved

The NQA oversees the NQF. Its responsibilities include overall quality assurance, the evaluation of qualifications, the accreditation of courses and awarding bodies and the registration of qualifications in the framework where these meet certain criteria. All qualifications must be approved by the NQA to be registered in the NQF. Its Governing Council includes 36 representatives from key stakeholders such as the Ministry of Education and other ministries, higher education institutions, industry, trades unions, professional associations and others. Industry stakeholders participate in boards and committees of the NQA.

Qualifications registered in the NQF are classified using a system similar to the Dewey system. The Namibian system comprises fields, sub-fields and domains.

The Namibia Training Authority (NTA) oversees VET provision in Namibia and is responsible for registering training providers in VET.

Qualifications can be developed by public institutions, higher education institutions, the Namibia Training Authority, private providers or industry-led bodies such as the Namibian Construction Academy. The development process is usually guided by NQF regulations.

Stage of NQF development

The NQF exists and is continually being developed and further implemented.

Timeline

1996

- The Act establishing the Namibia Qualifications Authority is adopted.
- First NQA staff members appointed.

1997-2005

- The NQA Council convenes and starts activities.
- Recruitment and capacity building of NQA staff.
- The NQA elaborates and tests procedures for occupational standards, qualifications and accreditation.
- The NQA develops a proposal for NQF.
- National consultation on the NQF.

2003

■ Higher Education Act passed.

2005

- Revised proposal for an NQF approved by the NQA Council and the Minister of Education.
- The Namibia VET Policy published to provide the skills needed for accelerated development.

2006

■ The Namibian NQF is created.

2008

Vocational Training Act adopted; establishes the Namibia Training Authority and allows it to register training providers.

ANNEX 9. TAJIKISTAN

Main challenges

The Tajik labour market lacks qualified people in most branches of industry. It is characterised by youth unemployment, low salaries and migration but at the same time, every year many vacancies remain unfilled due to lack of relevant competences. In particular, the lack of qualified people jeopardizes the active development of different sectors of the economy, like communications, tourism, construction, energy and industry.

There is a strong need to raise the quality and relevance of education programmes and to improve transparency and efficiency by streamlining numerous specialisations into a manageable number of broad occupations or career paths. Furthermore, it should become possible for the skills and qualifications of labour migrants to be recognised.

Drivers for NQF development

New state educational standards have been developed for pre-school, primary and secondary education, secondary and higher vocational education; a three-level system of higher vocational education (bachelor, specialist, master) has been introduced; new curricula and programmes for all levels of education have been developed and implemented. A national quality monitoring system of education is under development and the government decided to establish a National Testing Center. The new National Strategy for Education Development till 2020 underlines that the content of vocational education will be revised in accordance with requirements from economy, labour market, society and families.

A new generation of state educational standards will be introduced at all levels of vocational education. They will be based on occupational standards, developed with the direct involvement of employers.

The new generation of state educational standards introduces the concept of learning outcomes, and modular programmes based on qualification requirements of a national qualifications system. It will regulate:

- the educational outcomes as a list of technical and core competencies to be part of the programme for related professions and occupations;
- the organisation of educational programmes with a modular structure which includes a fixed part from the Ministry of Education and a flexible part that takes into account the labour market requirements;
- the conditions of the educational process;
- the procedure for the review of educational programmes and the introduction of flexibility;
- the basic educational technology.

The Ministry of Labour and Social Protection is developing the provision adult learning and plans in this context to establish a mechanism of qualification recognition. This idea is rooted in the fact that many labour migrants have very different skills and qualifications in different fields but these qualifications are not recognised officially and their value in different environments is not guaranteed. The ministry is now working on establishing a mechanism which supports the mobility of labour migrants, their income and their living standards. A framework for qualifications is one of the options.

Scope

The implementation of an NQF in Tajikistan would improve consistency in the entire VET system and support the current and future needs of the labour market. A first start was made in the tourism and hospitality sector in 2005. At the moment the main focus is on the adult education system.

Who is involved

In 2005, key ministries and sectoral stakeholders in the hospitality industry started to discuss the possibility of creating an NQF. Based on a project supported by the ETF some first steps were taken, such as the creation of several sector associations and of sector related educational institutions. Tripartite sectoral agreements were signed. Also, several occupational standards and related training programmes were developed with the input from the sector associations in the hospitality sector.

Presently, the Ministry of Labour and Social Protection which is responsible for adult education in Tajikistan, has the intention of establishing within its own system a department or unit for qualification recognition that will also be in charge of ensuring quality.

Stage of NQF development

In Tajikistan, NQF development is in the phase of conceptualisation, proceeding slightly faster in the adult education sector.

Timeline

2005

- The Discussion on NQF development and implementation starts with the launch of an ETF-supported NQF project.
- A project group works on the conceptualisation of an NQF.
- Progress on NQF developments are reported to key ministries of education and labour.

2009

- A national concept is adopted by the Ministry of Labour which shares it with the National Centre for Adult Learning, but there are no formal plans to implement it yet.
- The elaboration of national occupational standards starts under the responsibility of the National Centre for Adult Learning using a national methodology based on functional analysis.

ANNEX 10. TURKEY

Main challenges

Employment and education and training

Turkey has a population of 74 million inhabitants that is still growing fast. It has important regional and social disparities. Turkey is a candidate country of the EU. The Turkish economy suffered from an economic downturn in 2001 but it has proven relatively resilient to the consequences of the current financial crisis. Employment levels, however, remain low, especially among women. Yet, growth sectors are increasingly in need of qualified labour. The overall educational attainment level of the working population is relatively low. Education reforms are progressing steadily, improving the participation rate in secondary education but many challenges remain. The VET system is fragmented with different subsystems

operating in parallel. It has been under reform with substantial EU support. Competence-based curricula have been introduced. Further reforms address the system of pre-service and in-service teacher training. School governance is gradually being decentralised.

Qualifications

Vocational school graduates receive school diplomas rather than national VET qualifications. Opportunities for progression to higher levels after secondary VET are very limited.

Overall there are not enough places in higher education, for which a strict selection is made through a national entrance exam. Hence many young people end up in post-secondary vocational education in colleges (MYOs). A maximum 10% of MYO graduates progress to a bachelor degree – most enter the labour market. MYOs fall under the responsibility of the Council of Higher Education. Higher education is expanding. New universities and colleges are opened every year. There is a need for both quality improvement and quality assurance processes.

The employment situation and the need for skilled labour have led to close cooperation between ISKUR (the Turkish Employment Agency) and economic sectors to ensure more relevant adult qualifications. Since 1992, this cooperation has covered a series of initiatives to develop occupational standards but only since 2006 has this become a regulated system of national occupational standards and qualifications under the responsibility of the tripartite Vocational Qualifications Authority (Mesleki Yeterlilik Kurumu – MYK). Its National Vocational Qualifications System is developing into a system that runs parallel to the existing formal secondary general and initial vocational education systems under the Ministry of National Education and the college and higher education system under the Council of Higher Education. The education ministry is also responsible for teacher qualifications. The main challenge of a national Turkish qualifications framework is now to link these different qualifications systems into one qualifications framework for lifelong learning.

Drivers for NQF development

The following policy objectives should be addressed by developing an umbrella framework:

- to strengthen the relationship among education and training and employment;
- to develop national standards based on learning outcomes;
- to encourage quality assurance in training and education;
- to provide qualifications for vertical and horizontal transfers and develop national and international comparability platforms;
- to ensure access to learning, advances in learning and recognition and comparability of learning;
- to support lifelong learning.

Scope

The Turkish qualifications framework for lifelong learning consists of three subsystems that are all under development: The National Vocational Qualifications System foresees the establishment of a quality-assured system of adult qualifications based on occupational standards with the MYK as its regulator. The Ministry of National Education is planning to strengthen its own certifications systems by establishing national qualifications and linking them to occupational standards. The Turkish NQF for higher education aims to align Turkey with the Qualifications Framework of the European Higher Education Area and wants to support quality assurance and relevance of the higher education provision. There is also a link with national occupational standards for college (MYO) qualifications.

The Turkish framework should integrate the different initiatives and promote mobility, progression and international recognition of Turkish qualifications abroad.

Timeline

1992

ISKUR (the Turkish Employment Agency) establishes a tripartite Occupational Standards Commission.

1995-2000

- Through the World Bank's Employment and Training Project, 250 occupational standards are developed, but legislation to recognise national standards fails to be adopted.
- Parallel initiatives are launched by the Turkish Standards Institute preceding the adoption of the MYK Law in 2006.

2001-05

The EU-funded SVET (Strengthening vocational education and training) project introduces competence-based curricula in initial VET under the Ministry of National Education and Turkey joins the Bologna process.

2005-06

- Work on a qualifications framework for higher education is initiated after the Bergen Bologna meeting.
- Turkey reacts actively to the EQF proposal.
- The SVET project develops policy documents for a national Vocational Qualifications System.
- The Vocational Qualifications Authority is established.

2007-10

- The Vocational Qualifications Authority becomes operational and coordinates the development of 143 national occupational standards by 10 sectors, as well as a small number of vocational qualifications.
- The Lifelong Learning Strategy Paper is published.
- In January 2010 an NQF for higher education is adopted.
- The Action Plan for Strengthening Relationship between Employment and Vocational Education is published. An NQF commission is established to develop a Turkish qualifications framework for lifelong learning, facilitated by the Vocational Qualifications Authority.
- An EU-funded project strengthening the Vocational Qualifications Authority and the National Vocational Qualifications System starts.

2011-12

- The work on occupational standards has advanced with 206 national occupational standards from 20 sectors adopted; 44 qualifications have been develop and 426 individual MYK certificates have been issued for a single qualification by November 2011.
- EU-funded projects are launched with the Ministry of National Education to support lifelong learning and quality assurance in VET and to align higher education with the European Higher Education Area. These contribute to NQF developments.
- NQF levels and other tools are foreseen in 2012.
- The adoption of the umbrella NQF is foreseen for 2012, followed by self-certification against the European frameworks, the EQF and the Bologna Framework.

ABBREVIATIONS AND ACRONYMS

APEC Asia-Pacific Economic Cooperation

AQF Australian Qualifications Framework

AQFC Australian Qualifications Framework Council

ASEA Association of Southeast Asian Nations

Cedefop European Centre for the Development of Vocational Training

ChileValora (Commission of the) National System for the Certification of Labour Competences - Chile

CITB- Construction Industry Training Board (also Sector Skills Council) – UK

Construction Skills

CNCP Commission nationale de la certification professionnelle (National Committee for Professional

Certification) - France

CNFPA Consiliul National de Formare Profesionala a Adultilor (National Council for Adult Vocational Training,

also National Authority for Qualifications) - Romania

COPPA Code of Practice for Programme Accreditation – Malaysia

EQF European Qualifications Framework

ETF European Training Foundation

EU European Union

FHEQ Framework for Higher Education Qualifications – England, Wales and Northern Ireland

GNVQ General National Vocational Qualification – UK

ICT Information and communication technology

ILO International Labour Organisation

INACAP Chile's largest educational institution (includes a technical training centre, a professional institute and a

university)

ISCED International Standard Classification of Education

KOSVET EU-funded project supporting the reform of vocational education and training in Kosovo

Lembaga Akreditasi Negara (National Accreditation Board) – Malaysia

Mejoramiento de la calidad de la educación superior (Improving the Quality and Equity of Higher

Education programme) - Chile

MEDA EU programme supporting the countries in the southern Mediterranean

MQA Malaysian Qualifications Agency

MQF Malaysian Qualifications Framework

MYK Mesleki Yeterlilik Kurumu (Vocational Qualifications Authority) – Turkey

MYO Meslek Yüksekokulu (vocational college) - Turkey

NGOs Non-governmental organisations

NQA Namibia Qualifications Authority

NQF National qualifications framework

NVQ National Vocational Qualification - UK

OECD Organisation for Economic Cooperation and Development

Ofqual Office of Qualifications and Examinations Regulation - England and Northern Ireland

Onisep Office national d'information sur les enseignements et les professions (counselling and guidance

service) - France

PhD Doctor of Philosophy

QAA Quality Assurance Agency for Higher Education – UK

QCA Qualifications and Curriculum Authority – UK

QCDA Qualifications and Curriculum Development Agency - UK

QCF Qualifications and Credit Framework - England, Wales and Northern Ireland

RNCP Répertoire national des certifications professionnelles (national register of professional certifications) –

France

SADC Southern African Development Community

SVET Strengthening vocational education and training (EU-funded project) – Turkey

TEQSA Tertiary Education Quality and Standards Agency

TVET Technical and vocational education and training

UK United Kingdom

VAE Validation des acquis de l'expérience (accreditation of prior experiential learning) - France

VET Vocational education and training

BIBLIOGRAPHY

- Allais, S., The Implementation and Impact of National Qualifications Frameworks: report of a study in 16 countries, International Labour Office, Geneva, 2010
- Allais, S., Raffe, D. and Young, M., Researching NQFs: some conceptual issues, Employment Working Paper, No 44, International Labour Office, Geneva, 2009
- AQF (Australian Qualifications Framework) website. Last accessed 24 April 2012 at: www.aqf.edu.au/
- Cabreba, A.M., Qualifications Frameworks: implementation and impact Background case study on Chile, ILO Skills and Employability Department, Geneva, 2010
- Castejon, J.-M., Chakroun, B., Coles, M., Deij, A. and McBride, V., (eds), European Training Foundation, *Developing Qualifications Frameworks in EU Partner Countries: modernising education and training*, Anthem Press, London, 2011
- Cedefop (European Centre for the Development of Vocational Training), *The Shift to Learning Outcomes: conceptual, political and practical developments in Europe*, Office for Official Publications of the European Communities, Luxembourg, 2008
- Cedefop (European Centre for the Development of Vocational Training), European Guidelines for Validating Non-formal and Informal Learning, Office for Official Publications of the European Communities, Luxembourg, 2009a
- Cedefop (European Centre for the Development of Vocational Training), *The Dynamics of Qualifications: defining and renewing occupational and educational standards*, Office for Official Publications of the European Communities, Luxembourg, 2009b
- Cedefop (European Centre for the Development of Vocational Training), Learning Outcomes Approaches in VET Curricula: a comparative analysis of nine European countries, Research paper, No 6, Publications Office of the European Union, Luxembourg, 2010
- Cedefop (European Centre for the Development of Vocational Training), *Development of National Qualifications Frameworks in Europe*, Working paper, No 12, Publications Office of the European Union, Luxembourg, 2012
- Cedefop (European Centre for the Development of Vocational Training), European Inventory on Validation of Informal and Non-formal Learning 2010 Bibliography, [online]. Last accessed 24 April 2012 at: www.cedefop.europa.eu/EN/bibliographies/18212.aspx
- Chisholm, L., 'Diffusion of the National Qualifications Framework and outcomes-based education in southern and eastern Africa', *Comparative Education*, Vol. 43(2), 2007, pp. 295-309
- CNCP (Commission nationale de la certification professionnelle) website. Last accessed 24 April 2012 at: www.cncp.gouv.fr/gcp/pages/
- ETF (European Training Foundation), 'Inventory of recent NQF developments in the ETF's partner countries', Working document for the EQF Advisory Group, 1 February, 2010 (unpublished)
- Galvin Arribas, J.-M., European Training Foundation, 'Multilevel governance', Working paper, ETF, Turin, 2011 (unpublished)
- Greinert, W.-D., 'Governance models of training for employment: a European perspective', *Research in Comparative and International Education*, Vol. 5(3), 2010, pp. 251-260
- Haertel, E.H., 'Performance assessment and education reform', Phi Delta Kappan, Vol. 80(9), 1999, pp. 662-666
- Karseth, B. and Solbrekke, T.D., 'Qualifications Frameworks: the avenue towards the convergence of European higher education?' *European Journal of Education*, Vol. 45(4), 2010, pp. 563-576

- Keating, J., Qualifications Frameworks: implementation and impact Background case study on Malaysia, ILO Skills and Employability Department, Geneva, 2010
- Keevy, J., Chakroun, B. and Deij, A., European Training Foundation, Transnational Qualifications Frameworks, Publications Office of the European Union, 2011
- Mecesup, Proyecto Mecesup: DiseZo de un Marco de Cualificaciones para el Sistema de Educación Superior Chileno [Design of a qualifications framework for the Chilean higher education system], Santiago de Chile, 2010
- Meyer, J.W., 'Globalization: sources and effects on national states and societies', International Sociology, Vol. 15(2), 2000, pp. 233-248
- MQA (Malaysian Qualifications Agency) website. Last accessed 24 April 2012 at: www.mqa.gov.my/
- MYK (Vocational Qualifications Authority) website. Last accessed 24 April 2012 at: www.myk.gov.tr/
- NQA (Namibia Qualifications Authority) website. Last accessed 24 April 2012 at: www.namga.org/
- Ofqual (Office of Qualifications and Examinations Regulation) website. Last accessed 24 April 2012 at: www.ofqual.gov.uk/
- Parkes, D. and Nielsen, S., The Reform of Vocational Curricula: outcomes of the 2005 ETF peer reviews in Bulgaria, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, and Serbia, Office for Official Publications of the European Communities, Luxembourg, 2006
- Raffe, D. 'Can National Qualifications Frameworks be used to change education and training systems?', CES Briefings, No 48, Centre for Educational Sociology, June 2009
- Rauner, F., Grollmann, P. and Kruse, W., Europäisierung Beruflicher Bildung: eine Gestaltungsaufgabe, LIT Verlag, Hamburg, 2006
- Sence (National Service for Training and Employment Chile), Certificación Competencias Laborales [Certification of labour competences], [online]. Last accessed 24 April 2012 at: www.sence.cl/sence/?page_id=302
- Tuck, R., An Introductory Guide to National Qualifications Frameworks: conceptual and practical issues for policy makers, International Labour Office, Geneva, 2007
- Wolf, A., Review of Vocational Education The Wolf Report, Department for Education, UK, 2011
- Young, M., 'Comparing approaches to the role of qualifications in the promotion of lifelong learning', European Journal of Education, Vol. 38(2), 2003, pp. 199-211
- Young, M., National Qualifications Frameworks: their feasibility for effective implementation in developing countries, Skills Working Paper, No 22, International Labour Office, Geneva, 2005
- Young, M., 'What are schools for?', in Daniels, H., Lauder, H. and Porter, J. (eds), Knowledge, Values and Educational Policy: a critical perspective, Routledge, London, 2009

EUROPEAN TRAINING FOUNDATION

QUALIFICATIONS FRAMEWORKS: FROM CONCEPTS TO IMPLEMENTATION

Luxembourg: Publications Office of the

European Union

 $2012 - 72 \text{ pp.} - 21.0 \times 29.7 \text{ cm}$

ISBN: 978-92-9157-602-9 doi:10.2816/17557

HOW TO OBTAIN EU PUBLICATIONS

Our priced publications are available from EU Bookshop (http://bookshop.europa.eu), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

CONTACT US

Further information can be found on the ETF website:

www.etf.europa.eu

For any additional information please contact:

European Training Foundatior Communication Department Villa Gualino Viale Settimio Severo 65

E info@etf.europa.el F +39 011 630 2200



Publications Office



TA-30-12-583-EN-C