Presidency Conference "Realizing the European Learning Area"
Munich, 4 – 5 June 2007

EXPERTISE

Qualifications frameworks in Europe: platforms for collaboration, integration and reform

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A paper for the conference: *Making the European Learning Area a Reality*, 3-5 June 2007, Munich

Mike Coles, Qualifications and Curriculum Authority, London

Abstract

The pace of qualification framework development in European countries has accelerated in the last two years. The European Qualifications Framework (EQF) should be ready for implementation by the close of 2007. National qualifications frameworks are developing in most countries. The rationale for the development of these frameworks is discussed, as are some of the main concepts, such as levels, descriptors, learning outcomes and competence. The mechanisms of influence of the EQF on the national frameworks are examined. Similarly the influence of the EQF on other European level instruments is outlined. The rapid development of frameworks, carried out on the basis of little empirical evidence of the chances of them delivering benefits, raise many issues for the immediate and mid term. The origin and nature of these issues is explained.

Introduction

This paper works with the flow of recent European initiatives in the area of qualifications and aims to observe developments, explain their logic and offer the basis for critical review. It basis is the observation that in the last two years the pace of qualification framework development has accelerated. This has produced a Europe where explicit qualifications classifications are developing in almost every country. At European level, the European Qualifications Framework (EQF) is in the final stages of discussion in the European Parliament and could be ratified as a Recommendation to Member States by the close of 2007. In this paper the relationships between the various national qualifications systems and the EQF are examined. In particular, the national classifications are discussed: national qualifications frameworks (NQFs) form the basis of an analysis of the potential benefits of explicit classification of qualifications; and the issues that may be encountered during classification. Before this analysis it is useful to review the landscape of qualifications framework development. This involves trying to identify the driving forces for reform and an attempt to clarify some of concepts and terminology involved.

Education and training reform: an international perspective

There is a wealth of reports about reasons why education and training systems are in need of reform. The main theme seems to be the need for education and training to mesh with the labour market and produce better economic results which, in turn leads to benefits for companies, people, communities and countries. Another substantial theme is the way education and training can better support social policy objectives which it is hoped would lead to greater social cohesion and stronger cultural enrichment of peoples lives.

The mid-term review of the Lisbon strategy confirmed the central place of education and training within the European Union's agenda for jobs and growth. Member States are asked to expand and improve investment in human capital and to adapt education and training systems, in response to new skills needs. Education and training are believed to be a determining factor in each country's potential for excellence, innovation and competitiveness. At the same time, they form an integral part of the social identity of Europe. They hold a unique position to enhance solidarity, equal opportunities and social participation and also to produce positive effects on health, crime, the environment, democratisation and the general quality of life.

Some pressures for development of national qualifications systems
National qualifications systems are a fundamental component of education and training provision and are subject to just the same pressures for modernisation. Chief amongst these is the pressure to improve the competitive edge of the national economy; this is seen as crucial in a world market place where technology, people, skills and jobs can move easily. There are many aspects of competitive economic performance, however efficient development of human capital with a skills profile that matches the economic needs of today and the mid term future is crucial. OECD evidence identifies economic pressures as a driver of reforms to national qualifications systems. Countries reinforce a need to strengthen the link between the education system and the labour market - they point to the gap between job training needs and qualifications as a reason for the development of qualifications frameworks and skill standards.

Innovation in production and the growth and innovation in services is another area of competitive economic behaviour that has implications for training and, in turn, for national qualifications systems. The forms of learning in innovative settings are increasingly becoming self-directed; consequently, learning structures in the workplace are becoming more complex. The focus is no longer solely on acquisition of knowledge but has widened to include new values, new codes of behaviour and the remodelling of past experience. This has resulted in the redefining training provision, by for example, giving a stronger focus to lifelong learning and learning tailored to individual needs. In response to this emphasis there is a need to modernise qualifications and use of more diverse assessment methods that lead to qualifications.

Pressures also arise from the publication of comparative data pertaining to national qualifications levels. Ranking in the OECD Programme for International Student Assessment (PISA) or Trends in International Mathematics and Science Study (TIMSS) have been seen as a key driver of policy reform in education and training. Prior to these studies, the International Adult Literacy Survey (IALS) had already shown major discrepancies in adult literacy performance among OECD countries Among the European Union countries, there is a commitment to increasing mobility of workers and learners across country boundaries - this requires transparency in qualifications systems and encourages countries to build education and qualification structures that can articulate with other countries of the EU. The proposal for a European Qualifications Framework (EQF) will facilitate compatibility among national systems.

Low population growth and the outflow of older skilled workers from jobs coupled with increased demand for high skills, has drawn attention to potential skill shortages.

It has also led to the expectation that qualifications systems need to provide recognition for skills learned at any stage in life. Immigration flows also pose challenges to qualifications systems - these include the need to relate qualifications gained in other countries to the national system and the need to recognise learning not previously recognised through qualifications.

In the search for coherence and harmonisation there is pressure to rationalise national qualifications systems, and in so doing create a more balanced view of all of the options available. This pressure to create a coherent system, involves forging stronger links between secondary education, higher education, and vocational education and training.

Qualifications systems must allow for the recognition of new knowledge, skills and wider competences arising from technological advance and changing work organisation and more articulate users/customers/clients. Qualifications systems must also themselves optimise their functioning through the use of new technologies. Technological change has encouraged the growth of international qualifications, a development that raises important recognition, benchmarking, evaluation, quality assurance and jurisdiction issues. This generates a two-way set of pressures: *importing* qualifications from other countries and *exporting* a country's own qualifications. This is possibly a major issue for the future.

All of the pressures outlined above indicate that qualifications systems should be transformed so that they can be more user-oriented- this means that qualifications systems have to be able to relate to a wider variety of users; the ability to cope with heterogeneity of needs and users is thus critical in structure, presentation, management and functioning. In response to these pressures the OECD summarises that qualifications systems should develop in ways that:

- increases flexibility and responsiveness;
- motivates young people to learn;
- links education and work;
- facilitates open access to qualifications;
- diversifies assessment processes;
- makes qualifications progressive;
- make them more transparent;
- facilitates review of funding and increase efficiency; and,
- lead to improvements in the way the system is managed.

In the light of these conclusions it is not surprising to see that qualifications systems are emphasised as a key area for reform. In particular, the growth of national qualifications frameworks as a structuring tool for reform and as a means of ensuring a level of quality of education, training and qualifications should be noted.

Understanding the basis of qualifications frameworks

Qualifications frameworks should be seen as an optional part of a qualifications system. The latter is an all-embracing term for all structures and processes (such as institutional arrangements, funding, quality assurance) that lead to the award of a qualification. Within these systems, the public is aware of levels of qualification (such as basic schooling, completion of upper secondary education, apprenticeship,

bachelors degree, professional licence etc.). These understandings of implicit levels of qualification come close to resembling a qualifications framework, however, a qualifications framework is usually understood to make these implicit national levels of qualification explicit.

In other words, NQFs classify and communicate national qualifications levels. NQFs are considered to add value to the implicit levels of qualifications because the latter are inevitably subject to differences in interpretation. The relationship between gaining qualification and the requirements for progression from one qualification to another or to a job can be unclear. Stakeholder ownership is also not clear within implicit understandings of qualifications levels – it follows that reforming different qualification types, on the basis of this more diverse range of understanding, is likely to be difficult.

The idea of a qualifications framework as a classifier of qualifications is not new. For many centuries the trade organisations in many countries have exercised control over the right to practice a trade and defined a hierarchy of skills within the trade. These hierarchies were the forerunners of sectoral and national qualifications frameworks. The universities had also set down common patterns of recognising progress within higher academic learning, thus defining another hierarchy of qualifications. What is new about the modern national qualification framework is the interest of governments in developing overarching frameworks that incorporate qualifications that represent the learning outcomes from school, work, higher education and other adult learning. The new frameworks are thus often linked to lifelong learning strategies and are also intended to be more open to informal learning, or experience, that the learner wishes to have recognised.

A qualifications framework is a classification of qualifications according to a set of criteria for levels of learning achieved. This set of criteria may be an implicit characteristic of the qualifications themselves or made explicit in the form of a set of level descriptors. The EQF Recommendation defines the concept in the following way: *a 'national qualifications framework' is an instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved. It aims at the integration and coordination of national qualifications subsystems and the improvement of transparency, access, progression and quality of qualification in relation to the labour market and civil society.*

In the simplest form of classification the qualifications themselves are arranged in a hierarchy of demand or standard, the lowest level of qualifications rises through a series of steps to the highest level. The qualifications in these hierarchies are sometimes further classified into qualification types (e.g. higher education qualifications, school qualifications and work-based qualifications. A second type of classification uses explicit levels that are each defined by criteria – these are often termed level descriptors or level indicators. It is this second type that is attracting the interest of many countries, since this offers more than the first type in terms of coordinating power across educational sectors and work-based qualifications. However, all qualifications frameworks aim to establish a basis for improving the linkages between qualifications and the quality, accessibility, and public or labour market recognition of qualifications within a country and internationally.

NQFs have various forms and functions but it is reasonable to conclude that all have four generic aims:

- to establish national standards for learning outcomes (competences);
- to promote, through regulation, the quality of education and training provision;
- to act as a way of relating qualifications to each other; and
- to promote access to learning, transfer of learning and progression in learning.

NQFs can have policy purposes that go beyond these four aims. The development of an NQF can be used to integrate parts of the qualifications system (for example, professional education delivered in VET colleges and higher education) or to enable modernisation of parts of the education and training system, (for example, to change the regulation of the quality of qualification processes or to change the way public funds are used to support education and training). This additional factor of using a national qualifications framework as a tool for reform is becoming more common and this suggests it could possibly become a fifth aim to add to those above. Additionally, some NQFs are used to allow target setting and planning of public investment in education and training and they support the measurement of performance of the education and training system.

The Bologna Working Group on Qualifications Frameworks assign a series of aims for frameworks with the higher education arena. The Group suggests that 'new style' qualifications frameworks go beyond classification and also have following characteristics; they

- describe qualifications as well as the interaction and articulation between them;
- suggest learning paths among qualifications in all directions upward, sideways and even downward;
- describe learning in terms of outcomes;
- recognise that qualifications are complex and go beyond knowing something to include other generic competences;
- have implications for the relationships between institutions and public authorities;
- have implications for recognition procedures.

This identification of 'new style' NQFs is important since most of the new development of NQFs is of this type. In another part of the Group's work, the function of qualifications frameworks, as a means of improving communications about qualifications, is discussed. Using frameworks as a means of promoting qualifications and learning is one such role; this also has the potential to increase access and participation to qualifications-based programmes.

It is also instructive to look at the vision for the New Zealand Qualifications Framework when it was proposed in July 1996. The Chairman of Board of the Qualifications Authority outlined a long list of goals for the new NQF. These ranged from technical reform of specific types of qualifications to advancing social reform. It was clear the new framework was to be much more than a classifier and was considered a tool for wider reform of education and training in order to support wider political goals.

It is possible that, even where no explicit wider reform agenda is acknowledged, there is a power within a simple classification of qualifications to transform aspects of

education and qualifications. This arises through the codification of the complex arrangements for qualifications in a country into a relatively simple form. Codification, or modelling, creates a relationship and a language with which stakeholders can readily engage. As is stated above, without the codification of a framework, the hierarchy of qualifications, the knowledge, skills and wider competences they each testify and the horizontal equivalencies between qualifications are often subject to incomplete or tacit knowledge. A qualifications framework is a more solid basis for discussion of qualifications and their relationship one to another can lead to proposals for development.

There is another effect of qualifications frameworks in terms of acting as a tool for reform: sometimes modernisation requires multiple actions on different parts of the qualifications system (e.g. accreditation of qualifications, funding, institutional arrangements). These coordinated reforms are challenging: choosing incremental 'one-at-a-time' approaches do have the advantage of being less risky, cheaper and more manageable. It is arguable that the coordinating effects of NQFs, especially in terms of greater stakeholder engagement and redefined institutional roles and responsibilities, make it more likely that broader, coordinated programmes of reforms can be proposed.

Levels and descriptors
The development of a hierarchy of levels that recognises all kinds of learning outcomes demands some theoretical or descriptive basis that is independent of current forms of qualifications and current education and training infrastructure. There are some good theoretical bases from which to identify levels of qualification and elaborate descriptions of these levels. However, most of the existing frameworks seem to have emerged from a consideration of what exists already in the qualifications system (implicit qualifications levels). Two main characteristics of qualifications systems are commonly used to derive a basic series of levels. The first is the hierarchy of qualifications and the second is infrastructure of the education system. In an approach based on a hierarchy of qualifications it is possible for some diversity in the number of levels across national systems; the range of 6 levels to 12 levels exists amongst current overarching NQFs. These overarching[1] NQFs usually accommodate sub systems of qualifications, for example in VET or higher education, that will have different numbers of levels. Using the infrastructure of the education system typically leads to national levels for:
1. Primary education
2. Lower secondary or compulsory education
3. Upper secondary education
4. Specialist VET leading to qualified worker status
5. Specialist VET leading to expert status
6. Higher education: first degree
7. Higher education: masters degree
8. Higher education: doctorate

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[1] This term is used to describe qualifications frameworks that accommodate qualifications from all the different education and occupational sectors. They are sometimes called integrating or comprehensive frameworks.

Some aspects of education systems are not easily accommodated in such a hierarchy – for example, professional education programmes, short duration VET and programmes of continuing training that are usually developed in employment.

In a descriptor-based framework, qualifications can only be admitted to a level as a result of meeting the specific criteria - in the form of the level descriptor. There are two main kinds of descriptor – those based on inputs (programme duration, location and types of learning) and those based on outcomes (what the learner knows and can do after a period of learning). Learning outcomes are concerned with the achievements of the learner rather than the intentions of the teacher (expressed in the aims of a module or programme). If inputs are used for descriptors, the framework is inevitably tied to existing national qualifications structures and this is both an advantage (easier implementation) and a disadvantage (there are no independent reference points).

In summary, NQFs are increasingly a part of qualifications systems and they classify qualifications and show relationships between them. The classification involves defining levels through descriptors that are sometimes written on the basis of the structures of learning inputs and sometimes written on the basis of learning outcomes. Learning outcomes are discussed later in this paper.

With the development of international frameworks, that are designed to relate to: different education and training systems (for example ISCED 97[2]); different sets of occupational standards (for example ISCO[3]); and, different qualifications systems (for example, the EQF, Framework of Qualifications for the European Higher Education Area), it is important to locate NQFs in relation to each of these international frameworks.
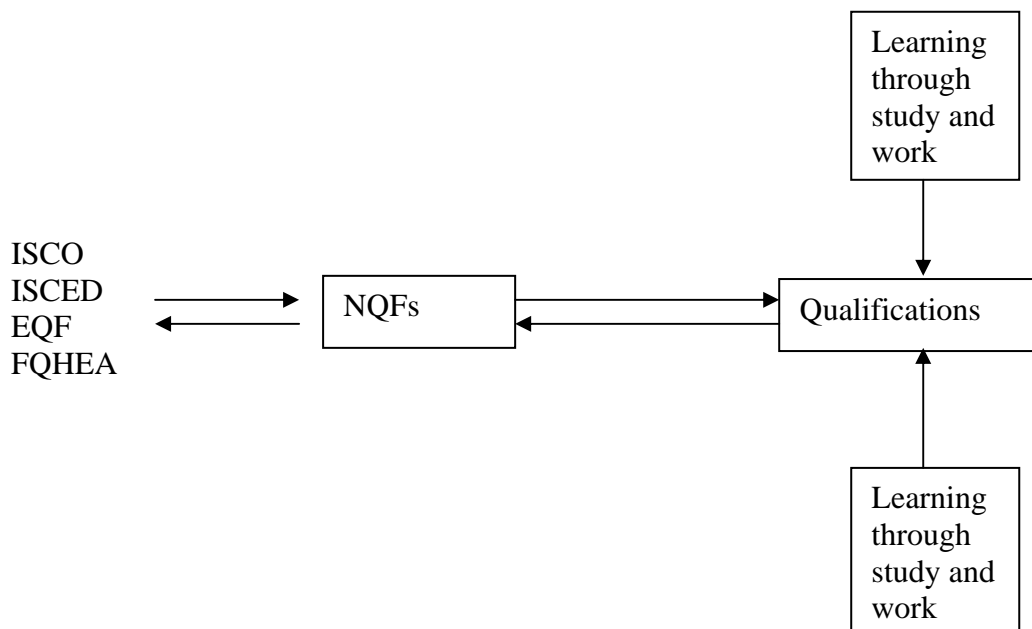
As the diagram aims to show, the essential element of discussions about qualifications is the underpinning learning that makes it possible to certify that a person is qualified.

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[2] International Standard Classification of Education
[3] International Standard Classification of Occupations

The centrality of learning is undeniable and it is reasonable to suggest that, beyond qualifications themselves, the qualifications frameworks at national and international level create what are essentially bureaucratic structures. The only argument for the existence of these frameworks is that they add value to the learning that takes place in schools, colleges, universities, workplaces and in everyday life. The way these frameworks can add value is by broadening the appreciation of the learning and enabling recognition beyond the place of learning to other places and to other stakeholders who are not directly involved in the learning process. In other words they offer increased status to learning and qualifications through the explanatory power of the framework and its levels.

4. The development of the European Qualifications Framework

The education and training institutions and qualifications systems in Europe have evolved to meet national, regional and local needs; therefore, the rich diversity of qualifications and qualifications systems from country to country is to be expected. However, as the European Union works towards the common Lisbon goals, the separate systems need to articulate with each other and they need to be transparent to external observation. Transparency of qualifications can be defined as the degree to which the value of qualifications can be identified and compared on the labour market, in education and training and in a wider social setting. Transparency can thus be seen as a necessary precondition for recognition of learning outcomes leading to qualifications. Increasing transparency is important for the following reasons:

- it enables individual citizens to judge the relative value of qualifications;
- it is a prerequisite and condition for transfer and accumulation of qualifications;
- pursuing lifelong and lifewide learning requires that individuals are able to combine and build on qualifications acquired in different settings, systems and countries;
- transparent systems make it possible to judge how qualifications can be linked and/or combined;
- it improves employers' ability to judge the profile, content and relevance of qualifications on offer in the labour market;
- it allows education and training providers to compare the profile and content of their own offers to those of other providers and thus also is an important precondition for quality assurance in education and training.

The EQF is envisaged as a meta-framework that will enable qualifications frameworks at national and sectoral level to relate to each other, thus developing the necessary greater transparency at the European level. The EQF is essentially a translation device based on eight common reference levels, that are described in terms of learning outcomes. Each country will be able to reference its qualifications levels (explicit in an NQF, or implicit in national understanding) to these eight levels. Once this is done, it will be possible for each country to use their knowledge of the EQF levels to understand another country's qualifications levels - in terms of their own qualifications levels.

The reference levels span the full range of qualifications, from completion of programmes in primary and secondary schools to the most advanced qualification for senior professionals. This includes qualifications acquired through non-formal and informal learning and through lifelong learning opportunities.

The use of the concept of learning outcomes as the building block of level descriptors allows the EQF to become an effective qualification framework. This means that it leaves to countries and sectors the task of determining the details of the structure of learning programmes and the qualification structure (including, content, delivery and assessment). In the EQF three types of learning outcomes are proposed:

- knowledge (factual and theoretical);
- skills (cognitive and practical); and
- wider competences concerned with autonomy and responsibilities.

These three types of outcomes are described at each of the 8 levels of the framework in a way that facilitates amplification and exemplification by national bodies. The definition of the 3 types of outcomes was a considerable challenge during the design of the EQF. Some of the issues encountered are examined in some detail later in this paper.

The development of the EQF has the potential to formalise some of the implicit qualifications levels in those countries without descriptor-based NQFs. The EQF sets overarching descriptions of learning outcomes and associates these with levels of qualification. The level descriptors are in fact criteria for aligning national qualification levels (implicit or explicit) to the EQF. The process for carrying out this task requires that each qualification level (including all the different types of qualifications at each level) be matched against the EQF level descriptors. The transformation of these implicit levels requires involvement of, and acceptance by, relevant stakeholders. Traditionally the description of these levels is focussed on; duration and location of education and training; on entry requirements to learning or work; and, on work related licenses to practise. However, following the introduction of the EQF, the main ingredient to be made explicit will have to be the *knowledge, skills and wider competences* that this national qualification level testifies to learners and other users of qualifications. Thus it seems likely that linking implicit national qualification levels to the EQF can be a staged process:

> Stage 1: Identify the implicit levels of qualification that are commonly understood by stakeholders and the qualifications that exemplify each level;
> Stage 2: Identify for these exemplar qualifications the knowledge, skills and competences they are commonly understood to testify;
> Stage 3: Use this information to match (as well as is possible) these exemplar qualifications to the EQF levels by reading the EQF descriptors for each EQF level and associating the qualification with an EQF level; and,
> Stage 4: Use the EQF descriptors to help build a learning outcome profile for national qualifications.

There could be a demand for Stage 4 that arises as countries begin to link their qualifications' levels to the EQF descriptors. Is might arise from the practicalities of using the outcome-based EQF. It may also arise from other countries as they enquire about quality assurance processes and need to know that the actual knowledge, skills and competences required at a qualification level has been formally agreed by stakeholders. If trust in the linking process is to develop, every country will need to adopt a transparent process for linking with the outcome based EQF. Thus, the

implicit levels of national qualifications will be transformed into explicit levels that can be the basis for an NQF - defined in terms of learning outcomes.

A meta-framework, such as the EQF, has distinct characteristics to the NQFs that relate to it. The major differences between EQF levels and NQF levels are dependent on: the functions of the frameworks; the method of their development; the influences on the form of the frameworks; the qualification levels they recognise; the quality assurance processes involved; and, the benchmarks used for establishing levels. Table 1 summarises these differences.

Table 1: Comparing national qualifications levels and levels in the EQF

Differences	National Qualifications levels	EQF levels
Main function:	to act as a benchmark for the level, volume and type of learning.	to act as a benchmark for the level of any learning recognised in a qualification or defined in an NQF
Developed by:	regional bodies, national agencies and sectoral bodies	Member States acting together
Sensitive to:	local, regional and national priorities (e.g. levels of literacy, labour market needs)	collective priorities across countries (e.g. globalisation of trade)
Recognises learning of individuals by:	assessment/evaluation, validation and certification.	[Does not directly recognise learning of individuals]
Currency depends on:	factors within national context	the level of trust between international users
Quality is guaranteed by:	the practices of national bodies and learning institutions	national practices and the robustness of the process linking national and EQF levels
Levels are defined by reference to:	national benchmarks which are embedded in different specific learning contexts, e.g. school education, work or higher education	general progression in learning across all contexts across all countries

If these distinctions are accepted, the form and function of national qualifications levels (or frameworks) will be different to those of the EQF meta-framework. Such differences should create a clear space for NQFs to continue to develop in a distinctive way that reflects national social and cultural perspectives. In the EQF proposals (and in the emerging meta-framework in Southern Africa) the intention is to respect and encourage different national perspectives. However, even if the differences between meta-frameworks and NQFs are accepted, the existence of each of the characteristics of the EQF (in the third column in table 1) asks questions of each country in terms of the content in the second column. Thus the EQF, which aims to be neutral, is likely to raise expectations of clearer design features of NQFs. This deduction is supported by the evidence that, even in the early days of the EQF, many countries are intending to use 8 reference levels in their emerging frameworks (for example, Belgium, Czech Republic, Lithuania, Slovakia, Spain).

In the 2005 Commission Staff Working Document there is a declaration of aims of the EQF, one of these is that the EQF *would be a force for change at European, national and sector level*. Whilst it is intended as a neutral instrument the process of bringing transparency to qualifications systems will foster the kinds of changes outlined above.

In summary, the EQF is likely to provide a means to transparency at the European level and, through its architecture of levels (defined in terms of learning outcomes), it is likely to bring to some countries the benefits of transparency (itemised earlier in this section). So, from a European perspective what other benefits might the EQF deliver, in addition to ease of reference to the qualifications in other countries?

Firstly, it will form a strong reference point for instruments that operate across Europe. The EQF's eight levels, but just as importantly the use of learning outcomes, can provide key reference points that will enable other instruments to work better and interact with each other. Some examples follow.

(i)   The Europass portfolio should become a more powerful communication tool when Europass CV, Mobilipass, Language Profile and the Diploma and Certificate Supplements have components that are referenced to the common EQF levels and, hopefully, to learning outcomes.

(ii)   ECVET and ECTS are credit systems that require 2 main defining concepts for them to work; firstly, the level of learning and secondly, the volume of learning. The EQF reference levels should form the basis of defining level, and the focus on learning outcomes should be supportive of attempts to define volume of learning.

(iii)   The Ploteus database of learning opportunities should be enhanced in the same way as ECVET, the level of learning and the use of learning outcomes will make the database more easily understood.

(iv)   Whilst no European system exists for the validation of informal and non-formal learning, it is clear that the principles defined by the European Commission in 2004 have been accepted as a strong basis for development of policies and practices in different countries. The focus on learning outcomes in the EQF and in NQFs means that identification of learning outcomes based on experience (non formal and informal learning) should become easier. Consequently the recognition and validation processes can also be facilitated.

(v)   Across Higher Education and VET sectors, work has been proceeding on principles that can form the basis of quality assurance systems. It is too early to predict the role of the EQF in relation to quality assurance processes. However, the development of national reference points for the linking of national systems to the EQF has the potential to become a tool for quality assurance. The linkages proposed by the national reference points will be open to international scrutiny and this will introduce an element of peer learning about effective quality procedures.

(vi)   Key competences have now been defined and are being considered in relation to national lifelong learning policies. Should countries decide to build these key competences into qualifications systems, the EQF levels and the learning outcomes approach will facilitate the further definition of staging points, in developing these competences.

Just as important as the improved functioning of the separate European instruments is the fact that they work together in a supportive way. If the underpinning architecture of these tools is common then tendency to see each of them as part of a whole approach to improving education and training is enhanced and fragmentation is avoided

In addition to improving the effectiveness and coordination of the European instruments there are other potential benefits at European level. For example, policy learning from experience in different countries can be enhanced through better understanding; made possible by common reference points. In the same way, external benchmarking of national educational standards is made possible. These potential

benefits remain to be explored in the future. Already taking place is the better European coordination of sectoral activities. Some employment sectors are already exploring the value of the 8 reference levels of the EQF as tools by which to define occupation and educational standards in their sector. Using the reference levels in this way adds value for employers and workers involved in Europe-wide enterprises. The added value takes the form of increased credibility, better communications and opportunities of promotion of the sector and its qualifications.

5. Learning objectives, learning outcomes and competence

The development of descriptors for the EQF and NQFs is challenging. This is because the main objectives of transparency, simplicity, comprehensive coverage of learning and meeting the needs of the various stakeholder groups present considerable problems when taken together. There is also the issue of differing conceptualisation of learning (as inputs and outcomes) and of ability to do things (as being qualified and competent).

It is common to witness confusion between learning outcomes and aims and objectives of programmes: certainly some people regard learning outcomes and programme objectives as the same and use the terms synonymously. The main distinction between learning objectives and learning outcomes probably arises through assessment of achievement. Assessment of achievement of learning objectives can take many forms and can include making a series of judgements about achievement across the whole content of a programme of learning. This might include assessment of all programme objectives or could include assessment of some or most of them, depending on the tool of assessment. For example, a module of learning on Roman history will include many objectives connected with timelines, major events, significant rulers, transport systems, social developments and so on. Assessment may sample across these aspects and will allow a general judgement of the level of knowledge of the Roman era to be made. On the other hand the assessment of learning outcomes will usually be inclusive of all outcomes and will be based on assessment criteria relating to each learning outcome, for example, the ability to describe the advance of the Roman Army in Europe, or the ability to identify the distinguishing characteristics of the architecture of Roman public buildings.

The different classifications of learning outcomes (for example knowledge, skills and autonomy and responsibility) can be stated in relatively simple terms. This is advantageous for a common understanding of the learning achievement required and attested. However, the achievement of a learning outcome will be dependent on the complexity of the context in which the outcome is *learned* and in which it is *assessed*. For example, *preparing a dinner* for a small family at home does not compare with *preparing a dinner* for a family wedding. The latter will require attention to be paid to all the variables within the context such as the number of these variables, their level of interdependency and the extent to which their behaviour under different conditions can be predicted. This is a well-researched area and the issue of the influence of context cannot be avoided in framework design. Some qualifications experts, especially in the field of VET qualifications, believe context to be at the centre of the difference in demand as learning progresses to higher levels. In other words the capacity to manage learning in more complex situations is a key difference between qualifications at different levels.

NQFs normally deal with the issue of complexity of context in three ways.

- It is left to the individual qualifications that are classified at a particular level to define complexity of the learning context.
- It is described in a separate, general commentary to a level and acts over all other descriptions of learning.
- Complexity of context is embedded in as many descriptions of learning as possible to provide a signal about the context in which learning has taken place and been assessed.

The EQF has followed the second option. The first and second categories of learning outcomes do not give any clues to the complexity of the context in which learning outcomes are learned and assessed. The third column provides this information. Reading across the EQF descriptors for level 3 we find the knowledge required is first defined. This knowledge is used in ways described in the second column where cognitive and practical skills depend on it. The application of these skills (and knowledge) is carried out in contexts defined in the third column in terms of, for example, of the level of autonomy and responsibility that has to be exercised.

The heading for the third column has been discussed many times and has been agreed to be *competence*. The rationale for this is simply that the learning outcomes in the third column convert those on the first two columns into competences. This decision to call the third column competence was not an easy one and there are many reservations. The main reservation is that reading down the column the full appreciation of the concept of competence is not revealed. Experts in this field would expect to read about such fields as cognitive, functional, methodological and personal competences. Within these fields they would expect to read even more detail about the nature of these separate competences such as ethical behaviours and interpersonal behaviours.

The identification and use of elements of competence to define occupations, work roles, training and qualifications developed a strong momentum in the late 1980s. The systematic nature of the process of defining achievements as competences and the clarity of the products – defined national standards – convinced many experts that the approach had moved the world of VET and vocational qualifications to a new level of understanding. By ignoring the way any learning was achieved it produced the freedom to focus on what really mattered – the outcomes of learning. A new platform for thinking about learning and work was established: it was now possible for people to examine vocational education and training in a different way by considering competences. However, recently, there seems to be a new consensus developing: the concept of competence must pay greater attention to the way learning is structured and enabled. In other words there is some rethinking of the position of competences as being separate from the learning process and acknowledging a link to the process of learning. In the field of VET, the well-established processes of *Formation* in France and *Beruf* in Germany, typifies this thinking. There is no single word in English that captures this meaning; usually it is expressed as something important that is gained during a learning programme that makes the learner clearly more competent in their work tasks. The most common explanation of this shortfall in describing how competence is developed beyond a set of learning outcomes is based on the theory of situated cognition, this takes account of the different forms of interaction between an individual and the work or study they engage with. The basic premise of situated

cognition is, as its name suggests, that learning and the context in which it happens cannot be separated. This theory and others need to be examined further in relation to qualifications frameworks and the ways learning outcomes are specified.

From an EQF and NQF point of view a simple model is needed and competences can be considered as learning outcomes where the context in which they were learned and assessed is specified.

It is interesting to note that without the concept of learning outcomes, it would probably be impossible to find a simple way of referencing all the different national qualifications systems in Europe. However, there are precedents for a system classifier based on learning inputs: ISCED 97 is probably the best known. Such is the complexity of the variables to be classified in order to cover all national systems that ISCED requires a manual to support interpretation and it has required amendment from time to time to ensure its relevance to evolving educational structures. Its use as a comparator is widespread and it forms the basis of most comparative statistical information on national education and training systems.

As interest in qualifications systems has grown the input based ISCED approach has been stretched and found to have serious drawbacks in the way it differentiates qualifications levels – it is not surprising therefore that international interest is shifting to the use of learning outcomes – this move is probably based on 6 sets of arguments.

1. Increased visibility of standards of qualifications through better definition of competences and qualifications: especially useful for comparative purposes.
2. The content of learning programmes is more manageable: learning outcomes form a comprehensive set of statements of what a learner knows and is able to do after successful study or work experience.
3. Learning programmes are more manageable: focus is on the key learning purposes of a programme and they maintain a good relationship between teaching, learning and assessment.
4. Increased transparency offered by learning outcomes: this benefits employers, higher education and civil society by articulating the achievement associated with particular qualifications.
5. It is possible to bridge the different sectors: learning outcomes provide the capacity to link vocational educational and training and higher education
6. External benchmarking is facilitated: it is possible to compare the learning outcomes arising in qualification systems in other countries.

The focus on learning outcomes is in fact a codification process similar to building a NQF. The complexity of learning programmes (including teaching specifications, subjects, institutional arrangements, duration of learning, evaluation, validation and certification) is simplified to a series of statements about what it is that has been learned as part of the programme. This codification, just like the codification of qualifications in an NQF, opens up discussion about such issues as relevance, links with other programmes, recognition of prior learning and fit-for-purpose evaluation. Thus it is likely that the practices of teaching and learning, which have often been inaccessible to many interested parties, including learners, is opened up for scrutiny and new positions of ownership and governance can be established.

However strong the arguments for a focus on learning outcome based systems it is likely there will be a place for learning input classification. The reality of today confirms this:

- Input arrangements can be supplemented with outcome information (Bologna process);
- Competence based models can be structured around input (apprenticeship);
- Assessment/evaluation methods can use both inputs (attendance at a training programme) and outcomes (demonstration of competence);
- Recruitment practices can use both input (e.g. work experience) and outcome (qualifications) information.

Having considered the EQF and the increasing focus on learning outcomes it is interesting to examine the national responses to these developments.

6. The national responses: Push or pull?

There are some countries (for example, New Zealand and Scotland) have used an overarching qualifications framework for some years, indeed some of these reflect qualifications that are based on learning outcomes and have level descriptors written in the form of learning outcomes. Other countries are new to the concept. The Annex to this paper provides an up to date, country-by-country summary of developments in the field of qualifications frameworks and learning outcomes. In summary:

- relatively few countries - Ireland, France, Malta and the UK (England, Scotland and Wales) - have actually adopted and/or implemented NQFs;
- one group of countries (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Italy, Latvia, Portugal, Slovak Republic, Slovenia and Turkey) have committed themselves, politically and/or legally, to the development of an overarching NQF explicitly linking into the EQF.
- another group of countries (Denmark, Estonia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Romania and Sweden) have started preparations for a NQF but have not committed themselves to the implementation of an overarching framework.
- Cyprus, Finland, Greece and Iceland have not started preparations or have stated that an overarching NQF is not a priority (for example Finland).
- The pre-accession countries of Croatia, former Yugoslav Republic of Macedonia and Turkey (candidate countries) and Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Serbia (pre-candidate countries) have also followed the development of EQF with great interest and have started to work on NQFs.

It is clear that national qualifications frameworks are in development in half of the countries and most of the others have begun policy preparations for an NQF. Outside this European circle we see new developments in NQFs in many other countries (for example, the Russian Federation, Ukraine, Sri Lanka, Malaysia, Thailand, Namibia and Botswana). Others have established NQFs (for example Australia, South Africa and New Zealand).

For the 32 countries involved in Education and Training 2010 programme, the question arises of whether NQF development is a direct national response to internal pressure to modernise the qualifications system or as a result of a future need to match the national qualifications system to the outcomes based EQF. Of course countries

may be developing NQFs for both of these reasons. While a few countries started work on NQFs before the proposal for an EQF (for example, the Czech Republic), the majority of countries launched systematic activities following the launching of the EQF-consultation in July 2005. In spite of considerable differences between the countries in terms of approach, some important commonalities can be observed:

- a significant number of countries are intending to use an 8-level structure, although the Irish and Scottish NQFs (respectively 10 and 12 levels) illustrate that an 8 level national structure is not the only option;
- the learning outcomes approach is widely accepted, irrespective of the attitude towards NQFs;
- a number of countries intend to link their development of a NQF with the setting up of a national repertoire of qualifications; and,
- a number of countries see the development and implementation of systems for validation of non-formal and informal learning as an important and integrated aspect of the development of NQFs.

It is interesting to note that only 2 countries (UK and Belgium Flanders) are considering linking an NQF with a credit-based system. Discussions around ECVET and the existence of ECTS have not, so far, prompted the same concerted national actions to develop integrated systems capable of supporting credit accumulation and transfer.

The EQF proposal seems to have exercised a 'pull' on countries and synchronised the timeline for development of NQFs in many countries. However the developments elsewhere in the world suggest that NQFs are increasingly seen as policy solutions to the pressures described in the first section of this paper. An ILO review of countries with NQFs has identified the following issues as important in leading to the decision to develop an NQF.

- Out of date programme content.
- Lack of flexibility in delivery systems.
- Qualifications not being developed to meet emerging social and economic needs.
- Lack of involvement of social partners, particularly in the development of standards.
- Inconsistent application of standards.
- Poor linkages between VET and academic qualifications.
- Low public esteem for VET.

These are strong drivers for a national change agenda and the pace of development suggests there is a strong 'push' from within countries. The NQF development is likely to be linked in with, and supporting, a range of national reform programmes. There are examples of the use of NQFs in these wider reform programmes from countries with NQFs. In New Zealand the intention was to coordinate better the whole education and training system, including schools (curriculum and qualifications, occupational standards and VET and higher education through the NZQF. In Scotland the SCQF has evolved to be the basis for credit transfer. In South Africa the SAQF was developed as a tool for redressing a history of discrimination against some social groups. In the UK and Ireland a framework articulation diagram has been developed to facilitate mobility between these countries. The French frameworks are designed to make economic planning more efficient.

Attempting to deduce exactly why NQFs are tools for wider reform is not easy. There is little written on the subject and yet the political intentions are clearly evident. One reason could be that NQFs based on learning outcomes alter the point of equilibrium of governance in education and training systems. It is possible that there are general shifts of position of the key actors where consumers of qualifications, mainly individuals and businesses, are likely to be empowered at the cost of providers. It is clear that learning programmes and qualifications based on inputs, such as teaching programmes and course duration, are impenetrable by end users. They are asked to trust the system and to feel confident they will have their needs met. The transformation of a teacher's/institutional intention into a measurable aspect of learning brings great clarity. As stated earlier, this process of transformation of teaching specifications into learning outcomes is a process of codification or modelling and allows a re-examination of programmes and a profoundly revised pedagogy and evaluation process. Stakeholders are able to intervene and discuss purposes, content and methods and there is the opportunity for peer learning and a cross fertilisation of ideas about best practices. Thus the 'secret garden' of learning programmes is exposed to external scrutiny.

Another reason for the use of NQFs as tool for reform builds on the above and makes use of the more significant engagement of employers in education and training. Just as the learning targets of learners are clarified, through the use of learning outcomes, so is the expression of need from businesses and other employers. The systematic definition of occupational standards has been common practice in many countries for many years and continues to grow into more countries and new sectors. These occupational standards are invariably written as learning outcomes, although it is possible to combine learning outcomes with definitions of learning programmes. It is likely to be the case that employers favour the transparency associated with learning outcomes and are able to use them in on the job training and in recruitment.

With learners, teachers and employers involved in identification and scrutiny of learning outcomes there is an opportunity for greater linkages between the different sectors and pressure to develop better coordination and to eliminate unnecessary repetition. It is also likely that social partnership can be strengthened.

NQFs make multiple reforms more manageable by setting a structure (the NQF itself but also its management infrastructure) through which different reforms can interact.

Earlier, the use of the EQF as a force for change was noted and the influence of the EQF on many current national developments is clear. Whether or not an NQF develops through national 'push' or international 'pull' it is important to know if the promised benefits will be delivered.

7. Evidence of impact: in short supply
How will we know that developing an NQF is the basis of a good policy? What evidence exists in countries that have NQFs that the NQF has made a difference to the workings of the education and training system? Despite some analysis by organisations such as the OECD and national reviews it is probably true that governments are still advancing in this field more on instinct than on the basis of evidence of *impact*. What impacts should be emerging?

The ILO have published a list of potential impacts in terms of stakeholder groups:

For individuals
- better recognition and utilisation of skills, improved employability, career prospects and fair remuneration;
- foster labour mobility;
- flexible access to formal education and training;
- assist training planning and career development; and,
- gain motivation for learning.

For enterprises
- reliable indicators for understanding the skills level of job applicants and employees;
- a means of identifying skills gaps and training needs;
- guides the development of HRD planning;
- provides reference work performance standards; and,
- assures quality of the goods and services to customers.

For teaching and training institutions
- enhance credibility and public image (thus marketability); and,
- provision of relevant and quality training.

For governments
- increase public accountability for training delivery; and,
- greater sharing of responsibility for learning with the private sector and individuals.

This type of stakeholder analysis dominates the small amount of literature of what are normally called 'reviews' of NQFs. The term review ranges from assessments of overall implementation and impact of frameworks, to a questioning of original objectives of frameworks and their structure and reviews of specific aspects or dimensions of frameworks. These reviews typically employ qualitative methodologies based on stakeholder interviews, focus groups and surveys. Measuring these impacts has not yet been attempted on a wide scale. Government-led framework reviews have been carried out for three frameworks (South Africa, Scotland, and England, Wales and Northern Ireland) and a fourth (Ireland) is underway. The review of the South African Qualifications Framework is a comprehensive impact evaluation and involves both qualitative and quantitative methodologies. In this study an attempt has been made to establish a baseline that can be measured again in successive cycles to provide impact measurement. The task of measuring impact is a complex one and some very difficult issues need to be resolved. For example, the impacts that are measured may reflect other national developments – the single independent variable - the NQF – is not a clean concept on which to build. And then there are sampling factors – how can the stakeholder sampling be made consistent over several measurement cycles? The South African authorities developed sets of related dependent variables and attempted to measure the differences in the set as a whole at different times.

Using the aims of NQFs as a guide it is possible to form some questions about the impact of NQFs that could be measured systematically (Table 2).

Table 2: The questions about impact of NQFs that need to be answered

Questions	Summary of depth of evidence[4]
Can NQFs simplify complex qualifications arrangements?	Where NQF reforms have attempted to reduce unnecessary overlap between qualifications they have been partially successful. Some NQFs have taken on board more functions and for ordinary users of qualifications the system might appear more complex.
Can NQFs link qualifications frameworks in different education and training sectors	There is limited evidence of success here. There is also some evidence of developing tensions when linkage has been established.
Can NQFs link qualifications frameworks in regional qualifications systems?	There is evidence in federal systems that this can be true.
Can NQFs link qualifications frameworks in sectoral qualifications systems?	No evidence here.
Can NQFs form a link between sectoral qualifications systems (often privately funded) and provision of national qualifications (often public provision)	Some supportive evidence from countries with overarching frameworks
Can NQFs benchmark qualifications and establish credible standards	There is limited evidence of small scale attempts to do this.
Can NQFs help provide clarity about competences, skills and qualifications that are needed by enterprises?	Strong competence based systems and national standards for occupations.
Can NQFs support credit based qualifications systems?	Where this is being attempted the NQF is integral
Can NQFs support progression of learning from one level of qualification to another?	Some studies in New Zealand and Australia have suggested problems for specific groups of learners. Otherwise limited evidence.
Can NQFs act to ease the portability of qualifications?	Many factors affect portability, evidence that NQFs help is limited.
Can NQFs open up qualifications to wider sets of learners through the recognition of non-formal and informal learning?	No evidence for this. However strong evidence of demand to gain formal recognition through qualifications
Can NQFs contribute to quality assurance arrangements?	Strong evidence for this. However some quality assurance arrangements could exist independently of a NQF.
Can NQFs support sector bodies by acting as a reference point for locating occupational standards?	Where occupational standards exist there is some evidence for this
Can NQFs support employers by providing commonly understood, and quality assured, benchmarks for qualifications?	It is difficult to distinguish the effects of a framework from the effects of a qualification with high currency.
Can NQFs support individuals by making it easier to describe their broad level of competence to recruiters?	No substantial evidence.

The absence of impact evaluations related to NQF development is a serious deficiency and setting up such evaluations could enhance the form and function of the existing and planned NQFs. NQFs are however often evaluated in a less systematic way. As they are developed and implemented feedback from stakeholders has shown how the

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[4] there are few frameworks that have provided evaluative evidence.

NQF can be further improved (for example the current NQF for England, Wales and Northern Ireland developed into its current form in this way. These issues raised by stakeholders are therefore important stimuli for improving NQFs.

8. Key implementation issues

This section tries to identify the systemic obstacles to qualifications development and from where they derive. Each of the issues deserve fuller discussion than is provided here and each needs to be informed by national experience. It is unlikely that there will be high levels of consensus in the issues raised by the development of the EQF and NQFs. Every country developing an NQF will do so according to the characteristics of the national qualifications system. From the very outset the pages set aside for planning the development of an NQF will not be blank. In table 3 some of the preconditions for NQFs are outlined.

Table 3 National preconditions for NQFs

Examples of national preconditions	Effect
Desired scale of reform	Large-scale reforms may be needed as they allow the building blocks of qualifications systems (such as providing institutions, needs analysis processes, assessment practice and the basic structure of qualifications) to be part of the programme of change. A large-scale reform need not necessarily be centralist and top-down.
Breadth of policy for reform	The introduction or reform of an NQF can be viewed as one part of a much broader set of reforms. More importantly these reforms are often, by design, interdependent in terms of bringing about the goals of reform. The blend of the set of reforms will, at least to some extent, determine the shape and role of the NQF.
Financing	The scale of financing and the period of guaranteed funding influences the extent of what might be attempted in terms of NQF development.
Timescale of reform	Reforms in qualifications systems suffer a significant time lag where change has to be managed in a way that preserves the rights and status of those who are directly affected. Changes also work their way through the system linearly (for example curriculum reform, qualification reform, recognition process reform and finally use of qualification for advancement).
The status of stakeholders	Where social partners are responsible for managing the competent bodies involved in the qualification system, an extensive process of consultation and bottom up development may be required.
The extent of diversity of existing qualifications	Finding common ground for establishing a framework will be more difficult if there is great diversity of qualifications on offer and little chance of consensus on benchmarks for standards. Equally the existence of a high credibility qualification can reduce the scope for qualification reform.
Status of quality assurance processes	In credentialist countries where standards is a high profile policy matter, the selection of a framework design will be dominated by the definition of quality assurance procedures.
The need to relate to external developments	Where inward or outward mobility of labour is commonplace, the need to use structures that can

Examples of national preconditions	Effect
	articulate with different kinds of frameworks will be important. Using learning outcomes in qualification design and level descriptors is an example.
The capacity of central agencies to manage change processes	The reform of qualifications systems through the introduction of an NQF will require support from central bodies.
The clarity of the image of the framework	Policymakers need the public perception of the framework to be positive. The image needs to be clear, easily understood, and effective as these reflect good development processes. If the image is oversimplified it can reduce the sensitivity of the framework to the complexities of the qualifications system.

Taking account of the important national factors such as those above in the design of NQFs can reduce the obstacles encountered. During the 2005 consultation on the form of an EQF, the responses from countries revealed some commonality in the perceived preconditions for developing NQFs and linking them with the EQF. The following conditions were regarded as critical to success.

- Learning outcomes should be used as the basis of level descriptors.
- Inclusion of all national stakeholders in the decision to build an NQF and the shape it should take.
- Systematic coordination between national ministries and authorities
- Systems for validation of non-formal and informal learning should also be included.
- Robust quality assurance mechanisms should be put in place.
- Peer review and mutual trust should be part of the process of linking NQFs to the EQF.

Table 3 and these points from EU country responses provide an overview of the ways in which an NQF and its development plan can take shape. The major consideration, which is almost discernable as a precondition in most discussions of NQFs, is that they should be overarching frameworks – linking all parts of the education and training system. These frameworks are considered to have major advantages but their very nature as overarching frameworks usually means that they are, by design, less sensitive to the needs of one particular education sector. For example, a framework sensitive to the need to recognise competences in VET may not be sensitive to the nuances of different forms of knowledge developed in higher education. There have been some 'breakaway' pressures in existing frameworks, the most notable being the tensions experienced by higher education in New Zealand with regard to the expectations for registration with the NZQF. Currently some employment sectors in South Africa are finding the SAQF more restrictive than desired.

To what extent should an NQF be a means of ensuring quality of procedures and maintenance of standards? It is not always the case that a qualifications framework is a tool for quality assurance. However, if an NQF includes any criteria or processes for referencing qualifications to a level in the framework, then the framework will have some quality assurance function. The New Zealand framework has an explicit quality assurance function where admission of a qualification to the framework is carried out on the basis that the qualification is based on quality standards that are centrally defined. The Scottish Qualifications and Credit Framework (SCQF) has been

established by consensus between major qualification bodies. The admission of qualifications to this framework is not as well defined as the case in New Zealand but nevertheless the level descriptors exert an influence on the quality processes necessary for the award of a qualification at each level.

Some frameworks have associated with them explicit quality assurance processes. For example, the NQF in England, Wales and Northern Ireland has centrally agreed quality criteria for both the operations and capacity of the body that awards the qualification and for the qualification types themselves.

It is worth noting that when an NQF is built on learning outcomes the ways that programmes are described and delivered and how assessments of learning are made become more explicit, they also become more open to scrutiny. Consequently, other means of quality assurance become possible since a wider range of stakeholders may be in a position to offer advice on quality.

An issue arises in most countries that, whilst the transition to an outcome based definition of qualifications is a useful idea, the term *learning outcomes* is understood in different ways. The development of common understandings of the concept is a major implementation issue for NQFs based on outcomes. Equally important is to chart a course from a system with curricula, assessment methods and qualifications that are based on inputs of content, teacher time and norm referenced assessments to a criterion-referenced system based on agreed learning outcomes. The debate around this transition process is already underway between the countries involved in the Peer Learning Cluster on Recognising Learning Outcomes and will broaden in the future.

Perhaps the most important technical issue that will become prominent as the new frameworks are put in place is concerned with matching national qualifications levels to the EQF levels. Within countries the issue is to link qualifications to the NQF levels. The issue involves the concept of *best fit*.

> *Best fit* is about making a trusted decision on where a national qualification level is best described in terms of an EQF level. This means deciding which of several possible EQF levels is the one that best matches the learning outcomes in the level descriptors of the national qualification level.

Levels in the EQF are differentiated by learning outcomes. These outcomes are grouped under three headings of knowledge, skills and competence. If the EQF is to work as a reference point for locating a national qualification level it is important to understand what these two dimensions: levels and types of competence represent. Each appears to be made up of distinct categories (level 1, level 2 etc.; knowledge, skills, competence). In fact each must be part of a continuum and the different categories (levels and knowledge, skills and competence) are an attempt to define something that can be understood in its own right. For example, level 2 can be understood in terms of being more demanding than level 1 and less demanding than level 3. The knowledge competences are defined in as far as possible as facts, principles and concepts - but there is no clear-cut boundary with knowledge of processes and actions (skills) and competences in the third column overlap with both knowledge and skills. So levels in frameworks include descriptors, which, whilst

specific to one level, inevitably overlap with others since these levels are part of a continuum of achievement.

The link of a national qualification level to an EQF level is unlikely to be clear cut and precise. Instead the link needs to be trusted by users as the best possible link, better than any other option. This is the concept of best fit.

The structure of levels and types of learning outcome in the EQF means there are two dimensions of best fit.

- The best EQF level for an NQF level or a qualification.
- The best match to the different kinds of learning outcomes (knowledge, skills and competence).

The progression from one EQF level to another is shown for each type of learning outcome. A decision is needed for each type of learning outcome (knowledge, skills and competence) where the national qualification level best matches an EQF level. It is possible that for each type of learning outcomes a qualification will match the same EQF level. However, in the reality of qualifications levels, it is likely that there will be a link to more than one level of the EQF. The decision about the best level becomes which level is the best description of this qualification? Where does the 'centre of gravity' of the national qualification level lie? This process does not deny the reality of some parts of a qualification matching a higher level than the level deemed to best match the qualification. Nor does it deny that some parts may fall into a level below the level deemed to be best fit. The eight level structure has been designed so that significant coverage of more than one level is likely to be minimal. Having more levels would have made decisions more difficult.

NQFs that have level descriptors may not provide a clear match to the types of competence in the EQF; therefore the match to EQF types of competence can only be approximate. Sometimes the level descriptors in NQFs are not based on learning outcomes but instead on types of learning provision that poses a further difficulty.

The process of best fit is supported by two design features of the EQF that are not (so far) evident in the proposals. The first concerns levels – each EQF level is described on the basis that all lower levels are subsumed in it. Therefore there is no repetition of learning outcomes used in descriptions of lower levels. The second design feature is that for each level there should be a 'read across' of the three types of learning outcome. In other words the sequence ' this is the knowledge that is used with these skills in this area of competence' should be followed to get a full appreciation of the meaning of the level. These two design features will be elaborated in guidance on the EQF to be issued by the European Commission.

There are at present no significant *European qualifications*. No European body is issuing qualifications that are independent of the Member States. There are significant independent qualifications offered by large leading employers. These are usually quality assured at the point of delivery where a provider is competent to offer training to required standards. Measurement of learning outcomes is usually not attempted. A potential issue arises that, with the development of the EQF, it becomes possible to

create a qualification with an EQF level without recourse to any national qualification recognition procedure or accepted quality assurance procedure.

There is also an issue of proliferation of qualifications frameworks, particularly in the different employment sectors. The proliferation issue does not focus on the value of any particular framework within its sector but instead on the different formats, linkages and quality assurance procedures that could develop and how these might confuse users such as large (multi-sectoral) employers and potential learners. How can a process of coordination be operated in a free market setting? Is the 8 level structure of the EQF sufficient a coordinating factor?

Throughout the development phase of the EQF there have been questions about the distinctiveness of the Framework of Qualifications for the European Higher Education Area (FQEHA) and the EQF. The higher education framework with its Dublin descriptors for four levels of academic learning has been in development since 2004. Its fitness for purpose for use within European higher education has not been seriously challenged. The EQF as a lifelong learning framework also defines levels that relate to academic learning. Thus a tension arises around the co-existence of two meta frameworks, particularly;

- distinguishing the roles of each framework;
- the balance between higher education and VET in the higher levels in the EQF;
- the closeness of match of the common levels; and
- creating confusion amongst users of the frameworks.

Under the Irish Presidency of the EU attempts were made to bridge the higher education and VET communities in Europe and significant mutual learning has followed about the distinctiveness of each sector. Discussion of the issue of two frameworks has been richer than might have otherwise been the case. The fact remains the two frameworks have some similarities, they:

- are meta frameworks;
- are non mandatory;
- use of levels (cycles) and descriptors;
- are broad in scope of the learning covered;
- have a common view of dimensions of progression (knowledge, skills (application) and professional conduct;
- use the concept of 'best fit' to determine level;
- are associated with a quality assurance process;
- have been developed through a highly consultative process.

And there are some differences: they differ in:

- scope – lifelong learning - learning institutions;
- aims - one attempts to harmonise local frameworks the other attempts to articulate with them;
- the complexity in the sub systems to which the frameworks relate (VET is much less formalized than higher education);
- the generality of the descriptors;
- the strength of the focus of learning outcomes;
- the link to periods of learning;

- the volume of learning that constitutes a reasonable reference to a level;
- the strength of reference to other international qualifications frameworks;
- the driving force for their development.

Debates about the different roles of the two frameworks will continue to be important as the EQF commences its functions. The debates could now shift from a European level to national level where the local implementation issues that involve the two frameworks will become clear. There may be significant local differences in the way issues arise in countries where there is a separate ministry of higher education. Here it may be more difficult to arrive at solutions as to the way the two frameworks are used. Integration of implementation may be easier where one ministry is managing the process. Evidence for this arises in the context of VET when two ministries are often involved – a ministry of education and a ministry of labour.

High on the agenda in many Member States is the recognition of informal and non-formal learning. The issue here for many countries, is to identify the best approaches to build systematic ways of recognising learning outside the formal system and then validating this in terms of qualifications in the formal system. The issue has been discussed for many years now but the development of the EQF, with reference levels and the focus on learning outcomes, may raise the level of discussion and help build the bridge to formal recognition. There are already signs that this is the case, the activities in the peer learning cluster for recognising learning outcomes have focussed hard on effective systems for validation.

The EQF Recommendation suggests the establishing of an EQF national reference point in each country. The high level objective for these national reference points is to act with others in peer review of the NQF-EQF linkage process in countries. This peer review process could raise issues of its own to do with the nature of evidence for benchmarking national qualifications levels to specific EQF levels. In particular there may be difficulties for countries to explain the nature of their quality assurance procedures to others. An immediate issue might be the mechanisms to put in place to involve all the types of stakeholder (higher education and vocational education and training institutions, social partners, sectors and experts) that are involved in the comparison and use of qualifications at the European level in the EQF linking process.

Looking forward
An OECD study into qualification systems identified a tendency for governments to retain tight control over framework development while acknowledging the gains to be made by involving a wide range of stakeholders. Whilst the evidence for this must have been restricted to the few countries with NQFs at the time of the study it may be a signal of a longer-term issue related to who owns a national framework. Evidence summarised in the paper points toward frameworks being a tool for reform and a strong influence on the qualifications systems of which they are part. This power can be centralised and could reinforce central control over provision and restrict expansion of individualisation and regionalisation. Returning to the first point made in this section – if the control and management of the NQF should be a broad one then this should be one of the considerations at the design phase and management committees need to be established with appropriate remits.

It is perhaps surprising that with the extended timescale of ECVET discussions and the continued evolution of ECTS that credit based NQFs (those that have descriptors that allow units of assessment to be located at a level) are not more common or even in the policy pipeline. Some see the introduction of credit accumulation and transfer as a second stage process and longer term goal in reforms of qualifications systems based on qualifications frameworks (e.g. the SCQF) others see the introduction of an NQF with credit transfer as the best way to achieve flexibility (e.g. Belgium Flanders). The option to move to a credit based system is another longer term issue for countries. It is likely the continued drive to make qualifications systems more flexible will make this more of a question of the timing of the development of credit systems rather than whether there should be such a system. The OECD study, based on evidence from 2004, showed that credit frameworks were a very powerful way to make qualifications systems more conducive to lifelong learning.

Once a NQF is in place and the levels and descriptors become well known there is a tendency to interpret them at a finer level of detail and to add to them some sectoral contextual information, this might take the form of exemplification. This process makes the NQF more meaningful at sectoral level and gives it impact. An interesting option for defining level descriptors is to develop a two-tier system. At the top level the descriptors will cover all education and employment sectors and be generic. Under this level sectors are invited to write specific level descriptors that suit the purposes of the sector. These specific descriptors can be easily related to the generic ones. The advantage of this approach is to maintain high levels of relevance in the descriptors for the users. Ownership of reforms is also likely to be stronger because stakeholders have a role in NQF design. Whilst this appears to be a useful development there is an opportunity for differences in interpretation of the generic level descriptors to become evident at national level and, in the early days of establishing NQFs this may become a serious issue for the clarity of understanding of the top-level descriptors.

In this last section some potential issues have been raised for further discussion, there may be more issues that the implementation process will reveal. The NQFs that already exist have provided little guidance for the new developments on the basis of impact analysis and the most important issue may be the need for national and European level evaluation programmes. All of the issues in this final section have been raised as a kind of short *problematique* of frameworks. Further research and debate will strengthen framework design and implementation processes, and raise the chances of the EQF and NQFs delivering the benefits expected of them.

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Annex
National Qualifications Frameworks in Europe
(An extract from *Governing education and training; the case of qualifications frameworks*,
Bjornavold and Coles, European Journal of Vocational education and training, forthcoming)

Austria

The aim is to develop a single overarching NQF, based on learning outcomes, which
will be linked to the EQF. This framework will open up the validation of non-formal
and informal learning and will better meet the needs of the labour market than the
existing system. The agreement on the need for a NQF was expressed in the national
response to the EQF consultation and working groups were set up summer 2006 to
prepare a NQF based on in-depth research. In February 2007 a national steering group
for the development of the Austrian NQF was constituted. All stakeholders will be
involved in a bottom up process of consultation (beginning in Autumn 2007) and
development which is being coordinated by the General Directorate in the Austrian
Ministry for Education, Arts and Culture. The main aims of the Austrian NQF is to
support quality, promote access to and permeability of education and training and
promote a better balancing of VET and academic qualifications. The Austrian NQF is
planned to be ready for 2010.

Belgium (Flanders)

A NQF is seen as a necessary pre-requisite for relating Flemish qualifications levels
to the EQF. A set of 8 draft reference level descriptors was developed during 2005/6
and led to a discussion note published in October 2006. All relevant ministries as
well as all official advisory bodies (where social partners are included) in the field of
education and training gave an opinion on this document. A formal decision on the
establishment of a NQF (through the passing of a Decree) is expected before summer
2008. The development of the NQF have taken more time than the Flemish authorities
anticipated. A number of unforeseen consequences have been detected, requiring
additional work and clarification. Setting up a NQF is expected to improve overall
access to education, training and learning, to support the development of quality and
to strengthen overall permeability in education and training. There is full agreement
that a NQF must be based on learning outcomes - something that is well reflected in
the draft reference level descriptors. It is worth noting that the Flemish level
descriptors are based on 'knowledge', 'skills', 'context' and 'autonomy-
responsibility', thus paying particular attention to the importance of context in
describing qualifications levels. A series of pilot projects were finalised in spring
2007 testing the learning outcomes approach and the link to the qualifications
framework in a range of sectors (EQF levels 1-5). Similar projects have also been
carried out by Bologna promoters for levels 6-8. The general conclusion of these test
projects is that the descriptors developed for the Flemish framework are useful for
classifying qualifications and only require minor changes and adaptations. A report on
the development of a central qualifications database has been completed and a
prototype will be developed by the end of 2007.

Belgium (Wallonia)

A formal decision on setting up a NQF was made in March 2006. I the response to the EQF consultation, a NQF is seen as an requirement and precondition for a functioning European framework ('..est un prealable indispensable. C'est exclusivement a travers ceux-ci-que les qualifications peuvent se situer dans le CEQ)...'). A group of experts was set up autumn 2006 to outline the main features of a future NQF. The result of this work is expected to be presented 2007 and will form the basis for future developments. As in Flanders, the emphasis on learning outcomes is essential to the ongoing work. It is noted that some parts of the education and training system (adult learning, vocational education and training, the new system for validation of non-formal learning) have significant experiences in using the learning outcomes approach; other sub-sectors have less experience. It is likely that an 8-level structure will be chosen for the framework.

Bulgaria

The Bulgarian Ministry for Education and Science has committed (in 2006) to the setting up of a NQF which is considered to be of great importance and is expected to be presented to the government for adoption by 2008. A discussion paper on an integrated NQF will be the basis for consultation with stakeholders The ministry is also working on a complete register of qualifications. Experts are currently working on the relationship between current Bulgarian qualifications levels and the EQF. An important area for further development will be the redefinition and reformulation of education and training standards and curricula on the basis of learning outcomes. The question of how to integrate the framework for higher education (referring to the EHEA) and the EQF and the question of how to develop a single credit system within the framework are being discussed.

Croatia

First steps towards the development of an overarching (lifelong learning) Croatian Qualifications Framework (CROQF) have been taken. During 2006 the Ministry of Science, Education and Sports (MSES) formed a joint working group of experts from VET and HE. The proposal of this group has been discussed (during spring 2007) with all the relevant stakeholders. The framework will have eight levels (with additional four sublevels reflecting the particularities of the Croatian qualifications system). Levels six, seven and eight correspond to the three 'Bologna' cycles. The levels have been described through credit ranges, links to levels in the EQF and types of qualifications gained after the completion of studies within a certain level. Elements of key competences are also included in the first four levels. During 2007 a wider working group consisting of experts from all stakeholders will be formed that will define common standards and descriptions for all levels which will serve as a basis for development of detailed descriptions for all qualifications based on measurable learning outcomes and competencies. Quality assurance and prior learning recognition, including non-formal and informal learning, will be important considerations. The Croatian framework is expected to be complete by 2009.

Cyprus

Cyprus has, in the context of discussions on the EQF, signalled scepticism towards the development of NQFs. Representatives of the country have argued that the principles and structures of a potential NQF have to be the responsibility of each member state and expressed fear that the EQF Recommendation goes too far in standardising one particular NQF solution. It is anticipated that the current qualifications system will eventually be used to develop an NQF. Caution has also been expressed in relation to the use of learning outcomes. The learning outcomes approach promoted by the EQF is considered to be not in line with the needs of the national education and training institutions.

Czech Republic

The Czech republic started work on a National Qualifications Framework prior to the launching of the EQF (2003-2004). This work formed part of the national reform agenda, partly supported by the EU social funds. An outline of a NQF has been developed and laid down in the 2006 law on 'Recognition of continuing education results'. This law will enter into effect August 2007. The Czech NQF is based on 8 levels, including a set of reference level descriptors reflecting the principles promoted by the EQF. The NQF is part of a lifelong learning strategy and it is hoped it will raise qualification levels generally and increase degree of success of people on the labour market and in so doing improve response of the educational system to labour market needs. The learning outcomes approach has been firmly embraced and is seen as crucial for reducing barriers between different education and training sectors. It is also hoped it will improve permeability and parity of esteem between vocational education and training and academic education. The main aim of the NQF is thus to facilitate comparability, transfer and transparency, at national level as well is in a wider European context through the link to the EQF. The NQF builds on units (complete and partial qualifications) and standards (for qualifications and assessment). The development of the NQF has taken place in close cooperation with all relevant stakeholders, including social partners and education and training providers.

Denmark

Denmark has yet to take a final decision on the establishment of a NQF. The national framework for higher education (related to the EHEA) is currently being revised and work has been undertaken to develop a qualification framework that supports stepwise qualifications in VET-programmes. In 2007 an inter-ministerial group is considering how to develop a coherent NQF on the basis of the current qualifications system. The goal will be to improve transparency, credit transfer and overall coherence in education and training that will support lifelong learning and to create a strong basis for the implementation of EQF in Denmark. The linking of Danish qualifications levels to the EQF will start from 2008 and onwards. As an important background for this development, it should be noted that the Danish Governments strategy on globalisation "Progress, Innovation and Cohesion- Strategy for Denmark in the Global Economy" from May 2006, includes goals and measures that targets the needs for increased permeability, allowing for increased transfer and combination of

learning outcomes between education and training sub-system, between education and work and also points to the link between the Danish education and training system and the EQF

Estonia

There is a proposal in Estonia for an 8 level lifelong learning NQF. The legal basis for the education and training system is currently under review and this is taking place in an incremental way that considers one sector at a time. It is intended that in the long term a new qualification system will cover the spectrum of lifelong learning. A set of new, learning outcome based national curricula for VET, is expected to be in place by 2008. To these will be added a new model of professional standards to be gradually developed in the period 2008-2013. Estonia noted, in the EQF consultation, that the development of a NQF requires substantial resources as it implies development of study programs should be based on learning outcomes. Nevertheless proposals for NQF have been made and discussions on the appropriate number of levels are taking place. The 5 years of experience with a competence framework for VET is being used to consider a widening of the use of learning outcomes in general education and higher education.

Finland

Finland started work on a (three cycles) framework for higher education (EHEA) in 2004. A proposal was ready in 2005 and a formal decision is expected during 2007. A parallel development is not foreseen for VET - an overarching NQF covering all qualifications levels is therefore not seen as an option. Finland will therefore relate to the EQF without an overarching framework and has set up two expert groups to consider how best to do this. The main reservation about developing an overarching Finnish NQF is the development would require extensive work that could distract from other necessary developments in education and training. Finland has extensive experience in applying a learning outcomes approach to its education and training system. This applies in particular to VET but increasingly in general and higher education. This is seen as a fundamental enabling pre-condition for linking Finnish qualifications levels to the EQF without setting up an overarching NQF.

France

National Qualifications classifications have been established in France for 40 years. There is the legal basis (since 2002) to bring these various classifications together in a French NQF. The 8 level EQF has been a positive influence on this process of integration however the EQF level descriptors for knowledge, skills and competences have created problems for creating a single French qualifications framework. The key element of the French framework is the national repertoire of professional qualifications. These qualifications consist of three main types; those delivered by the Ministry of Education, those delivered by sectors and branches and those delivered by other ministries, chambers of commerce as well as various public or private

institutions. The purpose of this repertoire is to increase the transparency of qualifications, both for employers and for individual citizens. For a qualification to be registered, a particular procedure has to be followed, guaranteeing that the relevant quality criteria have been met. A National Committee consisting of 16 representatives of the state and 12 representatives of the social partners have been set for this particular purpose. An important aspect of the French approach has been the implementation of a system for validation of learning gained through experience (non-formally and informally acquired learning outcomes). This system provides an important bridge between different segments of the education, training and learning system and underlines that qualifications can be achieved by different routes and pathways, which include formal routes as well as non-formal and informal ones. The French approach can thus be seen as an illustration of the practical implementation of a learning outcomes approach.

Germany

Germany has declared its intention to create a NQF covering all areas and levels of education and training. Studies and technical preparations were initiated autumn 2006 and a first outline of a German NQF is expected during 2007. A pilot project has been set up to formulate competence-based vocational training regulations in a few selected occupations. Other projects test the recognition of leaning outcomes of VET for access to higher education. German debate on the EQF has focussed explicitly on its possible impact on the national education and training system and to which extent and in which form it would support national reforms. Some stakeholders see the EQF, and notably a German NQF, as an opportunity to reduce barriers between sub-systems of education and training and promote a more flexible form of recognition (for example of non-formal and informal learning). The shift to learning outcomes (in the German context formulated as 'competence') is supported by major stakeholder (Federal Ministry, Employers organisations). Other stakeholders (some Trade Unions) emphasise the need to protect the German vocational training model (Berufsmodel) and warns against a modularised model watering down the existing dual model combining school and work practise. A NQF for the Higher Education Sector (EHEA) was implemented in May 2005.

Greece

The Greek reactions to the EQF have been positive however it as reserved its national position regarding the development of an NQF. Initial discussions on a NQF were started in September 2006. These discussions are linked to the ESSEEKA Law (on the relationship education-employment) and covers a number of aspects, for example the development of national VET standards and validation of non-formal and informal learning. No decision has been taken as to the development of a NQF so far. In general, the learning outcomes perspective has not been embraced in Greece (an exception is two competence based VET profiles developed under a new Common Ministerial Decision that defines EKEPIS - Ministry of Employment as the responsible authority on the elaboration of profiles). A certain reluctance can be detected in higher education, expressed in the form of scepticism/opposition to credit transfer and diploma supplements.

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Hungary

There is a clear commitment to develop a NQF in Hungary. As it is stated in the response to the EQF consultation; '..the lack of such a framework has become one of the major factors impeding lifelong learning'. The NQF work is part of the national development plan 2007-2013. An NQF is seen as necessary for strengthening political commitment and for increasing the efficiency of policy coordination at national level. Stakeholders see the need for a framework that promotes lifelong learning and a policy coordination tool that facilitates communication between education and training sectors and the labour market. Hungary has begun a information gathering activities about the experiences of other countries with NQFs. The learning outcomes based approach is seen as a prerequisite for success in this field. Reforms have already been carried out in segments of the education and training system, in particular in VET and adult education. Some reforms have also been carried out in general secondary education and in higher education.

Iceland

Iceland has committed itself to the development of a National Qualifications Framework for higher education (EHEA) but has yet to address the question of an overarching NQF. Iceland has made substantial progress as regards the use of learning outcomes in describing curricula. This applies in particular to VET and adult education but is increasingly influencing general and higher education. There is an ongoing restructuring of the upper secondary education system in Iceland, which aims to demonstrate the attractiveness of VET and bridging the gap between VET and academic studies at this level. It is also an Icelandic goal to increase participation in formal education and establish a system for validation of non-formal and informal learning. Establishing an NQF is being considered, but as of yet no final proposals have been made.

Ireland

Ireland set up a National Qualifications Framework in 2003. The ten levels of the Irish national Framework captures all learning, from the very initial stages to the most advanced; qualifications achieved in schools, further education and training and higher education and training are all included. Each level of the Framework is based on nationally agreed standards of knowledge, skills and competence that are expressed as learning outcomes. In addition, each qualification that is included in the framework is quality assured, as is every provider delivering programmes that lead to qualifications. The current stage of development is described as one of deepening implementation where more consistent approaches to learning outcomes, credit transfer and recognition of non-formal learning are being pursued. The work on the linking of the Irish framework to the EQF will start in the near future.

Italy

An NQF is a widely shared priority and initial work has started. In September 2006 the Ministry of Labour presented a 'National Table' that aimed to begin the process of defining and implementing a NQF. Stakeholders in such a framework would be, in addition to the Labour Ministry, the Ministry of Education, universities, regions and social partners. The aim will be to integrate the different titles, qualifications and diplomas delivered by these stakeholders (and the employment services) into one framework. This framework may eventually lead to a definition of national criteria and methodologies improving the transparency and visibility of knowledge, skills and competences, irrespective of the context where they were acquired. Learning outcomes play an important role in this development, in particular VET and higher technical education have adopted this approach, other segments of the system are also working in this direction.

Latvia

Latvia will develop a NQF by building on the existing 5 level structure in VET and the 3 level structure existing for higher education. Work on a national framework for higher education - in the context of EHEA - has started and is covered by a draft law on higher education. The term learning outcomes is not widely used in Latvia. We can however observe a growing emphasis on learning outcomes (and competences) in recent years, partly in relation to the development of a framework for higher education, partly related to the development of occupational standards (based on Ministerial Regulation February 2007). The link between Latvian qualifications levels and the EQF will be the responsibility of a tri-partite committee working on a new Law on vocational education and training.

Lithuania

Lithuania is currently developing an overarching National Qualifications Framework of 8 levels and will be based on competences/learning outcomes. The characteristics of the level descriptors will follow the pattern of the EQF. This framework of qualifications is the integrative part of the National System of Qualifications which is being designed at the moment. The system of qualifications consists of the qualifications framework and the processes of the designing, provision, evaluation and the recognition of qualifications. The project was started in 2006 and the plan is to finalise the work by 2009 (a new national Law on Qualifications will be issued to provide a basis for the framework, the NQF will also covered by the new Law on vocational education and training). The expert group responsible for the development of the NQF included all relevant national stakeholders; education and training providers (VET and HE), social partner organisations and representatives of research. An even broader set of stakeholders will comment on the proposal of the expert group, involving universities, chambers, industry and trades, non-governmental organisations etc. The implementation of the NQF, including establishing a link to the EQF, will involve the setting up of a national register of qualifications and a representative national coordination body. The university sector is rather reluctant towards competence based approach of the NQF and employers are worried that

transparency of qualification levels may lead to increased migration of skilled people from Lithuania. There is also the challenge of the implementation and development of the system of assessment and certification of the informally and non-formally acquired competencies and qualifications, as well as the inclusion of the sector qualifications.

Luxembourg

A working group, coordinated by the Ministry of Education, was set up in 2006 to prepare a NQF proposal to be submitted to the relevant stakeholders during 2007. As Luxemburg is preparing a reform of the VET system focused on the learning outcomes approach, the work of the group is delayed. The discussion of the law proposal will bring some clarifications concerning the link between the VET system and the labour market and concerning the learning outcomes. This will influence the results of the proposal for the NQF.

Malta

Basic elements of a NQF have been put in place through the establishment of a National Qualifications Council (legal notice 1st of October 2005) and a proposal for the preparation of an 8 level framework. This proposal has been generally accepted by the main stakeholders (employers, trade unions, major public and private education and training providers) in a broad consultation process ending April 2007   The learning outcomes approach is seen as fundamental to these developments. Many of the existing VET-courses are already designed on the basis of this approach and will be extended to other qualifications as well. It is expected that in May 2007 four working documents on Malta's NQF will be published. The four documents focus on the conceptual framework of Malta's NQF; a reform strategy for a VET system within an NQF; a quality Assurance policy for a VET system and level Descriptors for key Competences at levels 1,2 and 3 of the NQF. Malta's NQF encompasses all levels of formal, informal and non-formal education and training.

The Netherlands

In the response to the EQF consultation, the Netherlands responded that it will strengthen coordination between the different education and training sub-systems and pursue a policy increasingly referring to learning outcomes. A national steering committee has been set up to consider the question of a National Qualifications Framework and a proposal is expected within one year. Also the Dutch Education committee, where all relevant stakeholders are represented, has produced a report on the impact of the EQF on the Dutch qualifications system and raising the question of a NQF. The focus on learning outcomes and the validation of non-formal and informal learning is strong in the Netherlands, in particular in VET and adult education and training, and may prove important for the development of a NQF. As regards the linking of Dutch qualifications levels to the EQF, work on this will not start until the formal adoption of the EQF have taken place.

Norway

In the response to the EQF consultation, Norway did not commit itself to the development of a NQF. Emphasis was on the development and implementation of the framework for higher education (related to the EHEA framework). It was however noted that the higher education framework would have to be compatible with a potential future, overarching framework. This position was further developed during 2006 resulting in the setting up (June 2006) of a working group consisting of representatives of some main learning arenas (VET, HE, adult learning). This group has produced (October 2006) a preliminary report on a possible overarching NQF. The working group suggested to start developing a framework in part of the VET system and use experiences from this and other pilots before starting developing framework for life long learning. The learning outcomes approach is fundamental to this work, and is extensively used in several segments of the education and training system, in particular in VET but increasingly so in higher education.

Poland

Poland is ready to develop an NQF but acknowledges that this would be a substantial development as such a framework would have to be built from scratch. Work will be linked to the operational programme Human Capital 2007-2013, this programme started in 2006. Within this programme a set of projects related to a NQF and the EQF will be carried out. The aim of these projects is to gather information and data on all qualifications (learning outcomes) within education, training, labour market and other sectors. The next step will be to arrange this information in a NQF. It is envisaged that this new framework will make it possible to introduce a mechanism for validation of non-formal and informal learning.

Portugal

The Portuguese response to the EQF acknowledges the necessity of establishing a National Qualifications Framework. A decision on setting up a NQF was taken in 2006, the aim being to integrate and coordinate national qualifications subsystems and improve access, progression and quality of qualifications in relation to both the labour market and society in general. An agreement was signed between the government and the social partners in March 2007 agreeing on the following key elements to form part of the NQF; a national agency for qualifications under the responsibility of the Ministries of Education and Employment, a national catalogue of qualifications based on learning outcomes and, finally, further development of a system for recognition of non-formal and informal learning (taking forward the existing RVCC system). The validation system will refer to the qualifications standards in the national catalogue. The linking of Portuguese qualifications levels to the EQF seen as fundamental and the overall development of a NQF is expected to take 3-5 years.

Romania

The development of an overarching Romanian NQF has yet to be decided. If this happens, it will have to build on the National Qualifications Framework for VET recently agreed between the government and the social partners. This framework introduces a 5 level structure and gives priority to a learning outcomes approach which as been in development since 1995. A series of draft policy documents have

already been elaborated, for example related to the nature and scope of standards (occupational standards and training standards). A system for validation of non-formal learning has been developed in relation to the VET framework. The emerging 3 level qualifications framework for higher education (EHEA related) will also have to be taken into account by an overarching NQF.

Slovak Republic

Positive steps have been taken towards the development of a NQF. This framework will be based on 8 levels and refer to learning outcomes. The Slovak Republic estimates a time schedule of 3-4 years for the development of this. The process is led by the Ministry of Education but involves other relevant stakeholders.

Slovenia

There is a positive attitude towards the development of a NQF. In the EQF consultation response it as stated that the 'Slovene Qualifications framework' will have to clarify criteria for transferring between educational programmes, institutions and systems'. It is agreed that the learning outcomes approach is important for a future NQF. A redefinition of curricula according to a learning outcomes approach has been in progress since 2003, the work is facing some scepticism from general education. A first concrete step towards a NQF was taken in 2006 through the adoption of a national classification (repertoire) of qualifications. This classification id an important first step towards the recognition of non formal and informal learning. An 8-level NQF structure is proposed covering the main types of qualifications.

Spain

Spain has started on the road towards an overarching NQF. At the moment the National Qualifications and Vocational Training System and The National Catalogue of Occupational Qualifications provide instruments which can be used to create the basis of an NQF for VET. A qualifications framework for higher education is currently being developed (3 levels, EHEA related) and will, as soon as it is completed, be linked to the remaining qualifications categories and levels, for example in VET where a 5 level structure exists. This would result in an 8 level structure covering all Spanish qualifications. The legal basis for these developments has been established through the 2002 Law on 'Qualifications and Vocational training' and the 2006 Law on 'Education', both underlining the importance of recognising learning outcomes irrespective of how, when or where they were acquired. The standards that characterise the 5 VET-levels have, in line with this, already been written in terms of learning outcomes and are defined taking into account professional competencies demanded by employment sectors using criteria such as knowledge, initiative, autonomy, responsibility and complexity.

Sweden

No overarching NQF has been set up in Sweden and a political decision as regards the linking of qualifications levels to the EQF and a possible NQF is still pending. A working group has been set up within the Ministry of Education and Research to discuss and analyse different options and the objective of this group is to start a more

in-depth analysis before the summer of 2007. This depends on a political clarification. and therefore no designs have been developed so far, although an international project is underway to explore how qualifications levels might e linked to the EQF without a formal NQF structure. A NQF for higher education is being established (EHEA related).

Turkey

The main elements of a National Qualifications Framework are in place in Turkey and further developments will involve drawing the various elements together. It is estimated that the time for development of the NQF is 3-5 years. Learning outcomes is seen as an essential part of the development of a NQF, considerable amount of work already done in VET and HE. A national project is supporting the development of a NQF, for example by introducing assessment and certification at all levels based on national standards. The NQF will consist of eight qualifications levels defined through learning outcomes and will cover general, vocational and higher education and training. A new law on 'occupational qualifications institution' was adopted on the 21 September 2006 and will facilitate the preparation of a NQF.

United Kingdom

There are four national frameworks in the UK: (i) the National Qualifications Framework for England, Wales and Northern Ireland (NQF), (ii) the Scottish Credit and Qualifications Framework (SCQF), the Credit and Qualifications Framework for Wales (CQFW) and (iv) the Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland. The NQF for England, Wales and Northern Ireland has been established since 2000 and covers all qualifications except those in higher education (the latter are accommodated in the FHEQ). The NQF has 8 levels plus a lower level, Entry level, that is aimed at easing access to the qualifications system. Since 2003 Wales has been developing a separate qualifications framework that has the capacity to accommodate credit accumulation and transfer and recognise all learning outcomes. Recently England, Wales and Northern Ireland have begun testing an 8 level (plus entry level) Qualifications and Credit Framework that is designed to be fully operational in 2010. The Scottish Credit and Qualifications Framework has been existence for 20 years in various forms and has recently become a public company. It is a overarching framework made up of 12 levels. All the UK frameworks are based on learning outcomes.

NQF developments in the Wider Europe; pre-accession[5] countries following European developments

All pre accession countries have started to work on NQFs; action plans to establish NQFs exist in most countries, however these do not reveal a pattern for what kind of NQF is planned in these countries. The development of the labour market is a key

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[5] The pre-accession countries are Croatia, former Yugoslav Republic of Macedonia and Turkey (candidate countries) and Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Serbia (pre-candidate countries).

driver that leads to pressure to develop qualifications frameworks for VET and to recognise the skills of adults without formal qualifications. Together with Bologna developments (all these countries engage with the Bologna process) this has often led to the development of two qualifications frameworks (for VET and HE) in each country.

Validation of non-formal and informal learning is a long term goal for most of these countries, and most do not have alternative pathways to the same qualifications level. Therefore recognising lifelong learning through the qualifications system remains some way off.

VET reforms in most countries have seen experimentation of outcome based approaches and, together with the influence of the EQF, it is possible to see a focus on learning outcomes in the development of NQFs. The EQF and the Bologna process are important drivers of change in all countries, and NQFs are being developed in order to align qualifications systems to the EQF.