CEDEFOP

European Centre for the Development of Vocational Training

Analysis and overview of NQF developments in European countries

Annual report 2012

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Foreword

This report, the fourth since Cedefop started its regular analysis of national qualifications frameworks (NQFs) development, covers 36 countries ([1]). Given that only Ireland, France and the UK (England, Northern Ireland, Scotland and Wales) had established frameworks prior to the adoption of the European qualifications framework (2008), the speed of developments has been remarkable.

In 2012, political commitment towards the developing and implementing national qualifications frameworks was strengthened. This is demonstrated not only by the fact that frameworks are being formally and legally adopted by several countries but also by the support they attract from broader groups of stakeholders, including social partners. Combined with the extensive technical work being carried out at national level, this forms a solid basis for the frameworks to build on.

Most frameworks have been designed to be comprehensive, covering all levels and types of qualification. This overarching perspective forms a critical precondition for reducing barriers within education and training and for pursuing lifelong learning. We can already observe a new type of dialogue across education and training subsectors, potentially creating the conditions for more permeable systems supporting vertical and horizontal learner progression.

Sharing many common characteristics, NQFs also reflect national traditions, values and objectives. This report shows that NQFs are significantly contributing to the shift to learning outcomes, as countries adopt learning outcomes based qualifications levels. While this focus is seen as crucial in achieving better transparency and comparability of qualifications, nationally and internationally, Cedefop analysis shows that putting learning outcomes into the wider context of education and training inputs is important.

Most countries see the primary role of frameworks as increasing transparency and thus making it easier for learners and employers to make good use of existing qualifications. Some countries, however, see frameworks as tools for reform and use them to introduce institutional and structural change.

While important, these achievements cannot hide the fact that the new NQFs being developed across Europe are still vulnerable and their long-term impact is by no means guaranteed. First, their existence is not well known to ordinary citizens. Second, the shift to learning outcomes promoted by the NQFs

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([1]) The 27 EU Member States, Croatia, the former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey.

is viewed with scepticism by some groups: the argument is that the focus on learning outcomes draws attention and resources away from pedagogies and learning contexts. Third, there is a danger that frameworks are not seen within a sufficiently long time-horizon but as short term and formal responses to European initiatives (the European qualifications framework (EQF) and the qualifications framework in the European higher education area). Frameworks need to be developed on a long-term basis.

This Cedefop report shows that some of these concerns are ill-founded. The use of learning outcomes is combined with learning inputs and the approach is seen as complementary rather than exclusive. Other worries, like the lack of visibility and long term strategies, are better founded and underline that the process described in this report requires further increased attention in the years to come. Stronger engagement with labour market actors remains an important challenge.

This report supports EQF implementation at European and national levels and feeds directly into the referencing process, in which countries relate their national qualifications levels to the EQF. It also contributes directly to the strategic objectives and short-term deliverables 2011-14 set out in the Bruges communiqué.

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Introduction – Overview and main tendencies

The rapid development and implementation of national qualifications frameworks (NQF) continued in 2012. An increasing number of European countries have now agreed on, and adopted the overall structure of their frameworks and are moving into an early operational stage. Joining the few countries where NQFs have existed for some time – France, Ireland and the UK – these new qualifications frameworks must now start to deliver in accordance with the ambitious objectives agreed. This report, the fourth since Cedefop started its regular analysis of NQF developments in Europe, analyses progress made and points to the main challenges and opportunities ahead.

NQFs in 2012: overall progress

Currently, 36 countries ([2]) are developing 40 NQFs. The following figures reflect the situation in November 2012:

- 29 countries ([3]) are developing or have developed comprehensive NQFs, covering all types and levels of qualification;
- all are using a learning outcomes based approach to define the NQF level descriptors;
- eight countries are developing or have developed partial NQFs covering a limited range of qualifications or consisting of separate frameworks operating apart from each other. This is exemplified by the Czech Republic, England/Northern Ireland and Switzerland where separate frameworks for vocational and higher education qualifications have been developed; by Serbia where a separate framework for levels 1 to 5 and for higher education are being outlined; by France where only vocationally or professionally oriented qualifications are included in the framework; and by Italy, Liechtenstein and FYROM where frameworks are restricted to qualifications from higher education;

([2]) These countries are: the 27 EU Member States, Croatia, the former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey.

([3]) In the UK, the frameworks of Scotland and Wales are comprehensive; the qualifications and credit framework in England/Northern Ireland includes only vocational/professional qualifications.

- 27 countries have proposed or decided on an eight-level framework. Other countries have NQFs with either five, seven, nine, 10 or 12 levels;
- 24 NQFs have been formally adopted;
- four countries have fully operational frameworks;
- 10 countries are entering an early operational stage.

NQFs and their relationship to the EQF

The EQF has been the main catalyst for the development of NQFs in Europe. While, in principle, countries can link their national qualifications levels to the EQF without an NQF, almost all (⁴) see the development of an NQF as necessary to relate national qualifications levels to the EQF in a transparent and trustful manner. All countries covered by this report emphasise the importance of increasing international comparability of qualifications and see the EQF as a tool for accomplishing this. By the end of 2012, 16 countries had completed their referencing to the EQF: Austria, Belgium (FL), Croatia, Czech Republic, Denmark, Estonia, France, Germany, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal and the UK (⁵). Most of the remaining countries are expected to complete their referencing process during 2013. It is also worth noting that the number of countries taking part in EQF cooperation increased during 2012, from 34 to 36 countries (⁶).

Compared to the original 2010 deadline in the EQF recommendation, referencing to the EQF is delayed; this is mainly because all countries exceptFrance, Ireland and the UK have developed NQFs from scratch. The combination of NQF developments and EQF referencing has been resource- and time-consuming and frequently politically challenging. This has been particularly apparent during 2012 when optimistic referencing schedules have been adjusted repeatedly. This report demonstrates why this has happened and how most countries have been going through an extensive formal adoption process often requiring a new legal basis and/or amendments to existing laws and decrees.

(⁴) The only exception is Italy, which intends to reference its qualifications levels to the EQF without an established NQF. The Czech Republic has developed an NQF for vocational qualifications and one for higher education and referenced on the basis of national clasifications of educational qualifications types and the NQF for vocational qualifications.

(⁵) Germany presented its referencing report to the EQF advisory group in December 2012.

(⁶) The two new countries are Switzerland and Serbia.

The development of national qualifications frameworks in Europe also reflects the Bologna process and the agreement to promote qualifications frameworks in the European higher education area (QF-EHEA). All countries included in this report are participating in this process, with 12 countries having formally self-certified their higher education national qualifications frameworks to the QF-EHEA ([7]). Countries are increasingly combining referencing to the EQF and self-certification to the QF-EHEA ([8]); Austria, Croatia, Estonia, Latvia, Lithuania, Luxembourg, Malta and Portugal have all produced joint reports on both processes, reflecting the priority given to the development and adoption of comprehensive NQFs covering all levels and types of qualifications. It is expected that this approach will be chosen by most countries preparing to relate their qualifications to the EQF in 2013. This development reflects the increasingly close cooperation between the two European framework initiatives, also illustrated by regular meetings between EQF national coordination points and 'Bologna' framework coordinators.

The success of the referencing process will eventually have to be judged on its credibility and whether the resulting comparison of qualifications across countries is trusted. The discussions during 2011 and 2012 point to some areas where comparability has become an issue:

- the comparison of qualifications at the lower levels of the frameworks (equivalent to EQF one to three) has started attract more attention. This is exemplified by current discussions between the five Nordic countries Denmark, Finland, Iceland, Norway and Sweden. These countries consider their primary and (lower) secondary education qualifications as broadly comparable but have chosen to place these qualifications at different EQF levels (Denmark and Iceland see qualifications at this level as fitting to level 2 of the EQF; Finland, Sweden and Norway may eventually go for level 3). Many other European countries that have completed the referencing process (e.g. Estonia, Lithuania and Portugal) have linked these qualifications to EQF level 2. This has triggered a discussion on whether the learning outcomes principle has been applied in different and inconsistent ways, potentially creating differences where these do not exist. Intensifying discussion on comparison of qualifications at the lower levels of the framework also partly addresses vocational qualifications at these levels;

- assigning a level to school leaving certificate from general education (general *Abitur*, *Baccalaureate*, etc.) has caused intense discussions in

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([7]) Information was provided by the Council of Europe on 1.12.2012.

([8]) Self-certification reports verify the compatibility of the national framework in higher education with the QF-EHEA.

several countries and across Europe. While most countries agree that these qualifications are best placed at level 4 of the EQF, Germany and Austria – due to domestic disagreements – have postponed this decision. This reflects the fact that the interpretation of learning outcomes and 'best fit' necessarily can vary among stakeholders and create conflicts. The lesson learned from 2012 is that these discussions need to be as transparent as possible and must allow those involved to consider all arguments. The Dutch decision to revise its original proposal to link school leaving certificates from upper secondary pre-university education (VWO) to EQF level 5 stands out as positive. The change of position followed an open discussion between countries and strengthened the overall credibility of the EQF;

- EQF level 5 has received increased attention during 2012. More countries now see this level as a key to bridging different education and training subsystems. It is interesting to note that the Baltic countries and Poland plan to introduce this level as a platform for developing new qualifications. This shows that the EQF levels work as a reference point not only for comparing existing qualifications, but also for developing new ones.

What is clear is that the credibility of the EQF will depend on continuous debate on the levelling of qualifications and on the criteria used for this purpose. While seemingly technical in character, assigning levels to qualifications is just as much a political as a technical process. How, for example, should academic and vocational qualifications be compared, valued and ranked? The development of the NQFs and the shift to learning outcomes have triggered a discussion in several countries on the implicit and assumed hierarchies of qualifications in existence, in some cases resulting in changing their order.

Common objectives and different ambitions

Apart from the key role of NQFs in promoting international and European comparability of qualifications, they are also generally seen as promoting better coordination between the different parts of education and training and increasing the overall transparency of the national qualifications system. The role of NQFs as communication frameworks is broadly confirmed and accepted and is seen as adding value to – although not changing in any radical fashion – existing qualifications systems.

Some countries, however, see the NQF as a tool for changing and improving national education, training and lifelong learning systems and practices. Countries like Croatia, Iceland, Poland and Romania, for instance, are promoting

NQFs as reforming frameworks and see the NQF as a (learning outcomes based) reference point improving the coherence and quality of education and training.

The further implementation of NQFs in the coming years will show the extent to which countries move from the relatively modest ambition of communication frameworks towards the more challenging role of reforming frameworks. In particular areas, for example related to the introduction of national arrangements for validating non-formal and informal learning, NQFs increasingly act as reference points for reforms. This is exemplified by the German and Polish qualifications frameworks which see the development of validation as an integrated and important part of framework developments.

As discussed later, framework developments are already triggering wider institutional reforms in some countries, in particular influencing the way qualification authorities and awarding institutions are set up. Developments in 2012 seem to indicate that most frameworks will combine and mix the roles of communication and reform. To operate with an absolute distinction between these two roles is not helpful in understanding current developments; we need to understand better how they are combined in each country and how they change over time.

Towards a European NQF model?

As most countries have reached a conclusion on how to design and structure their NQFs, it is now possible to reflect on the main characteristics of this new generation of frameworks triggered by the EQF. While we can see important areas of convergence, we can also identify areas where countries have chosen different routes.

Convergences and divergences

A comparison of the frameworks developed in direct response to the EQF shows a remarkable degree of similarity and convergence:

- NQFs have mostly been designed as comprehensive frameworks, covering all levels and types of qualification;
- most countries have introduced eight-level frameworks where learning outcomes are described according to the knowledge, skills and competence (KSC) categories;
- the convergence in structure (eight levels and focus on KSC) underlines the countries giving priority to international comparability;

- NQFs are frequently seen as a part of national lifelong learning strategies, in many cases opening up to qualifications awarded outside the formal, public system as well as promoting validation of non-formal and informal learning.

While countries have converged around these features, the new NQFs are not mere copies of the EQF. NQFs are part of national qualification systems and reflect national contexts, values and traditions. Countries have largely put their own mark on the frameworks:

- learning outcomes descriptors, while following the basic KSC structure, have been adjusted according to national traditions and approaches. This is particularly visible for the 'competence' category, where level descriptors have been adjusted to signal national priorities and orientations. Several countries have chosen to include key competences in their level descriptors, making these explicit;

- the relationship between the different subsystems of education and training (general, vocational education and training (VET) and higher education) is addressed differently by countries. While frameworks in most countries can be defined as comprehensive, the bridges connecting the different parts vary in architecture and strength.

The acceptance of the learning outcomes principle

The new generation of European NQFs are mainly connected through their emphasis on learning outcomes. Evidence collected for this report shows that the principle of learning outcomes has been broadly accepted across Europe and that frameworks have contributed actively to this shift. In a number of countries, for example Belgium, Croatia, Iceland, Norway and Poland, frameworks have supported implementation of learning outcomes, notably by identifying areas where learning outcomes have not been previously applied or where these have been used in an inconsistent way. The Norwegian NQF pointed to the lack of learning outcomes based descriptions and standards for advanced vocational training (*Fagskole*), resulting in work to remedy this weakness. Some countries, for example Poland, have taken systematic actions, closely linked to the introduction of the NQF, to introduce learning outcomes across education and training sectors. The same is happening in Croatia, Malta, Romania and Spain, to mention a few.

Pragmatic interpretation of learning outcomes

The NQFs developed after 2005 differ in important respects from the first generation frameworks developed in England, South Africa and New Zealand.

While differences in number of levels and coverage immediately catch the eye, the main difference lies in the interpretation and application of learning outcomes. The early frameworks were based on what may be described as a radical learning outcome based approach (Raffe, 2011) ([9]). Inspired by the English system of national vocational qualifications (NVQ) introduced in the late 1980s, these frameworks tended to specify learning outcomes independently from curriculum and pedagogy and tried to define qualifications in isolation from delivery mode, learning approach and provider. The countries in question have moved partly away from this radical approach but much of the scepticism towards NQFs currently expressed in academic literature (Allais et al., 2009; Brown, 2011; Young, Allais, 2011; Wheelahan, 2011a) tends to refer to this early, radical version of learning outcomes based frameworks and ignore the way the new frameworks are defining and applying learning outcomes.

According to the material collected and analysed for this report, countries have adopted a more pragmatic approach to learning outcomes. While the principle is seen as crucial for increasing transparency and comparability, there is general understanding that learning outcomes must be put into a wider context of education and training inputs to make sense. When placing existing qualifications into a new framework structure, the focus on learning outcomes is frequently combined with consideration of institutions and programme structures, accepting that mode and volume of learning varies and matters. The development of the German qualifications framework (DQR) illustrates this combination of input and outcome based considerations (BMBF, KMK, 2012, p. 67) ([10]).

The starting point for allocating selected qualifications to the levels of the DQR was the relevant regulatory instruments. These included federal and regional laws, framework agreements and curricula. Also, examination regulations and those issued by accreditation agencies were taken into account. As these descriptions were only partly oriented towards learning outcomes, identifying the learning outcomes 'core' of the qualifications was based on extensive testing and piloting in selected sectors and on systematic dialogue within the DQR coordination groups. In cases where no consensus could be reached, further analysis was carried out by experts, providing the basis on which consensus then was sought.

What is important, and is well illustrated by the German process, is that the learning outcomes approach adds a new important element to the 'old picture', making it possible to take a fresh look at the ordering and valuing of

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([9]) The role of learning outcomes in national qualifications frameworks. In: *Validierung on Lernergebinssen* [Recognition and validation of learning outcomes].

([10]) Germal EQF referencing report.

qualifications. This pragmatic use of learning outcomes – combining it with a careful consideration of input elements – has been important for redefining the relationship between vocational and academic qualifications. Reviewing this relationship in terms of what a candidate is expected to know, be able to do or understand – instead of looking at the type of institutions – has challenged accustomed ways of valuing qualifications. Placing the German master craftsman at the same level as the academic Bachelor is a good example of this approach. The same combination of input and outcome based approaches can be identified in most other countries.

Outcomes-led versus outcomes-referenced frameworks

While consideration of learning outcomes is critical for allocating qualifications to NQF levels, other factors, for example delivery mode and volume of learning activities, will inevitably play a role. The mix of these two main factors, outcomes and inputs, varies significantly between countries and subsystems. Raffe (2011, pp. 87-104) distinguishes frameworks as follows:

- learning outcomes-referenced frameworks;
- learning outcomes-led frameworks.
  In our interpretation this distinction can be understood in the following way:

Outcomes-referenced frameworks	Outcomes-led frameworks
• are seen as part of a strategy aiming for incremental change in qualifications systems;	• treat the learning outcomes principle as an instrument for transforming education and training systems;
• see the shift to learning outcomes as a step towards informing and improving teaching, training and assessment;	• have weak or no references to existing programmes, institutions and processes;
• aid communication and transparency across institutions, sectors and countries;	• aim explicitly to break the links between input and outcomes by defining qualifications independently of providing institutions and mode of delivery;
• link to programmes and delivery modes but use learning outcomes to clarify expectations and increase accountability;	• shift power from providers of education and training to users of qualifications (employers, individuals);
• are seen as critical to dialogue between qualifications providers and users;	• promote a market of learning by encouraging new providers and the free choice of learners; flexibility is a main objective;
• are education and training driven.	• are labour market driven.

This dichotomy is helpful in drawing attention to priorities inherent in the qualifications frameworks. Based on the evidence provided by this report, most European comprehensive frameworks are predominantly placed within the outcomes-referenced category outlined above. In this sense they confirm the observation of Hart (2009) ([11]) that '/…/the process of determining the level of a qualifications based on its outcomes needs to be supplemented by contextual information and benchmarks are required when cross-referencing different frameworks.' However, many frameworks contain elements of the 'outcomes-driven' model influencing the overall mix between outcome and input-factors. The influence of the outcomes-driven model is most visible in some of the subframeworks for professional qualifications developed since the 1990s and now forming an integrated part of comprehensive frameworks.

The Estonian and Slovenian subframeworks of professional/occupational qualifications are typical cases where qualifications are strictly defined on the basis of occupational standards and can be acquired through different routes: there is no required or obligatory link to a specific programme or institution. Some of the objectives set for emerging national frameworks in Europe, for example increasing overall flexibility of qualifications systems, refer to principles inherent to the outcomes-driven typology. The same can be said of the focus on 'reclaiming power' from education and training providers by involving new stakeholders in designing and defining qualifications. While it is difficult to find examples of purely outcomes-driven frameworks in Europe today, some of the principles of this model influence their orientation and their priorities. Raffe (2011, p. 97) argues that outcomes-referenced frameworks have generally been more successful than outcomes-led frameworks; they are less ambitious and more focused on gradual, incremental change. Cedefop evidence indicates that, while this dichotomy is too simple for classifying European NQFs, it is helpful in identifying how countries tend to mix the principles from the outcomes-referenced and the outcomes-driven in the same comprehensive framework.

Comprehensive but 'loose' frameworks

European NQFs are predominantly comprehensive. One of key challenges they face is to embrace the full range of concepts, values and traditions existing in the different parts of the education and training covered by the framework. This leaves two main options:
- to try to reform existing systems according to the principles of the framework (in line with the outcomes-driven model discussed above), or;

([11]) Cross-referencing qualifications frameworks.

- to introduce a 'looser' framework accepting and respecting existing diversity but insisting on a common core of principles to be introduced and shared on a transversal basis.

Comprehensive European NQFs can mostly be described as 'loose frameworks'. Whether a framework is tight or loose depends on the stringency of conditions a qualification must meet to be included (Tuck, 2007, p. 22) [12]. Loose frameworks introduce a set of comprehensive level descriptors to be applied across subsystems, but allow substantial variation across subframeworks [13]. Tight frameworks are normally regulatory frameworks and define uniform specifications for qualifications to be applied across sectors. Examples of early versions of frameworks in South Africa or New Zealand show that attempts to create tight and 'one-fit-for-all' variants generated a lot of resistance and undermined the overarching role of the framework. These experiences have led to general reassessment of the role of these frameworks, pointing to the need to protect diversity (Allais, 2011c, Strathdee, 2011).

In most countries, the inclusion of formal qualifications in the NQFs is based on sector-based legislation, not on uniform rules covering the entire framework. This is illustrated by the proposed Polish framework where generic, national descriptors are supplemented by more detailed ones for the subsystems of general, vocational and higher education. While not so explicitly addressed by other frameworks, the basic principle applies across the continent.

As comprehensive frameworks open up to the non-formal and private sector, as demonstrated by the Netherlands and Sweden, the concept of loose framework will have to be given yet another interpretation. The pending question is how these 'non-traditional' qualifications are to be regulated and quality assured, and by whom. Some stakeholders fear that too tight regulations will be imposed, leaving uniform rules inspired by formal education and training not fitting the non-formal sector.

The new generation of NQFs in Europe

The NQFs now emerging can be described according to the following characteristics:
- a key priority of the frameworks is to support European and international comparability (see aslo Méhaut, 2012);

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[12] *An introductory guide to national qualifications frameworks: conceptual and practical issues for policy-makers*.

[13] For example for VET or HE.

- frameworks have, reflecting the objective of international comparability, been explicitly designed according to the principles introduced by the EQF and QF-EHEA;
- the comprehensive character of NQFs reflects that they are seen as key instruments supporting national lifelong learning strategies;
- while emphasising their role as communication frameworks, many combine this with support to incremental reforms;
- frameworks tend to approach learning outcomes in a pragmatic way, combining this principle with a focus on input factors;
- while involving a broad range of stakeholders in their design and development, frameworks predominantly address the needs of the education and training sector (Raffe, 2012b, p. 5), and are seen as only partly relevant to (for example) employees and employers.

These are the characteristics in 2012. Developments so far have shown that the orientation and profile of frameworks change as they develop. Experience from the Irish and other earlier frameworks shows that their influence on institutions and subsystems has grown over time. Whether the same will happen for the new frameworks is uncertain, but experiences so far show that the role of frameworks is becoming clearer at national level, allowing countries to exploit their potential.

Stages of development – moving towards operational status

During 2012 countries have increasingly adopted frameworks and are now moving towards an early operational stage. While the initial focus was on the architecture of the frameworks (number of levels, descriptors, scope), the current stage of development requires attention to legislative issues, the role of implementing agencies (including EQF national coordination points, (NCPs)), stakeholder coordination and implementation funding. Promoting the framework to potential users now is moving to the forefront, signalling that developments so far have remained within a limited circle of experts and policy-makers. This said, the 36 countries taking part in the EQF implementation can be placed according to four broad stages:

- design and development. This stage is critical in deciding an NQF's rationale, policy objectives and architecture and is even more important for involving key stakeholders in the process;
- formal adoption. The instruments used in different countries vary: laws, decrees via governmental, ministerial and administrative decisions. The

relative strength of these decisions depends on the national legislative and political context (some countries use laws more frequently than others). However, some form of formal adoption is important. Lack of a clear mandate has led to significant delays in implementing NQFs and referencing them to the EQF in several countries;

- early operational stage. Reaching this stage indicates that the framework is starting to be heard and that its principles are being actively promoted and applied. A key task of this early operational stage is to communicate the purpose and added value of the framework to end users;
- advanced operational stage. The NQF is an important and integrated part of the national education and training system, delivering benefits to end users, individuals and employers.

These stages should not be seen as 'watertight' compartments; in practice there is overlap. Figure 1 illustrates that these stages can be seen as part of a circular process underlining that qualifications frameworks require continuous developments and will never be fully implemented. Several of the established frameworks, notably those in the UK, have gone through several such cycles. This is also a feature of EQF referencing, where countries (e.g. Malta) have already presented updates to their referencing reports, reflecting the need to adjust and further develop their frameworks.

Figure 1   **Stages of NQF development**
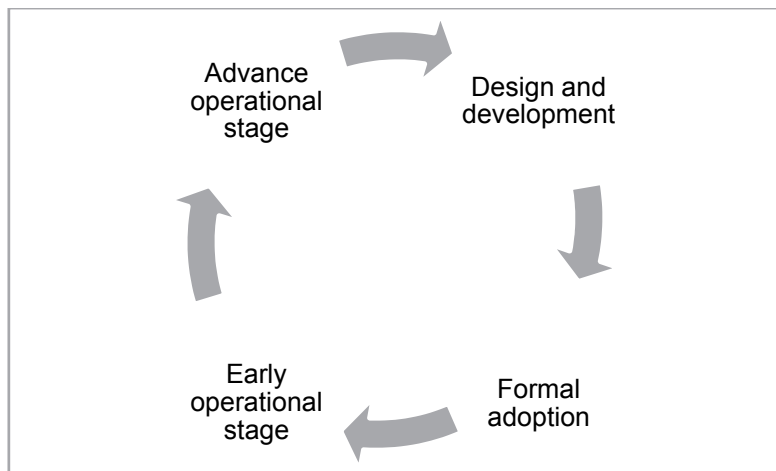
The following sections illustrate where countries are in relation to these four stages, and the challenges they have encountered.

Design and development

Initial design and development stages are mostly completed. While this demands a substantial amount of technical work, it also normally includes extensive consultation; this is critical for mobilising commitment and ownership among diverse stakeholders. Some countries have also chosen to test the NQFs approach in selected sectors. By the end of 2012, Greece, Romania, Serbia, Sweden and Switzerland could be described as still operating within a design and development stages, although some more advanced than others.

Formal adoption

While most countries have agreed on the architecture of their frameworks, many are still working on formal adoption. This has been delayed in in Croatia, Finland, Romania, Spain and Sweden. Compared to 2011, however, significant progress can be observed: 24 national qualifications frameworks are now formally adopted, either through NQF-targeted laws or decrees or through amendments to the existing legislation.

Targeted NQF laws have been passed by national parliaments in Belgium (Flanders), Czech Republic, Estonia, France, Ireland and Montenegro. Decrees have been adopted in Bulgaria, Hungary, Latvia, Malta, the Netherlands and Portugal. Laws and decrees on NQF have been prepared – and are awaiting formal adoption – in Croatia, Finland, Norway, Slovenia and Sweden. Existing legislation has been amended in Denmark and is planned in Hungary, Poland and Slovakia.

In a few countries government decisions have been made, frequently paving the way for later amendments of the existing legal basis. The formal basis of the NQF thus varies according to the national context and the 'policy-making culture' as well as existing governance arrangements (Raffe, 2012b) ([14]). However, legal basis alone is insufficient; reaching an agreement between key stakeholders on how to implement the framework after adoption is crucial, as illustrated below.

Moving towards an operational stage

The most important criterion for deciding whether an NQF has reached the operational stage is whether agreement has been reached on sharing responsibilities and roles between the different stakeholders. The case of Austria exemplifies this. The framework was launched in 2009 and extensively tested

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([14]) *What is evidence for the impact of national qualifications frameworks?*
http://www.tandfonline.com/doi/full/10.1080/03050068.2012.686260
[accessed 26.11.2012].

after this but, as procedures for allocating qualifications to levels have yet to be agreed between stakeholders, the framework has not entered the operational stage. The Belgian Flemish framework experienced the same dilemma after adoption in 2009 when lack of agreement with the social partners on how to allocate professional qualifications to the framework meant progress was halted. However, agreement was eventually reached and the 'filling' of the framework with qualifications has started and is now progressing fast. The successful completion of negotiations has strengthened the position of the framework – social partners are now fully involved – but has significantly delayed overall progress.

We can now distinguish between two groups of operational frameworks. First, frameworks in France, Ireland, Malta and UK have reached an advanced operational stage. These NQFs are being used by education and training and labour market authorities to structure information on education and training and make this visible to final users, individuals and employers through national databases on qualifications. Some of these frameworks, like the English and the French, go far in regulating qualifications and defining quality requirements, as well as operating as gatekeepers defining which qualifications are to be included.

Second, Cedefop material indicates that 10 countries can now be described as having entered an early operational stage: Belgium (Flanders), Denmark, Estonia, Germany, Iceland, Latvia, Lithuania, Luxembourg, the Netherlands and Portugal. These countries are currently working on the practical implementation of the framework: establishing secretariats, fine-tuning governance structures, and communicating the role and added value of the framework to potential end users in education and training. Some frameworks are heavily involved with the introduction and/or running of qualifications databases. Countries like Belgium and the Netherlands have a strong focus on developing quality assurance criteria to be used by the framework, such as including non-formal and private qualifications. The Portuguese example illustrates some of the steps taken to reach an early operational stage:

The new European NQFs differ from previous frameworks by being supported by designated EQF national coordination points (NCPs) in each country. A survey carried out among EQF NCPs as part of this analysis (September 2012) shows that coordination points influence implementation positively. While they play a particular role in linking to the European level – by supporting the referencing to the EQF – they are often identical to the secretariats in charge of overall NQF coordination and promotion (e.g. in the Czech Republic, Estonia, Finland, Ireland, Latvia or Malta).

The institutional basis of the NCPs varies between countries, as shown by the table below

Portugal

Three steps were taken to support the implementation of the framework:

- a new institutional model was developed to support setting up the national qualifications system and framework. A National Agency for Qualifications (now National Agency for Qualifications and Vocational Education and Training), under the responsibility of the, at the time, Ministry of Labour and Social Solidarity and the Ministry of Education, was established in 2007 to coordinate the implementation of education and training policies for young people and to develop the system for recognition, validation and certification of competences. One important role is also to articulate and communicate with the General Directorate for Higher Education regarding levels 5 to 8 of the NQF;
- a national qualifications catalogue was created in 2007 as a strategic management tool for non-higher national qualifications as a central reference tool for VET provision. 16 sectoral qualifications council were set up;
- the system for recognising non-formal and informal learning ('RVCC' system) was further integrated into the NQF.

Having reached an early operational stage, the Portuguese NQF now includes all national qualifications. The national database is structured in accordance with the levels of the NQF, making the framework clearly visible to all users. Education and training stakeholders are involved in the implementation of the NQF. A remaining challenge is to further disseminate information on the NQF to a wider spectrum of stakeholders, especially in the labour market, where the NQF is not yet known.

While most institutions, acting as NCPs operate under the remit of ministries of education, NCPs for example in Belgium (French-speaking community) and Italy are supervised by ministries of labour. In some countries, e.g. Portugal and Slovenia, both ministries govern VET agencies executing NCP functions.

Only in Latvia is the NCP placed within the ENIC/NARIC Centre ([15]). An independent organisation (company) acts as NCP in Scotland. In Germany, the NCP is being set up as a joint initiative of the Federal government and the *Länder* while the National Committee for Professional Certification (CNCP) performs the tasks of the NCP in France.

([15]) The European network of information centres (ENIC) and the national academic recognition information centres (NARIC).
http://ec.europa.eu/education/lifelong-learning-policy/naric_en.htm
[accessed 5.3.2013].

Table 1   **The institutional basis of the NCPs varies across countries**

Ministry of Education	National agency for quality assurance	Education/ qualifications agency	VET agency	Organisation responsible for internationalisation/ international cooperation
Cyprus	Belgium Flanders	Estonia	Italy	Austria
Bulgaria	Norway	England/ Northern Ireland	Lithuania	Denmark
Croatia		Czech Republic	The Netherlands	Liechtenstein
Iceland		Finland	Portugal	Poland
Luxembourg		Hungary	Slovenia	
Spain		Ireland	Sweden	
		Malta	Switzerland	
		Romania		
		Turkey		

The 2008 EQF recommendation invites countries to set up NCPs to be able to 'speak with one voice' on behalf of complex national qualifications systems. This was considered necessary to succeed in consistent referencing to the EQF. The list above shows that no single solution dominates. While the proportion of education/qualifications institutions comes as no surprise, some countries have chosen institutions which are under the remit of ministries of labour for this task. It is also worth noting that VET oriented institutions play a greater role than that played by higher education institutions. Most of these institutions are well integrated into the national qualifications structures and, as a minimum, are able to support framework implementation at technical and administrative level.

The bridging role of NQFs

The adoption and implementation of comprehensive NQFs across Europe influences the relationship between education and training subsystems. This is in line with the objectives set for most NQFs, aiming at improving the links and bridges between levels and types of qualification. Eliminating dead-ends and promoting vertical and horizontal progression is considered a key-task for most of the new frameworks.

Some of the established frameworks, for example the Scottish (SCQF), have invested much effort in creating better conditions for progression. In recent years Scotland has made significant progress in defining progression routes for learners in selected areas. Universities are obliged to reserve some of their places for learners coming through non-traditional routes e.g. without school leaving certificates from general education. While this strategy goes beyond the remit and role of the framework, the SCQF levels are used to position people (and their prior learning) and to map possible learning careers.

While few of the emerging frameworks have reached this level of intervention, many countries see dialogue and cooperation across education and training subsystems and with stakeholders outside education as a first step. This is expected to make it easier to identify common challenges and solutions.

Cedefop previous reports (2009-11) have shown that cross-sectoral working groups and task forces have been important during NQF design and development. In many countries this brought together stakeholders not commonly cooperating or speaking to each other. Experiences from this stage have mostly been summarised as positive, and most countries signal that they want to continue, institutionalising this dialogue and these cooperation platforms. Croatia and Germany provide good examples of the new permanent platforms being set up.

Croatia

The implementation of the Croatian qualifications framework (CROQF) will rely on the new national council for human resource development. The national council will comprise representatives of national ministries, regional structures, social partners, sectoral councils and national agencies involved in developing and awarding qualifications in different education and training subsystems. This body oversees education, training, employment and human resource development policies and monitors and evaluates the impact of the CROQF. The proposed law also defines responsibilities of various ministries (for education, labour and regional development) involved in coordination and development.

Germany

A coordination point for the DQR is being set up in a joint initiative of the Federal government and the *Länder*. It will consist of six members, including representatives from the Federal Ministry of Education and Research and Federal Ministry of Economics and Technology, the standing conference of the ministers of education and cultural affairs of the *Länder*, and the conference of ministers of economics of the *Länder*. Its main role is to monitor the allocation of qualifications with to ensure consistency of the overall structure of the DQR. The direct involvement of other ministries, social partners, representatives of business organisations and interested associations is, if their field of responsibility is concerned, ensured by the Federal Government/ Länder coordination point for the German qualifications framework.

The German qualifications framework working group (Arbeitskreis DQR) remains active as an advisory body retaining its former composition.

Whether these platforms can be used to improve the overall permeability of national systems remains to be seen, although the relative success of Scotland in this area shows that frameworks have a role to play.

NQFs and institutional reform

NQFs are contributing directly to institutional reform in some countries. Ireland, Malta, Portugal and Romania exemplify this through their decisions to merge existing and multiple qualification bodies into one covering different types and levels of qualifications. A number of other countries have aired plans to merge qualifications authorities or to establish new institutions (a proposal for a national qualifications council has been suggested in Sweden). This shows that NQFs, even in cases where their main role is perceived as promoting transparency, can trigger institutional reform. The following examples show how institutional reforms and framework developments can be closely related.

Ireland

The national framework of qualifications has been developed and monitored by the National Qualifications Authority of Ireland (NQAI), set up in 2001. The Further Education and Training Awards Council (FETAC) and the Higher Education and Training Award Council (HETAC) were set up as awarding bodies in further education and higher education, outside universities.

A new agency – Quality and Qualifications Ireland – was established in November 2012 under the qualifications and quality assurance (education and training) act 2012. The new authority is being created by an amalgamation of four bodies that have both awarding and quality assurance responsibilities: FETAC, HETAC, NQAI and the Irish Universities Quality Board (IUQB). The new authority will assume all the functions of the four legacy bodies while also having responsibility for new statutory responsibilities in particular areas.

Malta, Portugal, Romania and Sweden

In Romania, a new national qualifications authority was established (June 2011), merging the national adult training board, in charge of continuing vocational education and training (CVET) qualifications, and the national authority for qualifications in higher education. In Malta, the qualification council and the national commission for higher education were merged to the National Commission for Further and Higher education. Portugal also illustrates this tendency to the same coordination by institutionalising the cooperation between ministries of education and employment and the setting up of a new agency for qualifications. A similar proposal has also been made by Sweden, to take responsibility for overlooking the inclusion of new qualifications into the framework.

It is no coincidence that Ireland, following more than a decade of framework development, now has opted for one, coherent qualifications authority. The merging of the four previously existing bodies seems to reflect the structure and principles of the comprehensive NFQ and will also aid further development and implementation of the framework.

Opening up frameworks

The majority of post-2005 frameworks have limited their coverage to formal qualifications awarded by national authorities or independent bodies accredited by these authorities: this means that frameworks predominantly cover initial qualifications offered by public education and training institutions. While there are exceptions to this general picture, most NQFs only partly cover the education and training activities taking place in the non-formal and private sector, largely failing to address continuing and further education and training.

During 2012, attention has increasingly been paid to this potential weakness in framework design. A few countries, like the Netherlands and Sweden, have started working on procedures for including non-formal and private sector qualifications and certificates: this approach is presented as a key feature of the new Swedish NQF, meeting a need expressed by stakeholders in the labour market and in liberal/popular education and training. A key challenge faced by countries wanting to go beyond strictly regulated formal education and training is to ensure that the new qualifications in the framework can be trusted and meet basic quality requirements. The Dutch draft criteria illustrate how this can be approached.

The Netherlands

The NLQF will now actively promote the possibility of private or non-formal qualification included in and levelled to the framework. This is being presented as an opportunity for providers to achieve better overall visibility, to strengthen comparability with other qualifications at national and European level, to be able to apply the learning outcomes approach and strengthen links to the labour market.

If a provider, for example a private company, wants to submit a qualification for inclusion, an accreditation (or in Dutch 'validation') has to take place.

When an organisation has been accredited (for five years) it can submit qualifications for inclusion and levelling. The organisation will indicate the level it sees as most appropriate and this will provide the starting point for the assessment on which a final decision will be made. When requesting inclusion, the organisation will have to indicate the learning outcomes in accordance with the main elements of the NLQF level descriptors, the workload (no qualifications with less than 400 hours nominal workload will be considered), the assessment approaches to be applied, and the link to relevant occupational profile.

Several countries (e.g. Austria, Denmark, Finland, Latvia, Norway and Slovenia) have indicated that this opening up towards the non-formal sector will be addressed in a second stage of their framework developments.

Some established frameworks, for example in France and the UK, have put in place procedures allowing 'non-traditional' qualifications to be included in the frameworks. The Scottish framework now contains qualifications awarded by international companies (for example in the ICT sector) and other private providers. This is seen as a precondition for supporting lifelong learning and allowing learners to combine initial qualifications with those for continuing training and for specialisation. The French framework is also open to qualifications awarded by non-public bodies and institutions, as illustrated in the box below.

France

The French NQF covers three main types of qualification:

(a) vocational/professional certificates and diplomas awarded by French ministries in cooperation with social partners through consultative vocational committees (CPC) are registered automatically;

(b) vocational qualifications certificates produced by sectors under the responsibility of social partners but where no CPC is in place, and;

(c) certificates delivered by chambers, public or private institutions in their own name are registered on demand after the expertise, advice and fulfilment of strict quality criteria for inclusion in the NQF.

For entry into the national register of the vocational qualifications, a qualification should meet a number of requirements, aiming at national coherence and strengthening the overall quality and transparency of qualifications. All qualifications registered in the national register of qualifications must be accessible through validation of non-formal and informal learning. Registration signals that all stakeholders, as represented in the CNCP, underwrite the validity of a particular qualification. Registration is necessary for receiving funding, financing validation of non-formal and informal learning, exercising certain professions and occupations, and entering apprenticeship schemes.

Opening up frameworks to learners

Many countries see the framework as an opportunity to offer access for learning experiences gained outside formal education, at work and in leisure time. The introduction of validation of non-formal and informal learning is seen as a natural continuation of the learning outcomes based approach introduced by the frameworks. The 2012 analysis shows increased focus on such validation activities. Many countries see the introduction of the NQF, and learning outcomes, as an opportunity to integrate validation better in qualifications systems. In Germany a working group with the DQR-initiative has come up with a detailed recommendation on how to take forward validation in the national

context. The same developments can be observed in Poland where total absence of arrangements for validation is seen as a problem for lifelong learning, and where this now is being given priority within the development of the Polish qualifications framework. A third example is the French-speaking region of Belgium, where the development of validation and framework goes hand-in-hand and where significant progress has been made in the last few years. Given the political consensus reached by the European Council in November on the recommendation on validation of non-formal and informal learning, the link between frameworks and validation will receive increased attention. The adoption of the recommendation confirms that the NQFs have a reform role to play, pointing to their role as reference points for national validation arrangements potentially open to all.

Trends and challenges

National progress made during the last few years provides a good basis for releasing the potential of the NQFs, firmly supported by complementary policies and measures, for example on validating non-formal learning.

This requires that frameworks become visible beyond the limited circle of policy-makers and experts involved in their creation. The move from design, development and formal adoption to operational stage is critical and urgent. The following steps are important:

- learning outcomes based levels have to become visible. The inclusion of EQF and NQF levels in certificates and qualifications is critical to the future of qualifications frameworks;
- NQFs need increasingly to become a national structuring and planning instrument. Databases and guidance materials must be produced in a way that reflects the structure of the NQF. This has been achieved by the pre-2005 NQFs and need to be repeated by the emerging frameworks;
- NQFs need increasingly to engage with labour market actors and strengthen visibility in relation to labour markets (e.g. assisting development of career pathways, certifying achievements acquired at work, guidance);
- NQFs needs to open up to the non-formal and private sector and enable validation of non-formal and informal learning experiences acquired outside formal schooling or training.

NQFs can make a difference if seen as part of a wider policy strategy. If treated as an isolated initiative, operating outside mainstream policies and practices, NQFs will fail. The biggest danger is that countries will 'forget' their NQFs when the formal referencing to the EQF has been finalised.

AUSTRIA

Introduction

Austria has designed a comprehensive national qualifications framework, which will be implemented gradually, through a step-by-step approach. Currently, the NQF includes qualifications awarded in higher education, selected 'reference qualifications' from VET and a qualification from a prevocational programme. This selection of 'reference qualifications' serves an illustrative purpose and does not include any qualifications from general education. The decision on how to include qualifications such as the *Reifeprüfung* certificate from AHS schools (upper secondary school leaving certificate from general education) into the NQF still needs to be taken.

The NQF has been under development since January 2007. The first 'fact-finding phase' (February to October 2007) was supported by a broad consultation process. Its outcomes fed into a report (*Konsolidierung der Stellungnahme zum Konsultationspapier*), which identified a number of open questions ([16]) and was used by the Federal Ministry of Education, Arts and Culture and the Federal Ministry of Science and Research to prepare a policy paper (October 2009 ([17]), outlining the strategy for implementing the NQF. With the adoption of the NQF position paper by the Council of Ministers in late 2009, the Austrian NQF was officially launched. A research-based approach and a broad range of stakeholders involved in the development are key characteristics of NQF development.

Another is that levels 6-8 are open to VET qualifications acquired outside the Bologna strand. A 'Y-structure' was adopted, allowing for two sets of descriptors (for higher education and VET) to coexist at these levels ([18]). Dublin descriptors are used for qualifications related to Bologna cycles (BA, MA, Doctorate) and awarded by higher education institutions (i.e. universities, universities of applied

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([16]) All documents are available on the Internet site of the Federal Ministry of Education, Arts and Culture http://www.bmukk.gv.at/europa/eubildung/nqr/nqr_sn.xml [accessed 7.7.2012] or Federal Ministry of Science and Research http://www.bmwf.gv.at/wissenschaft/national/nqr/ [accessed 7.7.2012].

([17]) *Aufbau eines Nationalen Qualifikationsrahmens in Österreich – Schlussfolgerungen, Grundsatzentscheidungen und Maßnahmen nach Abschluss des NQR-Konsultationsverfahrens*, prepared by the NQF project group of the Federal Ministry of Education, Arts and Culture and the Federal Ministry of Science and Research, 2009 [unpublished].

([18]) *Aufbau eines Nationalen Qualifikationsrahmens in Österreich*, p. 7 [unpublished].

sciences (*Fachhochschulen*) and university colleges for teacher education *(Pädagogische Hochschulen)*. VET qualifications and qualifications from adult learning ('non-Bologna' strand) will be allocated based on NQF descriptors and additional criteria.

Responsibilities for design and award of qualifications are allocated to different stakeholders and providers. A step-by step implementation strategy was adopted to ensure a comprehensive NQF. The overall process was structured into three corridors: corridor one aims to assign qualifications from the formal education system, based on national legislation and awarded by the State; corridor two focuses on the assignment of qualifications from the non-formal sector (e.g. occupation-specific and company based CVET); and corridor three aims to develop approaches to validating learning outcomes acquired though informal learning. One of the main issues to be resolved within corridor one is inclusion of general education and the respective school leaving certificates in the NQF.

Main policy objectives

The main objective of the NQF is to map all officially recognised national qualifications, present them in relation to each other, and to make implicit levels of the qualification system explicit, nationally as well as internationally. It will have no regulatory functions. The specific objectives of NQF are to:

- assist referencing of Austrian qualifications to the EQF and thus strengthen understanding of these qualifications internationally;
- make qualifications easier to understand and compare for Austrian citizens;
- improve permeability between VET and higher education by developing new pathways and opening new progression possibilities;
- reinforce the use of learning outcomes in standard-setting, curricula and assessment;
- support lifelong learning and enable stronger links between adult learning and formal education and training;
- recognise a broader range of learning forms (including non-formal and informal learning).

The NQF plays an important part in implementing a strategy of lifelong learning (BMUKK, 2011) [19] that includes and assigns to all contexts of learning (formal, non-formal and informal) the same value (European Commission et al.,

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[19] *Strategie zum lebensbegleitenden Lernen in Österreich.*
http://www.bmukk.gv.at/medienpool/20916/IIIarbeitspapier_ebook_gross.pdf
[accessed 5.12.2012].

2010, Austria) ([20]). Some suggestions have been made on how to include non-formal qualifications in the NQF, for example by setting up 'bodies responsible for qualifications' ([21]). This issue is still under discussion. Methodologies and responsibilities are being developed for linking validation and allocation of non-formal qualifications to the NQF. This marks an important stepping stone towards an inclusive NQF.

One of the objectives of the NQF is to strengthen the linkages between different subsystems by making apparent existing pathways/developing new pathways and opening up new progression possibilities: improved counselling is an important element of this. Austria has a relatively high share of people with migration background in the labour force and in education. Raising their education outcomes, qualifications levels and increasing equal opportunities remains one of the main policy challenges and is a focus of the current reforms (Europan Commission, 2011) ([22]).

Stakeholder involvement and framework implementation

From the beginning, the Austrian approach has been characterised by active stakeholder involvement, but also occasional conflicting views on the role of the NQF. Two ministries, the Federal Ministry of Education, Arts and Culture and the Federal Ministry of Science and Research are in charge of the process. However, the General Directorate for Vocational Education and Training of the Federal Ministry of Education, Arts and Culture is the driving force behind the process. It has initiated and is coordinating NQF development and implementation, cooperating with the Federal Ministry of Science and Research, which is in charge of higher education.

A national NQF steering group was set up in February 2007. This includes 23 members representing all the main stakeholders (all relevant ministries, social partners and *Länder*) responsible for qualifications design and award. The main task of this group is to coordinate the NQF implementation, referencing to the

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([20]) *European inventory on validation of non-formal and informal learning 2010: country report: Austria.* http://libserver.cedefop.europa.eu/vetelib/2011/77444.pdf [accessed 5.12.2012].

([21]) *Aufbau eines Nationalen Qualifikationsrahmens in Österreich*, p. 11 [unpublished].

([22]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020): country analysis*, p.4.
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf
[accessed 10.8.2012].

EQF, and ensure that the framework reflects the interests of stakeholders. One important topic of discussion was on opening up levels 6-8 of the NQF for non-traditional higher education qualification, with VET stakeholders on one side and higher education on the other. Consensus was achieved.

The Austrian NQF was formally launched through the adoption of the position paper by the Councils of Ministers in 2009. Three sets of criteria for linking qualifications to the NQF levels have been developed:

(a) qualifications must meet existing formal requirements (for example related to assessment procedures and proof of qualification);

(b) the assignment of a qualification to a level is made on the basis of the level descriptors;

(c) a detailed description of the qualification, using an agreed template, has to be submitted (including qualitative and quantitative data about the qualification).

Based on this classification, a final decision is made on levelling [23]. Submission for registration is, however, voluntary. Allocation criteria and procedures were tested intensively in 2011 but those for allocation did not yield the expected results. A revised model is now being discussed which will clarify procedures, competent bodies and their responsibilities [24].

Currently, the NCP's main role is to support the development and implementation of the NQF in Austria, develop an NQF information system, including NQF register, and become the main information desk for citizens and institutions. It is envisaged to create a legal basis for the NQF, which will clarify responsibilities and allocation procedures.

Level descriptors and learning outcomes

The NQF has eight levels. The decision on number of levels was based on the broad consultation process and a study, providing information on an existing implicit hierarchy in the national qualification system, using statistical educational

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[23] Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research (2012). *Austrian EQF referencing report Annex 4: manual for including formal qualifications in the national qualifications framework (NQF): criteria*. January 2011.

[24] Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research (2012). *Austrian EQF referencing report – Supplementary information* [unpublished].

research and statistical frameworks (EQF Ref, 2011, p. 46) ([25]). Level descriptors are defined as knowledge, skills and competence. Reference qualifications are used to illustrate the level of learning outcomes.

Through the implementation of the NQF, Austria is strengthening the learning outcome approach across education and training: this is seen as central to the positioning of qualifications onto the NQF. Many qualifications are already learning outcome oriented, but the approach has not been applied consistently across all sectors and institutions. Several initiatives are supposed to strengthen learning outcomes orientation.

In 2005, the Federal Ministry of Education, Arts and Culture launched a project to develop educational standards for core subject areas in general education (Hubert et al., 2006) ([26]) and in VET ([27]). Educational standards for VET schools and colleges define 'content' (subject and knowledge areas and topics with specified goals), 'action' (cognitive achievements required in the particular subjects), and personal and social competences related to the specific field.

In March 2009, the General Directorate for VET of the Federal Ministry of Education, Arts and Culture started a project (curriculum design – learning outcomes orientation) which aims to integrate educational standards in VET curricula. In addition, Austria is preparing a competence-oriented and standardised '*Reifeprüfung*' to be administered in general and vocational upper secondary education.

In apprenticeship (dual system), a training regulation is issued for each profile by the Federal Ministry of Economics. It consists of the occupational competence profile (*Berufsprofil*) with related activities and work descriptions, and job profile (*Berufsbild*) with knowledge and skills to be acquired by apprentices.

In higher education a qualification profile, describing the expected learning outcomes (and definitions of learning outcomes) for each module, was introduced

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([25]) *EQF referencing process and report*, p. 46.
http://www.eqf-ref.eu/index.php?option=com_content&view=article&id=3&Itemid=6 [accessed 5.12.2012].

([26]) *Bildungsstandards in Deutschland, Österreich, England, Australien, Neuseeland und Südostasien* (2006).
http://www.edudoc.ch/static/web/arbeiten/harmos/lit_analyse_1.pdf
[accessed 5.12.2012]. For development of educational standards in Austria you can also consult the website of the BIFIE https://www.bifie.at/downloads [accessed 5.12.2012].

([27]) http://www.berufsbildendeschulen.at/de/downloads.html [accessed 5.12.2012].

by the University Act (*Universitätsgesetz*) in 2002, but implementation differs across higher education institutions.

Links to other instruments and policies

Austria is preparing for participation in the European credit system for vocational education and training (ECVET) by conducting studies and participating in international projects. The current strategy foresees using ECVET to support transnational mobility. It is not planned to link the NQF with the credit system (Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research, 2012) [28]. The European credit transfer and accumulation system (ECTS) has been implemented in higher education.

Austria is also active in the implementation of the EQAVET Recommendation. The Ministry of Education has introduced a comprehensive quality management system through the VET quality initiative (QIBB) in which nearly all Austrian VET schools and colleges participate (on a voluntary basis). This approach links results/standards with input/process dimensions. The initiative is in line with the main objectives, guiding principles and priorities of the EQAVET recommendation.

The NQF policy paper and the recently adopted strategy for lifelong learning (BMUKK, 2011) [29] place high importance on general demand for integrating non-formally and informally acquired learning outcomes in the NQF. Work to develop strategies and tools to include non-formally acquired qualifications and learning outcomes developed though informal learning is continuing. A working group is currently elaborating procedures for including learning outcomes acquired outside formal education. Proposals are already available, but no decisions have been taken yet. Social partners, who are also owners of the main adult training providers, play an important role.

Referencing to the EQF

Austria referenced its national qualifications levels to the EQF and self-certified to QF-EHEA in June 2012, preparing one comprehensive report.

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[28] *Austrian EQF referencing report*, p. 109.
http://www.oead.at/fileadmin/lll/dateien/lebenslanges_lernen_pdf_word_xls/nqr/EQR-Zuordnungsbericht/Austrian_EQF_Referencing_Report.pdf [accessed 26.11.2012].

[29] *Strategie zum lebensbegleitenden Lernen in Österreich*.
http://www.bmukk.gv.at/medienpool/20916/IIIarbeitspapier_ebook_gross.pdf [accessed 26.11.2012].

Table 2   **Level correspondence established between the Austrian qualifications framework and the EQF**

NQF	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

Important lessons and future plans

First, one strength of Austrian NQF development is the involvement and engagement of a broad range of stakeholders, representing all subsystems of education and training as well as the social partners. This broad process has made it clear that stakeholders hold different and sometimes conflicting views on the role of the NQF.

Second, Austria sees the NQF as a translation device to make qualifications transparent and comparable as well as a tool to improve validation of non-formal learning. It will not have regulatory functions. Implementing the NQF is closely related to strengthening the learning outcomes orientation in education and training, e.g. by revising VET curricula. NQF levels will also be explicitly mentioned in curricula and training profiles.

Third, the NQF has been designed to be comprehensive. This is underlined by the following principles: the adopted Y-structure of the NQF; the working structure of three corridors (see above); the long-term inclusion of general education; and methodologies being developed for inclusion of non-formal and informal learning (Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research, 2012) ([30]).

Main sources of information
The Austrian NCP was set up as an organisational entity at OeAD (*Österreichischer Austauschdienst*, Austrian agency for international cooperation in education and research). http://www.oead.at/nqr [accessed 12.3.2013].

([30]) *Austrian EQF referencing report. Supplementary information* [unpublished].

BELGIUM

Belgium is in the same situation as the UK in terms of developing and implementing more than one NQF. This reflects the federal structure of Belgium, giving the three communities a wide ranging autonomy in how to organise their education, training and qualifications systems. While the Flemish- and the French-speaking communities have been working on national frameworks since 2005-06, the German-speaking community has only recently decided to start work in this area. The Flemish and the French-speaking communities have been following different pathways, reflecting the substantial institutional and political differences in education and training between the two. The 2011 version of this report questioned whether some form of link between the two frameworks could be envisaged, potentially providing added value to Belgian citizens for mobility within in the country. This challenge has now, July 2012 ([31]), been addressed by the adoption of an amendment to the Belgian Federal Law on the general structure of the education system. This amendment states that the EQF levels will be used as a common reference for the three communities in Belgium. The linkages will be further enhanced by the adoption of broadly similar basic principles for the frameworks of Flanders and the French-speaking community. Differently from the UK, however, the three Belgian regions will reference separately to the EQF.

([31]) 3 augustus 2012 – Wet tot wijziging van de gecoördineerde wetten van 31 december 1949 op het toekennen van de academische graden en het programma van de universitaire examens en van de wet van 7 juli 1970 betreffende de algemene structuur van het <hoger> <onderwijs>.

Belgium (Flanders)

Introduction

On 30 April 2009 the Flemish Parliament and government in Belgium adopted an act on the Qualification Structure (The Flemish government, 2009) [32] (*kwalificatiestructuur*) introducing a comprehensive qualifications framework. The framework, based on an eight-level structure described by the two main categories of knowledge/skills and context/autonomy/responsibility, was formally referenced to the EQF in June 2011. The Flemish qualifications framework (FQF) further distinguishes between 'educational and professional qualifications', stressing that, in principle, both categories can be placed at all eight levels of the framework.

While the FQF was seen as a precondition for carrying out the referencing to the EQF, it was launched as an instrument for improving the national qualifications system. It is an integrated framework for professional and educational qualifications at all levels, including traditional universities. The overall objective is to strengthen the transparency of qualifications and to clarify mutual relations – vertically and horizontally – between them. It is also to enhance communication on qualifications between education and the labour market and to strengthen permeability between the different learning systems.

The road from formal adoption to implementation has proved more time-consuming than originally predicted. These delays have partly been caused by the need for further legal instruments (implementation decrees), and partly by negotiations with the social partners on how to link and level professional qualifications to the framework. Significant progress has been made during 2011 and 2012, however, and the Flemish framework has now reached an early operational stage.

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[32] *Flemish Act of 30 April 2009 on the qualifications structure.*
http://www.evcvlaanderen.be/files/DecreetVKS_ENG.pdf [accessed 26.11.2012].
The Flemish community of Belgium is responsible for education and training policy and legislation in the Flemish region and for Dutch-speaking education institutions within the Brussels-capital region. The Flemish qualification structure is a classification of Flemish qualifications using an eight-level qualifications framework.

Main policy objectives

The 2009 Act defines the Flemish qualification system as '... a systematic classification of recognised qualifications based on a generally adopted qualifications framework (FQF)'. The qualification structure (including the qualifications framework) aims at making qualifications and their mutual relations transparent, so that relevant stakeholders in education (students, pupils and providers) and in the labour market (social partners) '(...) can communicate unambiguously about qualifications and the associated competences' (2009 Act, Chapter I, Article 3).

The act underlines that the qualification structure (including the qualifications framework) should act as a reference for quality assurance, for developing and renewing courses, for developing and aligning procedures for recognising acquired competences, and for comparison (nationally and at European levels) of qualifications. The quality assurance of pathways leading to recognised qualifications is being followed up through the establishment of the Flemish Agency for Quality Assurance in Education and Training (*Agentschap voor Kwaliteitszorg in Onderwijs en Vorming*, AKOV). This agency now covers all types and levels of qualification, except higher education qualifications at level 5 to level 8, and is crucial to the overall credibility and success of the overarching framework, domestically as well as at European level (in relation to the EQF). For qualifications at levels 5 to 8 a joint accreditation organisation has been set up together with the Netherlands (Nederlands-Vlaamse Accreditatieorganisatie, NVAO).

The act emphasises the role of the qualification structure and framework as a reference for validating non-formal and informal learning and as an orientation point for guidance and counselling.

Stakeholder involvement and framework implementation

The Flemish NQF process has involved a broad range of stakeholders at all stages, coordinated by the Ministry of Education and Training. Other relevant ministries (Ministry of Labour and Social Economy and Ministry of Culture, Youth, Sports and Media) have also been involved. From the education and training side, participation by relevant sectors (general education, initial vocational education, continuing vocational education and training, higher education, including short cycle higher education) has been important. The link and overlap

(^{33}) between professional and higher or general educational qualifications has been a challenge and the active involvement of stakeholders representing the different levels and types of qualifications has been important. A qualifications framework for higher education linked to the Bologna process was developed and put in place (2008). The relationship between the two framework initiatives was discussed throughout the development process and the 2009 Act takes this into account in its terminology, framework descriptors and procedures.

The road from adoption to implementation and operational status has proved to be complex: there are two main reasons for this.

First, the transformation of the 2009 Law into practice required further legal steps and the introduction of a series of 'implementation decrees': A first decree covering professional qualifications at levels 4 and 5 was adopted in late autumn 2012 and gave the mandate to start linking these professional qualifications to the FQF. A second decree covering professional qualifications above level 5 is currently under preparation and is expected to be put in force in 2013, making it possible to include these qualifications in the framework. A third decree for educational qualifications levels 1 to 4 is also expected in 2013.

Second, clarification of the role of the social partners in relation to the linking of qualifications to the framework was needed and required substantial effort to be resolved. Flemish professional qualifications are developed within a tripartite system giving the social partners, in the context of the Social and Economic Committee (SERV), a decisive role. All professional qualifications build on competence standards defined and approved by the social partners. Professional qualification has to reflect these competences and no single qualification can be approved without the active input and approval of the social partners. The 2009 Law did not specify in detail how the social partners would contribute to the levelling of qualifications and so it was necessary to agree on how to approach this task. A general agreement – between the government and the SERV – on how to proceed was reached in January 2011. Based on this, the six first professional qualifications were included in the FQF in 2012. More than 50 will have been included by the end of 2012.

While time-consuming and challenging, contiuing inclusion of professional qualifications into the FQF can be deemed a success as it demonstrates that stakeholders are fully involved and responsible for the implementation of the framework. The Flemish approach is also interesting as it demonstrates how

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(^{33}) This overlap results from the fact that professional qualifications are integrated in educational qualifications, outside higher education at levels 6-8. It is being acknowledged that further alignment between professional and educational qualifications is needed.

competence standards developed for occupational purposes are being translated into professional qualifications. Whether it is possible to continue this process for professional qualifications above level 5 remains to be seen and will demonstrate whether the opening up – in principle – towards professional qualifications at levels 6 to 8 can be translated into practice.

Level descriptors and learning outcomes

The term 'competence' plays a significant role in Flemish education, training and employment policies and is used as an overarching concept. Competence and learning outcomes are used as interchangeable terms in education and training.

The descriptors

The Flemish qualifications framework is based on an eight-level structure described by the categories of knowledge, skills, context, autonomy and responsibility ([34]). Compared to the EQF, the FQF-descriptors are more detailed, in particular for lower levels. A main difference is that the FQF does not use 'competence' as a separate descriptor category but considers it as an overarching term and uses it interchangeably with learning outcomes. A main feature of the Flemish framework is the use of 'context' as an explicit element of the descriptors. The context in which an individual is able to function is seen as an important part of any qualification. This can be seen as a criticism of the EQF descriptors which contain contextual elements but fail to treat them explicitly.

The descriptors are used to describe two main categories of qualifications; professional and educational. A professional qualification is based on a set of competences allowing an individual to exercise a profession, and can be achieved both inside and outside education. An educational qualification is based on a set of competences an individual needs to participate in society, to start further education and/or to exercise professional activities. An educational qualification can only be acquired through education and in institutions recognised by the Flemish authorities. The distinction between professional and educational qualifications is applied for all eight levels of the framework; this offers the potential for high level qualifications in parallel to traditional academic institutions.

In referencing the FQF to the EQF in June 2011 it was concluded that, while the two frameworks have been designed for different purposes, and vary in detail and emphasis, they share the same basic principles. The referencing concludes

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([34]) See Annex 3.

that each level of the FQF contains at least a core that corresponds with the EQF level descriptor at the same level.

The approach adopted in 2009 reflects a development process which started in 2005. A first proposal contained a 10-level structure but – influenced by discussion on the EQF – was reduced to eight levels. The relationship between professional and higher education qualifications featured strongly in discussions. It was acknowledged that, while higher education institutes (universities and university colleges) have a 'monopoly' on the bachelor, master and doctorate titles, this does not rule out the parallel (at levels 6-8) placing of vocationally oriented qualifications. Several stakeholders (for example, representing adult education institutions providing higher VET courses for adults) asked explicitly for the placing of particular VET qualifications at levels 5 or 6. The identification of this 'grey zone' between academically and vocationally-oriented higher education qualifications resulted in the adoption of a set of descriptors using the same general logic at all levels.

Representatives from higher education argued that the EHEA (Dublin) descriptors would be the best way of describing levels 6 to 8 and allow direct integration of the higher education framework into the new NQF. This was also linked to an argument that learning outcomes at levels 6 to 8 could best be focused on the category of 'knowledge'. This was not accepted by most stakeholders who recognised the need for broad descriptors covering more qualifications, educational as well as professional.

Another important discussion in the development phase was how to understand the lowest level of the framework. Should there, for example, be an access level leading to level 1? Social partners expressed the fear that introducing a 'lowest level' (level 1 or an access level below level 1) could have a negative, stigmatising effect. In the adopted proposal level 1 is defined as starting, not access level.

Learning outcomes and competences

Progress on practical implementation of the principles of learning outcomes/competences varies, in particular when looking at teaching methodologies and assessment practices. The continuing VET sector is probably the most experienced in this field. A competence-based approach is well integrated, referring to professional requirements in the labour market. The use of competences in initial VET in recent years has been inspired by Dutch developments (in particular the MBO reform). Discussions between the Social and Economic Committee and the government in 2010 and 2011 on implementing the framework can be seen as part of this process; how can

existing occupational competence standards be translated into learning outcomes based professional qualifications and then attributed a level in the FQF? Learning outcomes are also present in general education, for example by the setting of learning objectives in national core curricula. The developments in higher education have been influenced by the Bologna process, but are mainly dependent on initiatives taken by single institutions or associations of higher education institutes. While reflecting a diverse situation, a clear shift to learning outcomes can be observed in Flanders. The insistence on a learning outcomes approach in the Bologna process has partly influenced university practices.

Links to other tools and policies

Validating non-formal and informal learning (European Commission, 2010, Belgium Flanders) ([35]) is identified as one of the objectives of the NQF, closely linked to the learning outcomes/competence perspective underpinning the framework. Some progress has already been made, involving various institutions covering different parts of the qualifications framework. The process of recognising non-formal and informal learning has been in place in universities and colleges since 2005; it aims to recognise prior learning acquired in external institutions as well as through professional activities. A proof of competences is provided, granting access to further studies or contributing to the award of a degree. The number of individuals using the system is moderate; to date approximately 500 have applied to take part each year. A system of 'certificates of work experience' has been introduced and is coordinated by the Ministry of Work, using professional competence standards (approved by the social partners in the Social and Economic Committee) as reference. This allows people without any diploma to demonstrate their professional skills and competences with a certificate, granted by the Flemish government, as formal proof of professional competence. In the period 2004-10, 2039 certificates were granted. In adult education, education institutions can recognise prior learning as well, but the practice is not widespread. Compared to other countries, notably neighbours France and the Netherlands, the Flemish system has still some way to go for validation to become generally accessible and recognised as credible by the general public. In July 2012, a policy note was published on recognising prior learning; this was developed by the policy stakeholders of Education and Work. Strategic advisory bodies in education, higher education, work and culture gave

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([35]) *European inventory on validation of non-formal and informal learning 2010: counry report: Belgium (Flanders)*. http://libserver.cedefop.europa.eu/vetelib/2011/77449.pdf [accessed 5.12.2012].

their advice on the policy note in October-November 2012. A legislative framework for recognition of prior learning is expected in June 2013.

An interesting development is the development and introduction of an integrated quality assurance system linked to the FQF ([36]). In July 2012 the policy stakeholders of education and work outlined the main elements in an integrated quality assurance system for professional qualifications: what distinguishes this proposal from traditional quality assurance arrangements is its focus on qualifications. The suggestion is to introduce a quality assurance arrangement covering all pathways (*trajecten*) leading to a professional qualification. The quality approach is thus not limited to traditional education and training institutions, but will also cover validation of prior learning (or *Erkennen van Verworven Competenties*/recognition of prior learning). To accomplish this task, the proposal pays particular attention to the articulation of competence objectives ('...to be expressed in a clear and recognisable way…') and the assessment of these ('…clear and transparent assessment criteria known to the candidate; assessment oriented towards competences; the use of varied assessment methods aiming at validity and reliability…'). The proposal can also be seen as a way to open up the FQF to education and training outside the existing formal system. In November 2012 AKOV started to pilot the quality assurance system. It is expected that the pilot will be formalised in a legislative framework in June 2013.

There is currently no explicit link established between the FQF and ECVET.

Referencing to the EQF

Referencing to the EQF was completed in June 2011 (Agency for Quality Assurance in Education and Training, 2011) ([37]), preparation having been carried out by AKOV, which is also the EQF national coordination point for Flanders. The decision of the Flemish government to reference to the EQF in mid-2011, pending the placing of professional qualifications to the FQF, was discussed by the EQF advisory group. The lack of clarity in professional qualifications made it difficult for other countries to judge how Flemish qualifications compared to their

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([36]) A conceptual note on how to take forward quality assurance for professional qualifications in the context of the FQF was finalised by AKOV in July 2012 (*Een geïntegreerd systeem van externe kwaliteitszorg*). This note outlines a pilot project to be started in November 2012 and completed in June 2013.

([37]) Government of Flanders, Agency for Quality Assurance in Education and Training. *Referencing the Flemish qualifications framework to the European qualifications framework*. Brussels, June 2011.

own. Flanders will present an updated referencing report in 2013 which will focus on recent developments in FQF implementation, with particular emphasis on the alignment method and the updated legislative framework in place. Given the developments reported above, this situation is now changing in a positive direction.

Table 3 **Level correspondence established between the Flemish qualifications framework (FQF) and the EQF**

FQF	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

Important lessons and the way forward

Although there is a long tradition in Flanders and Belgium of involving stakeholders and social partners in education and training policy and legislation, development and implementation of the FQF required extensive dialogue with all relevant stakeholders. Given progress made in the last year, this delay seems now to have been turned into strength. The acceptance and involvement of social partners in the implementation of the framework provides a good basis for future developments.

The FQF can be seen as the first of the new European NQFs – established in response to the EQF– now reaching early operational stage. While far from complete, the Flemish process illustrates the long-term character of NQF developments.

Main sources of information

Flemish Act of 30 April 2009 on the qualifications structure.
http://www.evcvlaanderen.be/files/DecreetVKS_ENG.pdf [accessed 6.12.2012].
The Flemish Agency for Quality Assurance acts as NCP.

Belgium (French-speaking community)

Introduction

The French community of Belgium (the Walloon region and the French community of Brussels) has been working on a national qualifications framework linked to the EQF since 2006 ([38]). The work on a qualifications framework for higher education, linked to the Bologna process, has been going on in parallel. Although the idea of an NQF (and its link to the EQF) received support, the question of how to integrate the qualifications framework for higher education within a comprehensive NQF has been much debated and has delayed the process.

The current proposal dates from 2010 when the three governments of the French community agreed on the principle of creating a qualifications framework with double entry, one for educational qualifications and one for the professional qualifications, placed into eight levels and consistent with the descriptors of the European qualifications framework. The proposed framework structure is close to that applied by the Flemish community. A working group is responsible for preparing the ground work for a legal text and a draft referencing report. All major stakeholders agreed in mid-2011 on these main principles of the framework. The final elements of the framework are expected to be finalised by March 2013, paving the way for referencing to the EQF in the second semester of 2013.

A specific law on the NQF will be prepared and form the basis for future work. When this can be adopted has yet to be clarified.

Main policy objectives

The main reason for pursuing a comprehensive NQF is to increase overall transparency in the existing education and training system. The framework is not, at least at this stage, seen as an instrument for reform of existing institutions and structures. It is not perceived as having any regulatory role and will not directly influence decisions regarding recognition of individual certificates or diplomas. The framework can, however, support the development of other tools and

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([38]) Education (compulsory, higher and for adults) is a competence of the French community of Belgium (for all people living in Wallonia – except the German-speaking community – and French-speaking people in Brussels); continuous vocational training is a competence of the Walloon Region and of the CoCoF (Commission communutaire française) in Brussels.

instruments for transparency, notably validation of non-formal and informal learning. The framework is seen as an important instrument for strengthening the use of learning outcomes and for referencing to the EQF. At this stage of development it has been decided to include only those qualifications which are delivered by public providers. It is not clear whether the framework may be opened up later to private or non-formal providers, for example in the way proposed for Sweden and the Netherlands.

The French-speaking community of Belgium has been developing a qualifications framework for higher education since 2007. This work is still in progress and is expected to lead to self-certification to the EHEA by 2012-13.

Stakeholder involvement and framework implementation

The NQF initiative was taken by the governments of the French region in 2006 and can be divided into two distinct phases; the period before and after 2010. While the period before 2010 was characterised by high quality technical work, lack of clarity over the role of higher education in the comprehensive framework created tensions and caused delays. The process was revitalised after 2010 and a new steering group set up including stakeholders from general education (at all levels and of all types, including universities) and vocational/professional education and training (including social partners). A number of expert groups have been working on specific solutions and have addressed aspects such as the writing of level descriptors, positioning (levelling) of qualifications in the framework and linking the framework to quality assurance arrangements. The recommendations of these groups have been followed up by decisions at intergovernmental level. Final decisions are expected by March 2013.

The division of the framework into two main strands – educational and professional qualifications – has implications for stakeholders involvement. The *service francophone des metiers et qualifications* (SFMQ) will play a key role in defining and positioning professional qualifications at levels 1-4. The SFMQ is well placed to play this role as its overall task (set up in 2009) is to develop occupational profiles based on the inputs of the social partners and in collaboration with employment services. Its role is also to develop training profiles with reference to these occupational profiles, in close liaison with education and training providers. ARES, the Academy of Research and Higher education will be responsible for defining and positioning educational qualifications at levels 6-8. ARES and SFMQ will share responsibility for qualifications at level 5, reflecting the extensive 'mix' of professional and educational qualifications at this level.

Introducing the distinction between educational and professional qualifications has been instrumental in bringing the NQF process forward in the French-speaking part of Belgium. This distinction will make it possible to open up for professional qualifications at higher levels without questioning the autonomy of universities and their responsibility in relation to bachelor, master and doctorate awards. The procedures for this inclusion of higher level professional qualifications are still being discussed. Using one set of level descriptors for all levels and both types of qualifications (see below) has gradually won acceptance by the different stakeholders and will, in the longer term, make it possible to look more carefully into how these two strands can interact with each other.

Level descriptors and learning outcomes

An eight-level structure is foreseen, using two blocks of terms: knowledge/skills and context/ autonomy/responsibility. The descriptors developed by the Flemish qualifications framework have been used as a basis but adjusted according to the conditions of the region.

In the French-speaking region of Belgium, learning outcomes are integral to a range of recent and continuing reforms (Cedefop, 2009c) ([39]). These outcomes, however, are described in various ways and the extent to which they influence education and training practice differs.

In compulsory education and training, learning outcomes are described in terms of *socles de competences* and *competences terminales*. For adult education (including higher education short cycles, bachelors and masters) the term used is *capacités terminales*.

In vocational education and training, work is continuing to define and describe qualifications in term of learning outcomes. Regional CVET providers are developing a common procedure (ReCAF, *Reconnaissance des acquis de formation*) of certification based on common standards and common standards for assessment, linked to the *Consortium de validation des competences* (see below). The SFMQ (see above) is playing a particularly important role as regards learning outcomes, both for IVET (vocational compulsory education) and CVET (education for adults and public providers of vocational training in Wallonia and Brussels). The descriptions of qualifications are based on the job profiles (professional standards) defined by the social partners. Common training profiles are then defined by education and training providers. These profiles are declined in units of learning outcomes compatible with the ECVET specifications.

([39]) *The shift to learning outcomes: policies and practices in Europe.*
   http://www.cedefop.europa.eu/EN/publications/12900.aspx [accessed 5.12.2012].

The insistence on a learning outcomes approach in the Bologna process has also influenced university practices. The autonomy of universities means that the decision to apply learning outcomes has to be made by the institution itself, resulting in varying approaches. For the *Hautes Écoles* (higher education institutions outside universities, delivering bachelors and masters) the definition of common competences profiles is in process.

Links to other tools and policies

Much effort has been invested in developing a system for validating non-formal and informal learning in the French-speaking community of Belgium (European Commissionet al., 2010) [40]. These developments, involving various stakeholder groups, may prove beneficial for broader NQF development.

In the vocational training area the 'validation' process leads to the award of a *titre de compétences*, a legal document recognised by the Walloon region, the French community and the French community commission (COCOF).The reference used for validating skills is not the existing diploma or certificates, but competence standards for specific occupations. The consortium in charge of implementing the validation of skills policy has defined competences in terms of the set of measurable skills necessary to undertake certain tasks in a workplace situation [41], i.e. geared towards measuring skills of direct relevance to specific job profiles. The system previously consisted of job profiles developed by the French register of occupations in the labour market (ROME) and by the *Commission Communautaire des Professions et des Qualifications* [42] (CCPQ). The CCPQ has developed a set of qualification and training profiles, in consultation with sector representatives and the unions. These profiles specify the competences required for each occupational profile, together with associated indicators. In the future, standards developed by the SFMQ (see before) will be used.

Since 2006 a growing number of individuals have had their work experiences validated (more than 2 000 last year) for a *titre de compétences.* While this *titre* can form part of a qualification, it is supposed to carry an independent value in the labour market, making visible prior learning and achievement of the individual in question. Due to their recent introduction, these

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[40] *European inventory on validation of non-formal and informal learning 2010, country report Belgium (Wallonia).* http://libserver.cedefop.europa.eu/vetelib/2011/77451.pdf [accessed 5.12.2012].

[41] Consortium de validations des compétences.

[42] The CCPQ, which developed principally standards for IVET, is now replaced by a wider institution, the SFMQ including IVET and CVET.

titles are still relatively new to employers: their future value will depend on the extent to which they are integrated into the NQF and how they are linked to (the better-known) certificates and diploma.

Since 1991, adults education has been organised in units and the possibility of validating non-formal and informal learning is included in the law. It is possible to access training without the required title, to be exempted for a unit or a part of unit, or to obtain a certificate or diploma with only the final test, called *épreuve intégrée*. Higher education institutions (both *Hautes Écoles* and universities) are developing procedures for recognising prior learning or experience for access to training, without the required title or benefit from dispenses of some ECTS (*Valorisation des acquis*).

Referencing to the EQF

Referencing to the EQF is seen as an integral part of the overall work on the NQF. As the development of the framework itself has been considerably delayed, referencing to the EQF will probably not take place until late 2013.

A national coordination point for EQF referencing was established in September 2010. This NCP, under the responsibility of the SFMQ, will also be responsible for coordinating issues related to validating non-formal and informal learning.

Important lessons and the way forward

The experiences of the French-speaking region of Belgium show the importance of finding a workable link between higher education and the other forms of education and training. Distinguishing between educational and professional qualifications at all levels has been instrumental in making progress. Whether this structure can be used to open up for future developments of professional qualifications at higher levels and for establishing stronger links between educational and professional sectors remains to be seen. Given a formal decision on the framework during 2013 (including a new Law on NQF), an early operational stage may be reached during 2014 and 2015.

Main sources of information

The NCP was set up under the responsibility of the *Service francophone des métiers et des qualifications (SFMQ).*
http://www.sfmq.cfwb.be/index.php?id=1435 [accessed 12.3.2013].

Belgium (German-speaking community)

The German-speaking community of Belgium is currently developing its own qualifications framework. Being the smallest part of Belgium (geographically and in terms of population) the framework reflects the work done in the Flemish- and French-speaking parts of Belgium and is also inspired the DQR. The NQF for the German-speaking community will be adopted – through a parliamentary decree – in early 2013. It is foreseen that reference to NQF levels will be introduced into qualifications and certificates in 2013 and that a system for validating non-formal and informal learning will be introduced by 2014.

Main policy objectives

A main objective for the framework is to strengthen international comparability. While subject to Federal laws on education applying in Belgium, the geographic location of the region means that citizens are likely to cross the border for living and working. This makes it a priority to clarify the relationship between own qualifications and those awarded in the neighbouring countries. The framework will also promote equivalence between general and vocational education and training and the shift to learning outcomes is an important step in increasing transparency and strengthening permeability.

Stakeholder involvement and implementation

The framework has been developed over a relatively short period of time, involving all main education and training stakeholders in the region. This includes the social partners who normally play a key role in an education and training system inspired by the German system, both for general and vocational education and training. The framework will be implemented from 2013 onwards, starting with reference to NQF levels in certificates this year. It is envisaged that further development of procedures will take place during 2014.

Level descriptors and learning outcomes

An eight-level, learning outcomes based framework will be introduced. The framework builds on the concept of *Handlungskompetenz* (action competence) and distinguishes between subject/occupational specific and personal competences. Level descriptors will be based on the following categories:

Table 4 **Level descriptors of the German-speaking community of Belgium, main categories**

Handlungskompetenz (action competence)			
Subject/occupational oriented competence (*Fachliche Kompetenz*)		Personal competence (*Personale Komptenz*)	
Knowledge	Skills	Social competence	Autonomy

The framework is seen as an instrument for promoting a learning outcomes or competence based approach across the different parts of education and training in the region. The framework distinguishes between general and vocational qualifications (reflecting the parallel distinction made in Flanders and the French-speaking part of Belgium). For general education it is worth noting that general upper secondary education (*Abitur*) is placed at level 4 while the three cycles of bachelor, master and doctor are placed at levels 6-8. In vocational education and training completed apprenticeship (dual system) is at level 4. A master craftsman with two years of training is placed at level 5 or level 6 for three years of training.

Links to other policies and tools

A system for validating non-formal and informal learning is expected to be put in place by 2014. There are no existing plans for using ECVET or ECTS.

Referencing to the EQF

It is not clear when a referencing to the EQF could take place.

BULGARIA

Introduction

The Bulgarian national qualifications framework for lifelong learning was adopted by the Council of Ministers decision No 96 of 2 February 2012. The Bulgarian government sees the NQF as a precondition for implementing the EQF and an important national priority ([43]).

The Bulgarian national qualifications framework is one single, comprehensive framework, which includes qualifications from all levels and subsystems of education and training (pre-primary, primary and secondary general education, VET and HE). It will provide a reference point for validating non-formal and informal learning.

Amendments to national legislation are foreseen in support of implementation of the framework.

Main policy objectives

The overall objective of developing and introducing a comprehensive NQF compatible with the EQF and the QF-EHEA is to make the levels of the Bulgarian education system clearer and easier to understand by describing them in terms of learning outcomes. This will improve the extent to which target groups and stakeholders are informed about national qualifications. It is hoped that this will raise trust in education and training and make mobility and recognition of qualifications easier. More specific aims addressed by NQF development are to:

- develop a device with a translation and bridging function;
- promote mobility within education and in the labour market;
- promote learning outcomes orientation of qualifications;
- support validation of prior learning, including non-formal and informal learning;
- strengthen orientation towards a lifelong learning approach;
- strengthen cooperation between stakeholders.

Apart from offering transparency, the NQF is seen as an important tool supporting national reforms and needs, for example by setting up a system for

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([43]) Programme for the European development of Bulgaria (2009-13).
http://www.mlsp.government.bg/bg/03.11.2009FINAL-ednostranen%20pechat1.pdf
[accessed 5.12.2012].

validating non-formal learning, improving education quality, modernising curricula and strengthening provider accountability. The NQF aims to play an import role in supporting lifelong learning and in promoting the participation of adults in learning in Bulgaria.

Stakeholder involvement and framework implementation

The Ministry of Education, Youth and Science coordinated and led the drafting the NQF and is now coordinating its implementation.

Between 2008-11, a working group developed proposals for level descriptors for VET and general education. Higher education levels had already been developed in 2007 by another working group. Both processes served as an important base for further developments.

In January 2011, a more coherent approach was requested and a new task force, responsible for drafting a comprehensive framework with a coherent set of levels and level descriptors was set up. This task force included all national stakeholders. A broad national consultation process was carried out in 2011. Finding an agreement on the level descriptors for higher education was particularly challenging. The result, based on closer comparison of the learning outcomes, merged four sublevels of master programme into one generic level.

Level descriptors and learning outcomes

The NQF comprises eight levels and an additional preparatory level (NQF level 'zero'), covering pre-school education. Level descriptors take into account EQF and QF-EHEA descriptors.

All levels are described in terms of knowledge (theoretical and factual), skills described as cognitive (use of logical and creative thinking) and practical (manual dexterity and the use of methods, materials, tools and instruments), and competences. The descriptor distinguishes between personal and professional competences. They include autonomy and responsibility, but key competences such as learning competences, communicative and social competences are also emphasised.

The expected qualifications levels learning outcomes reflect both the legal acts governing different subsystems of education and training and state education requirements of the contents and expected learning outcomes in the

national education system (general and vocational education and training) and in higher education.

It is expected that learning outcomes-based qualifications levels will strengthen the outcomes-dimension and give the learning outcomes a more prominent role in planning education provision. This is especially linked to the development of VET standards divided into units of learning outcomes. In 2011 a draft model of a new VET standard (the so-called State educational requirement for the acquisition of vocational qualification for profession) was elaborated in line with the principles and characteristics of EQF and ECVET. VET standards are seen as a prerequisite for setting up a validation system and updating VET curricula, two important policy priorities.

Links to other instruments and policies

Discussions on recognising and validating non-formal and informal learning have been intensified by the NQF development. Bulgaria is actively involved in ECVET and EQAVET implementation. Two main policy objectives are emphasised: to support transnational mobility and reform of the national VET system (e.g. improving the readability of qualification defined in units of learning outcomes) and improve transfer and recognition in further learning (e.g. in higher education).

Amendments to the VET Act are foreseen to create the necessary conditions for the implementation of all EU instruments (ECVET, EQF, EQARF and validation mechanisms) and to provide their synergy in reforming VET in Bulgaria [44]. It will be closely interlinked with the upcoming Preschool and School Education Act, which will introduce a new structure to secondary school education.

Referencing to the EQF

Bulgaria aims to reference its NQF to the EQF and the QF-EHEA in early 2013. One joint report is being prepared.

Important lessons and future plans

The aims of the NQF are to increase transparency in education and training and to aid knowledge and skills transfer and so improve labour force mobility. Level

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[44] See Cedefop (2012b). *ECVET monitoring* [forthcoming].

descriptors defined in learning outcomes aim to provide a reference point and common language for diverse qualifications from different education subsystems. By referring to educational levels and state educational requirements, the NQF has been given a strong input orientation. It is expected, however, that learning outcomes-based level descriptors will play a very important role in supporting dialogue and discussion among stakeholders will strengthen the learning outcomes dimension in qualifications design. It will also address vertical and horizontal progression possibilities.

The framework can play an important role, but only if it is a part of wider strategic policy resulting in necessary reforms and institutional regulations. The forthcoming Law on Pre-school and School Education, the Higher Education Act and amendments to the VET Act will feed into these developments.

Main sources of information

The International and European Cooperation Directorate in the Ministry of Education, Youth and Science is designated as the EQF national coordination point (NCP). http://www.mon.bg [accessed 6.12.2012]. It plays an organisational, coordination and supportive role in the referencing process.

CROATIA

Introduction

Croatia has developed a comprehensive, learning outcomes based NQF, the Croatian qualifications framework (CROQF). It will link and coordinate different education and training subsystems; it will also be the basis for validating non-formal and informal learning and incorporate credit systems.

The Ministry of Science, Education and Sport has prepared a draft act on the CROQF, which was subject to public consultation in autumn 2012 ([45]). Adoption by Parliament is expected by late 2012.

Main policy objectives

Apart from offering transparency, the CROQF is seen as an important tool for reforming national education and training. It builds on the reforms under way since 2005, e.g. developing new educational standards and national curricula for general education, as well as introducing the State matura. In 2006, and as part of this process, a total of 13 sector councils were established. These councils were entrusted with defining the necessary vocational qualifications, analysing existing and necessary competences within sectors and subsectors, and developing the contents for parts of the vocational qualification standard, providing the basis for new VET curricula. The draft act on the CROQF envisages expansion to 26 sector councils, taking into consideration different subsystems of education and training (general, vocational and higher education).

Besides helping the link to the EQF (and to the QF-EHEA), thus allowing for international comparability of Croatian qualifications, the framework is seen as reflecting national needs and priorities and as an instrument making it possible to develop new education and training solutions specific to the Croatian context:

- better link education and training with labour market needs;
- improve social inclusion and equity;
- improve pathways between subsystems and between sectors;
- make qualifications transparent and more consistent;
- support lifelong learning and offer a good basis for validating non-formal and informal learning.

([45]) For more information consult the website of the Ministry of Science, Education and Sports http://public.mzos.hr/Default.aspx?sec=3401 [accessed 5.12.2012].

Specific CROQF aims include setting up a system for validating and recognising non-formal an informal learning, and creating a well-founded quality assurance system (European Commission et al., 2010, Croatia, p. 3) ([46]).

Stakeholder involvement and framework implementation

Although the idea had been considered earlier, development of the CROQF officially commenced in 2006, when the Ministry of Science, Education and Sports formed the first Committee for the purpose. The National Committee for the Development of the CROQF was set up in 2007 with the aim of ensuring close cooperation and coordination between public authorities, employers, learning providers and other social partners. This committee was chaired by the Deputy Prime Minister and comprised 27 members representing different ministries, social partners, schools, universities and agencies. In 2010 it was succeeded by a 20-member high level committee, the National Committee for the Implementation of the CROQF. The draft act on the CROQF was finalised by the new ministry's Committee for the CROQF, set up in April this year and consisting of 28 members representing a wide range of different relevant stakeholders.

Setting up an appropriate institutional structure for decision-making and implementation was challenging ([47]). According to the draft act, the National Council for Human Resource Development and the sectoral councils will take on particular responsibilities for putting the framework in place. The National Council will comprise representatives of national ministries, regional structures, social partners, sectoral councils and national agencies involved in development and award qualifications in different subsystems of education and training. This body oversees policies in education, training, employment and human resource development and monitors and evaluates the impact of the CROQF. The proposed law also defines the responsibilities of various ministries (for education, labour and regional development) involved in coordinating and developing the CROQF, setting up the national register and quality assurance procedures.

([46]) *European inventory on validation of non-formal and informal learning 2010: country report: Croatia*, p. 3. http://libserver.cedefop.europa.eu/vetelib/2011/77465.pdf [accessed 5.12.2012].

([47]) NCP survey, September 2012.

Level descriptors and learning outcomes

The shift to learning outcomes is seen as an essential part of the CROQF development and is supported by all stakeholders. The CROQF is a qualifications and credit framework. It has eight reference levels, in line with the EQF, but with two additional sublevels at levels 4 and 8 to cater for existing qualifications.

Each qualification in the CROQF will be defined in terms of profile (field of work or study), reference level (refers to complexity of acquired competences) and the volume (measured as credit points). Level descriptors are defined in terms of knowledge (theoretical and factual) and skills (cognitive and practical and social skills are included). A third column is defined as responsibility and autonomy. It is emphasised that key competences should be included in each qualification (Vlada Republike Hrvatske, 2009, p. 47) [48].

The CROQF introduces two classes of qualifications: full and partial. For example, a qualification with the minimum 180 ECVET and/or HROO points [49] (from which a minimum 120 ECVET and/or HROO points are acquired on the fourth reference level or higher) will be referenced to level 4.1. For a qualification at level 4.2, a minimum 240 ECVET and/or HROO points are required (of them a minimum 150 ECVET and/or HROO points on the fourth reference level or higher).

The VET reform agenda includes a move towards an outcomes-based approach in standards and curricula; pilot occupational standards and outcomes-based curricula are being developed. A new approach to evaluating school outputs introduces a system of common final exams (State matura) for grammar schools and other four-year secondary schools in Croatian language, mathematics, the first foreign language, and the mother tongue for ethnic minority pupils.

Higher education has undergone extensive change during the last decade, including the use of learning outcomes. The decision (in 2001) to take part in the Bologna process has made it necessary for Croatia to adjust significantly its higher education system. The introduction of undergraduate (first cycle) and integrated (second cycle) programmes started in 2005. The change of curricula seeks development of competences needed on the labour market, but the functional link between higher education institutions and the labour market, and the social community in particular, has not yet been well established.

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[48] *Hrvatski kvalifikacijski okvir, Uvod u kvalifikacije [Croatian qualifications framework, introduction into qualifications].*
http://personal.unizd.hr/~mdzela/hko/HKO_Prirucnik.pdf [accessed 26.11.2012].

[49] Croatian credit system for general education.

One of the explicit aims of CROQF is to set up a system for validating non-formal and informal learning. However, in practice this is a new concept and validation of learning outcomes acquired outside formal education and training is still rare (Europen Commission et al., Croatia, 2010, p. 3) ([50]).

The CROQF is supported by a new register bringing together subregisters of occupational standards, qualifications standards, units of learning outcomes and including both programmes and awarding bodies.

Referencing to the EQF

Croatia referenced its national qualifications levels to the EQF and self-certified to QF-EHEA in March 2012, preparing one comprehensive report.

Table 5   **Level correspondence established between the Croatian qualifications framework (CROQF) and the EQF**

CROQF	1	2	3	4.1	4.2	5	6	7	8.1	8.2.
EQF	1	2	3	4		5	6	7	8	

Important lessons and the way forward

The relatively rapid development of the CROQF illustrates the importance of stimulating active and broad participation throughout the entire process. If complemented by targeted support to, and training of, stakeholders, this can support genuine partnerships. Progressive, step-by-step development is emphasised. It has, so far, been a very inclusive process with more than 200 meetings, workshops and conferences, and consultations with different groups of stakeholders, including more than 10 000 individuals.

However, much needs to be done in developing or redefining qualifications so they can be aligned to the CROQF levels.

Main sources of information
The EQF national coordination point for Croatia is the Directorate for International Cooperation and European Integration at the Ministry of Science, Education and Sports. http://public.mzos.hr/Default.aspx?sec=2428 [accessed 6.12.2012].

([50]) *European inventory on validation of non-formal and informal learning 2010: country report: Croatia*. http://libserver.cedefop.europa.eu/vetelib/2011/77465.pdf [accessed 26.11.2012].

CYPRUS

Introduction

Cyprus has developed a proposal for a comprehensive NQF which includes all levels and types of qualifications from all subsystems of education and training, from primary to higher education qualifications.

The system of vocational qualifications, being developed by the Human Resource Development Authority of Cyprus, will be an integral, but distinct part of the proposed NQF. Common structures and elements, which will offer opportunities for combining and transferring credits, are being discussed.

A decision to create an NQF was taken by the Council of Ministers in 2008 (Decision No 67.445); a national committee for the development and establishment of the NQF was then set up. A first NQF draft, with detailed timetable for implementation, was presented in April 2010 and consultation with various stakeholders took place in spring 2011.

Main policy objectives

The main role of the NQF is to classify qualifications according to predefined levels of learning outcomes. The reform potential ([51]) of the NQF is being acknowledged by linking it to wider reforms and procedures for quality assurance, assessment and awarding of qualifications.

More specific objectives and targets to be realised through NQF development are to:
- support recognition and validation of qualifications;
- enable progression and mobility;
- promote lifelong learning through better understanding of learning opportunities, improved access to education and training, creation of incentives for participation, improved credit transfer possibilities between qualifications and recognition of prior learning;
- improve transparency, quality and relevance of qualifications;
- strengthen the link with the labour market.

([51]) *Interim report of the national committee and working committee on the development and establishment of a national qualifications framework in Cyprus (CQF).* November 2012, p 7 [unpublished].

In the analysis of the existing national qualification system ([52]) it is emphasised that the NQF can contribute to these objectives if it is seen as one of several elements in a wider strategy. Only then will it be possible to initiate the necessary reforms and institutional regulations on quality assurance, assessment and awarding of qualifications. This strategy, however, must protect the quality and credibility of the system; this means making sure that all qualifications are the result of a formal assessment and validation procedure, safeguarding that an individual has achieved the necessary/required learning outcomes.

The objective is to develop an inclusive framework, open to qualifications awarded outside formal education. This will primarily be achieved by including the system of vocational qualifications – established by the Human Resource Development Authority of Cyprus – into the framework. These qualifications refer to occupational standards and certify learning outcomes acquired at work or in simulation. This is important to increase the participation of adults in lifelong learning (currently at 7.7%) which is below the EU average of 9.1% in 2010 (European Commission, 2011) ([53]).

Inclusion of the vocational qualifications system in the NQF will bring comparability and better correlation of various qualifications, acquired in formal or non-formal learning, which will result in the upgrading of knowledge, skills and competences throughout lifelong learning. One important policy objective is also to reinforce vocational education and training at secondary, post-secondary and tertiary levels.

Stakeholder involvement and framework implementation

The General Directorate for Vocational and Technical Education of the Ministry of Education and Culture has initiated and is coordinating the NQF developments.

The National Committee for the Development and Establishment of NQF consists of the Director General of the Ministry of Education and Culture, the Director General of the Ministry of Labour and Social Insurance, and the Director General of the Human Resources Development Authority or their representatives. Higher education representatives are involved but they maintain a degree of autonomy.

([52]) Ibid., pp. 7-8.

([53]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020): country analysis*, p.24.
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf
[accessed 5.12.2012].

The NQF of Cyprus will be established at the Ministry of Education and Culture as an in-service department. The stakeholders responsible for accreditating qualifications will continue to work according to the existing legislative framework for their operation. However, new legislation on the operation of the NQF, which would clarify the cooperation among different stakeholders, is thought necessary. A new permanent body, the Council of the national qualifications framework of Cyprus, has been established ([54]). Its main tasks will be:

- consulting with stakeholders on NQF development and implementation;
- developing, implementing and reviewing NQF procedures;
- disseminating public information on the NQF;
- advising the Ministry of Education and Culture on policy and resource implications.

Level descriptors and learning outcomes

An eight-level reference structure is proposed, reflecting the main characteristics of the national qualification system. The level descriptors are described in terms of knowledge, skills and competence. Knowledge is defined by the type and complexity of knowledge involved and the ability to place one's knowledge in a context. Skills are expressed by type of skills involved; the complexity of problem-solving; and communication skills. Competence contains the following aspects: space of action, cooperation and responsibility, and learning skills. These were simultaneously formulated for all levels so that there would be clear progression from one level to the next.

The VET qualifications, developed under the responsibility of the Human Resource Development Authority of Cyprus will most probably be aligned from level 2 to 6 of the NQF. This is still being discussed.

The existing national qualifications system is mainly based on inputs such as quality of teachers and length of education and training programmes. However, emphasis is increasingly being put on learning outcomes and the need to revise curricula, learning programmes and assessment methodologies towards learning outcomes. A number of reforms are under way, exemplified by upgrading of curricula for pre-primary and upper secondary education, upgrading of vocational education and training through the introduction of post-secondary institutes for vocational education and training (launched in September 2012) and the

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([54]) *Interim report of the national committee and working committee on the development and establishment of a national qualifications framework in Cyprus (CQF)*. November 2012, p 15 [unpublished].

introduction of new modern apprenticeship. Experiences gained in developing competence-based vocational qualifications will feed into the NQF developments. These are based on occupational standards and make it possible to award a qualification to a candidate irrespective of how and where they have acquired the necessary knowledge, skills and competences.

In formal education, learning outcomes are mainly expressed as part of a subject and stage-based general education. In the curriculum, learning outcomes are described as the knowledge, skills and attitudes, and awareness learners are expected to achieve at the end of each stage. There are level descriptors indicating the standards a learner should achieve, when awarded certificates at different education levels.

Links to other instruments and policies

The current proposal emphasises that the NQF cannot operate in isolation but must form part of a wider strategy: 'This framework can play a very important role, but if it is not part of a wider strategic policy resulting in the necessary reforms and institutional regulations, it will not achieve its objectives' ([55]).

Discussions on recognising and validating non-formal and informal learning are an integral part of NQF development, with numerous public and private stakeholders participating. Competence-based vocational qualifications, which will constitute an integral part of the NQF, are already open for validation of non-formal learning. Through this the NQF aims to bridge the various qualifications acquired via formal, non-formal and informal learning and strengthen the links between initial and continuous vocational education and training.

Referencing to the EQF

The referencing of national qualifications to the EQF is the responsibility of the Ministry of Education and Culture, where the NCP has also been established. The referencing report is expected to be presented in early 2013.

([55]) Ibid., p 7.

Important lessons and future plans

The comprehensive and inclusive nature of the proposed framework will require cooperation among different stakeholders. The proposal to set up a council for the national qualifications framework is important in establishing a permanent platform for cooperation between all stakeholders: the Ministry of Education and Culture, the Ministry of Labour and Social Insurance, the Human Resource Development Authority and representatives of employer and employee organisations and the academic community.

The early stages of NQF implementation will adopt a flexible approach, based on key principles to be applied across subsystemss, but also accepting differences and different approaches and practices in different education and training subsystems, if necessary.

Main sources of information

National contact point has been established at the Ministry of Education and Culture. http://www.moec.gov.cy [accessed 16.12.2012].

THE CZECH REPUBLIC

Introduction

The Czech Republic has yet to decide whether to develop a comprehensive NQF. However, partial frameworks for vocational qualifications and for tertiary education qualifications have been developed and are now operational. The proposed descriptors for primary and secondary education may also be seen as pointing in this direction; the question now being discussed is whether an overarching framework can help to coordinate and bridge these separate developments. The latest preliminary surveys among various stakeholders are supportive of developing a comprehensive NQF as a tool for communication, mutual cooperation and improving the quality of education and training in general ([56]).

Work on the framework for vocational qualifications started in 2005, based on the Act on the Verification and Recognition of Further Education Results (2006) ([57]), which is also the legal framework for recognition and validation of non-formal an informal learning. Both processes are closely related. The core of the framework is the publicly accessible national register of qualifications (NSK).

A framework for tertiary qualifications has been designed under the Q-RAM project, initiated in 2009.

Main policy objectives

The interlinked development of a framework and a register for vocational qualifications has been a cornerstone in the national strategy for lifelong learning (Ministry of Education, Youth and Sports, 2007) ([58]). Aiming at improving access to lifelong learning and creating a more permeable education and training

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([56]) NCP survey, September 2012.

([57]) The Act No 179 of 30 March 2006 on verification and recognition of further education results and on the amendments of some other acts. http://www.msmt.cz/areas-of-work/act-no-179-of-30-march-2006 [accessed 5.12.2012].

([58]) The strategy of lifelong learning in the Czech Republic. http://www.msmt.cz/uploads/Zalezitosti_EU/strategie_2007_EN_web_jednostrany.pdf [accessed 5.12.2012].

system, the main elements of this strategy, reflecting identified and agreed needs (⁵⁹), are:

- creating a system to recognise and validate learning outcomes, irrespective of the way they were achieved;
- making the whole system more transparent and understandable for all stakeholders, e.g. learners and employers, employees, training providers;
- linking initial and continuing education;
- systematically involving all stakeholders in vocational education and training and in developing national qualifications;
- responding to European initiatives such as making qualifications more transparent and supporting the mobility of learners and workers;
- supporting disadvantaged groups and people with low qualification levels.

Another important issue is to open up different pathways to qualifications and to increase flexibility in the qualifications system. Complete vocational qualifications in the register for vocational qualifications are broadly comparable and compatible with qualifications acquired in initial VET, opening up both ways of acquiring qualifications (formal and non-formal learning). Also, one can acquire vocational (formerly called partial) qualifications listed in the register and build a complete qualification step-by-step. Exams can be taken for all vocational qualifications of a given complete qualification but to achieve complete qualification (attaining a level of education) it is necessary to pass the final exam. This makes final exams based on qualification standards a bridge between the two systems. The focus is more on vocational (formerly called partial) qualifications, because these aid employment and can address relatively quickly shortages of certain qualifications in the labour market.

Developments in VET and higher education – to some extent pursued through projects – have not been coordinated or connected. This leaves a number of questions and challenges for the development of shared concepts and the design of a structure which could provide the basis for a future comprehensive national qualifications framework. This challenge is accentuated by the fact that the idea of a comprehensive framework is not yet well understood among the broader public (⁶⁰).

(⁵⁹) Despite apparent progress achieved in lifelong participation in recent years (to 7.5% in 2010) it is still below EU average (9.6%).

(⁶⁰) NCP survey, September 2012.

Stakeholder involvement and framework implementation

The framework for vocational qualifications is fully operational. More than 60 000 applicants have been awarded qualification certificates (their competences validated) ([61]).

The Act on the Verification and Recognition of Further Education Results, which came into force in 2007, sets out the basic responsibilities, powers and rights of all stakeholders in developing and awarding vocational qualifications. The Ministry of Education, Youth and Sports (MEYS) coordinates the activities of the central administrative authorities (ministries) and approves, modifies and issues the list of vocational and complete vocational qualifications. It supports the activities of the National Qualifications Council. This in turn – including all stakeholders – acts as an advisory body to the Ministry of Education, Youth and Sports (MEYS) in the area of qualifications. Sector councils are in charge of developing qualification and assessment standards of the NSK up to level 7; most qualifications are, however, placed at levels 2 to 4. At higher levels they define only specialised supplemental qualifications, not those awarded by higher education institutions (bachelor, master and PhD degrees) (European Commission et al., 2010, Czech Republic, p. 3) ([62]). Opening up higher levels (up to level 7) for qualifications awarded outside higher education institutions is seen as an important means of supporting lifelong learning.

The national coordination point has played an important role in referencing Czech qualifications to the EQF: it leads the discussion on establishing the comprehensive national qualifications framework and provides and disseminates information on European tools.

Level descriptors and use of learning outcomes

The framework and register for vocational qualifications consists of eight levels. Level descriptors reflect the complexity of work activities ([63]). A national meeting

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([61]) Ibid.

([62]) *European inventory on validation of non-formal and informal learning 2010, country report: Czech Republic*. http://libserver.cedefop.europa.eu/vetelib/2011/77454.pdf [accessed 26.11.2012].

([63]) In the proposal on qualifications levels in the national qualifications systems, adopted by the Ministry of Education, Youth and Sport in 2010, these levels were linked to levels of education and types of programmes. During the referencing process it was decided that all qualifications awarded in formal education will be referenced to the EQF levels by comparison of learning outcomes in national curricula and the EQF.

identified a need for modification and broadening of NSK descriptors but a decision can be taken only after the results of the Q-RAM project are published, which will feed into these developments.

In the tertiary education system the framework will consist of two layers. The first layer will be generic descriptors for each level of qualifications, compatible with the overarching framework for EHEA and also with the EQF descriptors. These descriptors cover four levels, corresponding to levels 5 to 8 in the EQF, and cover short cycle (no qualifications at this level currently in the system), bachelor, master and doctoral degrees.

A set of level descriptors for primary and secondary education (EQF level 1 to 4) has also been drafted, based on core curricula. In this proposal, descriptors are grouped into three categories; knowledge, specific study and work skills, and transferable skills. Discussion on the need, scope and goals of the comprehensive qualifications framework between all education sectors continues ([64]). The learning outcomes approach is widely used in the Czech education system, although applied and interpreted slightly differently across levels and subsystems. Core curricula for primary and secondary education emphasise key competences and their practical use. Expected learning outcomes are defined in terms of activities, i.e. tasks students should be able to perform. The Education Act, which came into force in 2005, regulates curriculum reform at primary and secondary level, emphasising learning outcomes and strengthening social partner influence in VET. Key competences (e.g. ICT skills, learning to learn, problem-solving) have become very important. Modularisation of courses was introduced to improve transferability between various pathways in initial and continuous education, but it has not yet been implemented in most schools (Cedefop Refernet, Czech Republic, 2010) ([65]).

A competence-based and learning outcomes oriented approach is shared by VET and higher education and has broad political support. This is documented and confirmed by the curriculum reform of vocational education (including relevant methodologies) and by the Act on the Verification and Recognition of Results of Further Education. IVET framework curricula are increasingly being aligned with competences defined in the NSK. The majority of standards for levels 4 and higher, however, are still being drafted.

([64]) The Czech Republic has referenced its formal initial qualifications to the EQF based on the classification of educational qualification types (KKOV) and nationally approved curricula.

([65]) *VET in Europe: country report Czech Republic*.
http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_CZ.pdf
[accessed 5.12.2012].

In the project Q-RAM (on the development of a qualifications framework for HE), the learning outcomes approach has been crucial in developing generic descriptors and subject-specific benchmarks and will be further promoted in specific study programmes. A pilot study tested the subject specific benchmarks within this project in 2011.

Links to other instruments and policies

Europass, ECVET and EQAVET are closely coordinated with the EQF implementation, because all these instruments are implemented and promoted within one institution. Policy objectives linked to the ECVET are to support domestic and international mobility and transparency of qualifications (connection of qualifications in NSK with the credit system ECVET is planned) [66]. Pilot projects are underway.

The NQF and register of vocational qualifications and the system being developed for validating non-formal and informal learning are closely related. The legal framework for recognising non-formal and informal learning and the register of vocational qualifications is the Act on the Verification and Recognition of Further Education Results. The act also establishes the NSK, which is based on the framework for vocational qualifications. Validation and recognition procedures are carried out according to the qualifications and assessment standards included in the national register of qualifications. Currently, only qualifications included in the NSK register can be acquired though validation of non-formal and informal learning.

Referencing to the EQF

The Czech Republic referenced its formal qualifications to EQF levels in December 2011. The qualifications referenced are those awarded in lower and upper secondary education, in higher education and in continuing education (under the Act 179/2006 on the Verification and Recognition of Further Education Results). Higher education qualifications are linked to the EQF, but not yet self-certified against the QF-EHEA. The Czech Republic intends to self-certify its higher education framework against the QF-EHEA at a later stage, following the completion of a project in 2012.

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[66] See Cedefop (2012b). *ECVET monitoring* [forthcoming].

Important lessons and future plans

An important topic of discussion will be the development towards a more comprehensive overarching national qualifications framework with a coherent set of level descriptors, which will bring together subframeworks for vocational qualifications, for higher education and lower and upper secondary education. Explicit levels would make more transparent the links to the EQF levels. Discussions have started, but no decisions have been taken yet.

Main sources of information

The National Institute for Education (NUV) is the EQF NCP, which manages the operational agenda and creates proposals of the NCP for referencing qualifications levels to the EQF. http://www.nuov.cz [accessed 6.12.2012].

A register of all approved qualification and assessment standards is available at http://www.narodni-kvalifikace.cz/ [accessed 6.12.2012].

DENMARK

Introduction

Denmark has developed a comprehensive NQF covering all types and levels of qualification awarded and quality assured by public authorities. The work on the framework started in 2006 and builds directly on the qualifications framework for higher education established in 2006-07. Implementation of the eight-level framework has been a gradual process, in effect starting in June 2009 when the proposal for the framework was adopted by the Minister for Education, the Minister for Science, Technology and Innovation, the Minister for Culture and the Minister for Economic and Business Affairs. The NQF was referenced to the EQF in May 2011. The framework has reached an early operational stage, supported by the EQF national coordination point established in 2010.

Main policy objectives

The Danish NQF provides a comprehensive, systematic overview of public qualifications that can be acquired within the Danish system. The Danish evaluation institute specifies this as '….all qualifications that have been awarded pursuant to an act or executive order and that have been quality assured by a public authority in the Danish education system (Danish Evaluation Institute, 2011, pp. 13-14) ([67]).

The framework supports the development of a transparent education, training and learning system without dead ends; it supports the progression of learners, irrespective of their prior learning, age or employment situation.

The Danish NQF draws a clear distinction between levels 1 to 5 and levels 6 to 8. The latter are identical with the level descriptors in the Danish QF for higher education at bachelor, master and doctoral-level, and contain explicit references to research related outcomes. The difference is illustrated by the use of two different principles for referring qualifications to the framework. A qualification at levels 1 to 5 is referred according to a 'best fit' principle where the final decision is based on an overall judgement of knowledge, skills and competences. A principle of 'full fit' is used for levels 6 to 8, as is the case for the Danish QF for HE,

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([67]) *Referencing the Danish qualifications framework for lifelong learning to the European qualifications framework*, pp. 13-14.
http://www.iu.dk/dokumentation/kvalifikationsrammer/National_report_Referencing_DK_Qualifications_Framework_to_EQF.pdf [accessed 5.12.2012].

implying that qualifications at this level have to be fully accredited as meeting the legal requirements set by national authorities and according to the QF for higher education for qualifications at these levels.

This distinction implies that all qualifications at levels 6 to 8 need to be defined and accredited according to the QF for HE. For the moment there are no publicly recognised qualifications in the Danish education system at level 6 to 8 that are not included in the higher education area (QF for HE), and a number of non-university qualifications have been, or are expected to be, accredited as bachelors and masters (for example related to arts, the armed services and police) and thus included in the qualifications framework for higher education.

The NQF adopted in 2009 is considered to be a first step in a long-term development process. A second stage, opening the framework up to qualifications and certificates in the private and non-formal sector, is envisaged. The work on this second stage will have to focus on the procedures for inclusion and, in particular, on how quality assurance and accreditation can be handled. This work was initially foreseen to have started in 2012 but has been delayed.

Stakeholder involvement and framework implementation

A broad range of stakeholders has been involved throughout the development and implementation period. The social partners have been systematically consulted and involved throughout the process and their role is being described as constructive and as a precondition for the implementation of the framework. Some social partner representatives, notably employers, have questioned the direct added value for companies, pointing to the need to move into a second and more inclusive development stage.

While the Ministry of Education is in charge of the NQF project the Danish EQF national coordination point has taken on an active role in the day-to-day coordination of the framework and its implementation. The NCP is located in the Danish Agency for Universities and Internationalisation (which also hosts the DK national academic recognition centre, NARIC). A main task for the NCP is to coordinate stakeholders involved in the framework as well as disseminate information to a wider public. It is acknowledged that the NQF is not very visible to the general public at this stage, but that the inclusion of NQF/EQF levels into certificates and diplomas and the Europass documents could change this (work to include levels on certificates and diplomas is ongoing).

The NQF is visible through two advanced websites, offering comprehensive background information and regular updates on development and

implementation: the NQF.DK, which provides information for an international target group, presenting the NQF and the qualifications it covers; and the UG.DK, addressed to a national target group, providing comprehensive information on qualifications, programmes, access, etc. The UG.DK also provides general information on the NQF and the qualifications levels, and explains the concept of learning outcomes-based levels and how these can be used by learners.

Level descriptors and learning outcomes

The eight-level structure adopted for the Danish NQF is defined by knowledge (*Viden*), skills (*Færdigheder*) and competences ([68]) (*Kompetenser*). Danish level descriptors have been based on a number of different sources, including existing descriptions of learning outcomes in curricula and programmes, the EQF descriptors, and the Bologna descriptors. They have been designed to be relevant to different types of qualification, theoretically as well as practically oriented. Knowledge (*Viden*) descriptors emphasise the following:

- the type of knowledge involved; knowledge about theory or knowledge about practice; knowledge of a subject or a field within a profession;
- the complexity of knowledge; the degree of complexity and how predictable or unpredictable the situation in which the knowledge is mastered;
- understanding the ability to place one's knowledge in a context. For example, understanding is expressed when explaining something to others.

Skills descriptors refer to what a person can do or accomplish and reflect the following aspects:

- the type of skill involved; practical, cognitive, creative or communicative;
- the complexity of the problem-solving; the problem-solving these skills can be applied to and the complexity of the task;
- communication; the communication that is required; the complexity of the message; to which target groups and with which instruments.

Competence descriptors refer to responsibility and autonomy and cover the following aspects:

- space for action; the type of work/study related context in which the knowledge and skills are brought to play, and the degree of unpredictability and changeability in these contexts;
- cooperation and responsibility; the ability to take responsibility for one's own work and the work of others, and the complexity of the cooperative situations in which one engages;

([68]) Note that the Danish NQF, in contrast to the EQF, uses the plural 'competences'.

- learning; the ability to take responsibility for one's own learning and that of others.

Table 6   **Level descriptors in the Danish NQF for lifelong learning**

Knowledge/*Viden*	Skills/*Faerdigheter*	Competence/*Kompetenser*
Type and complexity	Type	Space for action
	Problem solving	Cooperation and responsibility
Understanding	Communication	Learning

These descriptors are used to address both (full) and supplementary qualifications. The role of supplementary qualifications is particularly important for adult education and for continuing vocational education and training. A supplementary qualification can be a supplement (addition) to a qualification, a part (module) or an independent entity not related to any other qualification. The learning outcomes approach is widely accepted in all segments of education and training and is increasingly being used to define and describe curricula and programmes. VET has a strong tradition in defining qualifications in terms of competence, but higher education and the different parts of general education are also making progress. It is being admitted, however, that it will be necessary to deepen the understanding of the learning outcomes approach at all levels, for example by developing guidelines.

Referencing to the EQF

Referencing to the EQF is treated as an integral part of overall implementation of the NQF and was completed in May 2011 (Danish Evaluation Institute, 2011) ([69]). The result shows a strong convergence between the Danish framework and the EQF but a linking of Danish level 1 to EQF level 2. Some concern has been raised during 2012 that the five Nordic countries seem to go for different solutions to referencing of primary and (lower) secondary general qualifications to the EQF.

([69]) *Referencing the Danish qualifications framework for lifelong learning to the European qualifications framework.*
http://www.iu.dk/dokumentation/kvalifikationsrammer/National_report_Referencing_D K_Qualifications_ Framework_to_EQF.pdf [accessed 15.12.2012].

Table 7   **Level correspondence established between the Danish national qualifications framework (DK NQF) and the EQF**

DK NQF	1	2	3	4	5	6	7	8
EQF	2	2	3	4	5	6	7	8

A NCP has been established at the Danish Agency for Universities and International Education.

Important lessons and the way forward

Denmark is now moving towards a fully operational national qualifications framework for lifelong learning. This success has largely been achieved by accepting that not all problems can be solved immediately and an NQF will also need to develop beyond 2012.

The potential inclusion of certificates and diplomas awarded outside the public domain is an issue which will have to be addressed in the coming period. This could strengthen the relevance of the framework for the labour market and the social partners.

Main sources of information

A website for the Danish qualifications framework is available on http://en.iu.dk/transparency/qualifications-frameworks [accessed 6.12.2012].

The Danish Agency for Universities and Internationalisation acts as NCP. http://en.fivu.dk/the-ministry/organisation/agencies/danish-agency-for-universities-and-internationalisation [accessed 12.3.2013].

ESTONIA

Introduction

Estonia is implementing a comprehensive national qualifications framework for lifelong learning, the Estonian qualifications framework (EstQF), including all state recognised qualifications ([70]). The overarching framework brings together subframeworks for higher education qualifications ([71]), VET qualifications ([72]), general education ([73]), and occupational qualifications ([74]).

The subframework for higher education, reflecting the principles of the European higher education area, was adopted in August 2007 and described by the standard of higher education. General descriptors follow the logic of Dublin descriptors, but are adjusted to national needs.

Qualifications at level 5 of the NQF are subject to intensive discussions. A new draft VET Law, which is planned to come into force in 2013, has been prepared. It foresees qualifications at level 5 (both in IVET and CVET). Developing qualifications at this level is seen as crucial to improving permeability between different subsystems (especially VET and HE).

Main policy objectives

The ambition of the NQF in Estonia is twofold; to be a tool for transparency and communication and, at the same time, to be a tool for reforming lifelong learning.

More specifically, the policy objectives addressed by NQF are to:

- improve the link between education/training and labour market;
- increase educational offer and qualification system consistency;
- provide transparency for employers and individuals;
- increase understanding of Estonian qualifications in the country and abroad;
- introduce common quality assurance criteria;

([70]) According to law they have to be defined in learning outcomes qualifications standard (curriculum or professional standard). The awarding institutions (educational institution, professional associations) have to be accredited by state.

([71]) Referred to as standard of higher education.

([72]) Referred to as vocational education standard.

([73]) Referred to as national curriculum for basic schools and national curriculum for upper secondary schools.

([74]) Occupational qualification means a qualification associated with trade, occupation or profession resulting from work-based learning.

- support validation of non-formal and informal learning;
- monitor the supply and demand for learning.

It is expected that implementation of an overarching NQF will increase the coherence of education and training and help to introduce coherent methods for standard-setting. Another import policy objective is to increase adult participation in lifelong learning from 11% in 2011 to 17% in 2020, set as a national target ([75]). Early school leaving and drop outs have decreased in last years to 10.8% in 2011, but are still high in the last years of basic education and highest in the first year of vocational education (21.1%). Further decreasing early school leaving (especially among boys) remains an important policy area and an objective for the coming year. A key priority is to improve the quality of education and especially the relevance of VET to the needs of the labour market.

Stakeholder involvement and framework implementation

The Estonian NQF has reached an early operational stage, the Ministry of Education and Research and the Estonian Qualifications Authority being the main bodies involved.

The Qualification Authority (*Kutsekoda*) was established in 2001 with the aim of developing the competence-based professional qualifications system, which was put in place in parallel to the existing formal education system under the Ministry of Education and Research.

The Qualifications Authority coordinates 16 professional councils and keeps a register of competence-based qualifications; it cooperates with other institutions, e.g. the National Examination and Qualifications Centre and the Quality Agency for Higher Education.

A permanent platform is to be set up – a steering group – including stakeholders from different subframeworks (e.g. general education, HE, VET, occupational qualifications) and labour market actors to oversee the implementation and evaluate the impact of the EstQF.

The Qualifications Authority acts as national coordination point. It participated in the development of the NQF and referencing of the NQF to the EQF. It disseminates information, and guides and advises various stakeholders in the application of the framework.

([75])https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Estonia:Education_in_Europe_2020_Strategy#Adult_participation_in_lifelong_learning [accessed 5.12.2012].

Level descriptors and learning outcomes

The NQF is based on eight levels. Level descriptors for lifelong learning are identical to EQF level descriptors. They are defined as knowledge (theoretical and factual), skills (cognitive skills – use of logical, intuitive and creative thinking – and practical skills, i.e. manual dexterity and use of methods, materials, tools and instruments) and scope of responsibility and autonomy ([76]). More detailed descriptors have been developed in four subframeworks for general education, initial vocational education, higher education and occupational qualifications.

Two types of qualification are included:
- formal educational qualifications, which are awarded after completion of educational programmes at all levels (general, vocational, higher);
- occupational qualifications ([77]), where individuals are issued a certificate of knowledge, skills and competences required for working in a specific occupation or profession.

Introducing a learning outcomes approach is an important part of the national reform programme for general education, VET and HE. Linked to this is an increased focus on recognition of prior learning.

The learning outcomes of different types of VET are described in the vocational education standard, which came into force in November 2009. Learning outcomes in vocational education correspond to levels 2 to 4 of the NQF and are described with reference to minimum level standards. The learning outcome approach describes professional knowledge and skills as well as transversal skills (communicative, social and self-awareness competence, independence and responsibility). All types of VET will be formally linked with NQF levels by the end of 2013. A new VET Law is expected in 2013, which also envisages level 5 VET qualifications.

Programmes in VET are modularised and outcomes-based. All programmes will be reassessed in the future, taking into consideration possible changes in the occupational (professional) standards, aiming at increased compatibility of educational and professional (occupational) qualifications. There will be step-by-

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([76]) Professions Act (English version) is available on the website of the Estonian Qualifications Authority.
http://www.kutsekoda.ee/en/kutsesysteem/oigusaktidkutseseadus
[accessed 5.12.2012].

([77]) There are 620 occupational qualifications based on occupational standards, which can be placed on levels 2 to 8 of the NQF. They can be gained through formal education, adult education and in-service training. Information obtained from *Referencing of Estonian qualifications and qualifications framework to the EQF*, p. 9.

step development in each sector. All initial VET study programmes will be learning outcomes based by 2014.

New learning programmes have been implemented in higher education institutions from September 2009. The Universities Act and Applied Higher Education Institutions Act now allow for accreditation of prior and experiential learning in higher education curricula (Euopean Commission et al., 2010, Estonia, p. 1) ([78]).

Links to other instruments and policies

The Estonian lifelong learning strategy emphasises the principle that all strategic national, regional and local documents should support development of the lifelong learning system, including the recognition of prior learning and work experience. Increasingly, outcomes-based qualifications and programmes allow for recognition of non-formal and informal learning according to relevant regulation in different subsystems. ECTS, is used for higher education. In the VET system, a credit point system based on a study week is used, and transition to ECVET is planned (Aarna et al., 2012) ([79]).

Referencing to the EQF

Estonia referenced the Estonian qualifications framework to the EQF and self-certified the compatibility of the Estonian qualifications framework for higher education with the QF-EHEA in October 2011.

Table 8   **Level correspondence established between the Estonian qualifications framework (EstQF) and the EQF**

EstQF	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

([78]) *European inventory on validation of non-formal and informal learning 2010: country report: Estonia*. http://libserver.cedefop.europa.eu/vetelib/2011/77456.pdf [accessed 26.11.2012].
Except for final thesis or examination, all other parts of higher education programmes can be proved though recognition of prior learning.

([79]) *Referencing of the Estonian qualifications and qualifications framework to the European qualifications framework*, p. 10. http://ec.europa.eu/education/lifelong-learning-policy/doc/eqf/estonia_en.pdf [accessed 5.12.2012].

Important lessons and future plans

One of the key objectives of the EstQF is to improve comparability between formal school leaving certificates and occuptional (professional) qualifications. EstQF has contributed to this objective in recent years by building up a more coherent and responsive lifelong learning system. The process has been intense. Recently, 'a remarkable convergence of the formal educational system and professional qualification system has taken place' [80]. EstQF regulates key quality criteria for qualifications to be included in the framework. They have to be defined in learning outcomes-based qualification standards (curriculum or professional standards), awarded by accredited institutions and be quality assured.

One of the key challenges is to consolidate the platform for cross-sectoral cooperation among stakeholders in implementation of the comprehensive NQF, including those from subsystems of education and training and the world of work.

Main sources of information

The Estonian Qualification Authority is designated as EQF national coordination point. http://www.kutsekoda.ee [accessed 6.12.2012].

Information on NQF development is available from http://www.valew.eu/project-valew/project-partners/6-estonian-qualification-authority [accessed 6.12.2012].

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[80] *Referencing of the Estonian qualifications and qualifications framework to the European qualifications framework*. http://ec.europa.eu/education/lifelong-learning-policy/doc/eqf/estonia_en.pdf [accessed 5.12.2012].

FINLAND

Introduction

The work on the Finnish national qualifications framework started in August 2008. A national committee comprising all main stakeholders presented a first proposal in June 2009. Following two public consultations in 2009 and 2010, the government presented a proposal to the Finnish Parliament autumn 2010. According to this, the Finnish NQF will cover officially recognised qualifications (general, vocational education and training and higher education) at all levels, and can be described as comprehensive. The framework is also intended to (gradually) open up towards competences acquired outside the existing formal qualifications system, for example linked to continuing training in the labour market.

Following the change of government in 2011, the original proposal was slightly revised and resubmitted to Parliament in May 2012 (Act on a National Framework for Exam-based and other Competences). In its proposal the government expects the act to be in force by 1 January 2013, though this presupposes it's passing by the Parliament before the end of 2012.

A qualifications framework for higher education, in line with the Bologna process, was developed in 2005 but has not been taken forward separately and will form an integrated part of the NQF. Finland has decided to carry out the referencing to the EQF and the self-certification to the European higher education area as one process.

Main policy objectives

The work on the Finnish NQF was directly triggered by the launch of the debate on the EQF in 2004-05. While Finnish stakeholders supported the idea of a European reference framework, they originally saw little added value from an NQF in Finland, pointing to the transparent character of the existing education and training system and what was seen as relatively limited further benefit of a framework. This scepticism has largely been replaced by agreement that the framework has a long-term role to play in helping to increase international transparency and to improve the effectiveness and clarity of the qualifications system.

Transparency and comparability of qualifications, at national and European level, are core objectives of the NQF. This is to be achieved by describing all

existing qualifications in a coherent way and by using a consistent conceptual approach. This will illustrate the relationship between different qualifications and clarify how individuals can make progress within the system and how they can build pathways based on experience and/or on formal learning. Recognition of prior learning is emphasised as an important feature of the NQF and as a necessary element in a strategy for lifelong learning.

Several stakeholders are keen that the framework provide an opportunity to strengthen the overall consistency of the use of learning outcomes across education and different institutions. Explicit level descriptors may help to clarify what is expected from a qualification and can improve the overall quality of Finnish education and training.

As well as officially recognised qualifications (general, vocational education and training, and higher education) at all levels, the framework will also cover official qualifications awarded outside the remit of the Ministry of Education and Culture, for example related to the armed services, police, and prison and rescue services.

The framework introduces the concept of 'extensive competence modules' to be able to address acquired learning outcomes that are not part of the existing qualifications system. These competence modules cover a broad area and occur in many professions and at all levels. The government proposal distinguishes between two main areas where these 'modules' will be relevant:

- in regulated professions, where legal requirements for certifications beyond initial education and training exist. This is the case for professions in the health and social sectors but is also the case for teachers, diverse and various groups within the construction sector;

- in all areas where there is need for increased competences and specialisations beyond initial education and training. The NQF proposal refers to the need to improve the visibility and valuing of 'specialisations' beyond initial education and training. These specialisations form a significant part of the existing Finnish lifelong learning landscape (in vocational training, higher education and in liberal adult education).

By gradually including certificates and qualifications operating outside initial education and training, the hope is to improve their visibility and improve conditions for lifelong learning. The plan is that these 'extensive competence modules' will be covered only gradually by the framework and it remains to be seen how this will be dealt with in practice, not least with respect to quality assurance arrangements.

Stakeholder involvement and framework implementation

Development of the Finnish NQF has involved a broad range of stakeholders. While initiated and coordinated by the Ministry of Education and Culture, the working group responsible for preparing the NQF proposal consisted of the following: The Ministry of Justice, Ministry of Internal Affairs, Ministry of Employment and the Economy, Defence Command Finland (Ministry of Defence), Finnish National Board of Education, Confederation of Unions for Professional and Managerial Staff in Finland (AKAVA), Confederation of Finnish Industries (EK), Central Organisation of Finnish Trade Unions (SAK), Association of Finnish Local and Regional Authorities, Finnish Confederation of Professionals (STTK), the Association of Vocational Adult Education Centres (AKKL), Rectors' Conference of Finnish Universities of Applied Sciences (ARENE), Vocational Education Providers in Finland (KJY), Finnish Association of Principals, The Finnish Council of University Rectors, Finnish Adult Education Association, The National Union of University Students in Finland and the Union of Finnish Upper Secondary Students.

The range of stakeholders included in the working groups signals an inclusive approach seeking as strong ownership as possible from the start. This approach was further strengthened by carrying out wide-ranging consultation in autumn 2009. Of the approximately 90 proposals received, none questioned the idea of developing and implementing an NQF. A second consultation on the government proposal for national legislation was organised in summer 2010, after which changes were made to the level descriptors.

Higher education institutions have supported the development of the NQF and have contributed to the framework design. This seems to reflect the existing Finnish education and training system where interaction between general, vocational and higher education and training institutions seem to operate more smoothly than in many other countries. This may be explained by the role played by non-university higher education (promoting professional training at bachelor and master level) and by the increasingly important competence-based qualifications approach applied for vocational qualifications at levels corresponding to 4 and 5 of the EQF. This approach, gradually developed since the 1990s, is based on the principle that candidates without a formal training background can be assessed for a qualification. Finnish VET qualifications also give access to all forms of higher education. A qualifications framework for higher education, in line with the Bologna process, was developed from 2005 and is now an integrated part of the new comprehensive NQF.

The change of government in 2011, and the subsequent resubmission of the proposal to Parliament, was not accompanied by further consultations. The main changes to the proposal are linked to the levelling of particular qualifications, the original and somewhat controversial proposal to place some specialist vocational training qualifications, including one for riding teachers, at level 6 have been removed.

The delays experienced during 2011 and 2012 have partly reduced the overall attention to the framework and its potential role. Whether this will harm the implementation of the framework in the long term remains to be seen.

Level descriptors and learning outcomes

Broad acceptance of the competence-based approach underpins Finnish NQF developments and the relatively lack of conflict over linking general, vocational and higher education qualifications.

The government proposal now being discussed by Parliament introduces an eight-level framework reflecting (but slightly adjusting) the knowledge, skills and competence components introduced by the EQF ([81]). The descriptors have been inspired by the EQF but adopted to suit the national context; this is particularly so for competence, where additional aspects like entrepreneurship and languages have been added. This may help strengthen the dimensions of key-competences and lifelong learning. Including the aspect 'evaluation' specifies that individuals must be able to reflect on their knowledge, skills and competences and to judge how to improve them. The descriptors for levels 6 to 8 use the same basic approach but also largely reflect the descriptors of the earlier proposal for higher education qualifications framework. Table 9 shows the components used to define and describe levels in the Finnish NQF.

Table 9   **Level descriptors in the Finnish NQF**

Knowledge	
Work method and application (skills)	
Responsibility, management and entrepreneurship	**Levels 1-8**
Evaluation	
Key skills for lifelong learning	

([81]) See proposed level descriptors in Annex 3.

The level descriptors in the government proposal do not distinguish explicitly between the different dimensions of learning outcomes (KSC), even if they have been identified in preparatory work. The aim was to create a holistic description for each level.

The background document for the government proposal illustrates the main principles for placing qualifications at particular levels, and how the learning outcomes approach has been applied. Qualifications of the same type have been placed at the same level. This applies also to vocational qualifications (levels 4 and 5). To ensure the clarity of the education and qualifications system, all qualifications of a certain type would normally be placed at the same level in the framework, but some exceptions have been identified. Individual VET qualifications may be placed at one level higher than the basic qualification if the requirement level clearly differs from other qualifications of the same type, as is the case, for example, for vocational qualifications in construction (speciality in production). This is important as it signals a willingness to use the learning outcomes approach actively and an acknowledgement that this may lead to different level placement within one group or qualifications.

While creating no controversy at national level, the placing of the basic education syllabus at level 3 of the NQF has triggered an intense discussion with the four other Nordic countries (Denmark, Iceland, Norway and Sweden). Denmark and Iceland, both considering their primary and (lower) secondary education to be at level 2, fear that the Finnish approach inflates this particular qualification and may create artificial barriers between the Nordic countries, obscuring existing and de facto similarities. The Swedish and Norwegian positions on levelling for primary and (lower) secondary education have been influenced by the Finnish proposal, and both may decide to go for level 3.

Links to other instruments and policies

The government proposal emphasises the role of the NQF in further promoting the use of learning outcomes for describing expectations to individuals and for improving the quality and consistency of the education and training provisions and institutions themselves. In this sense the NQF is seen as a tool for promoting lifelong and life-wide learning. While not explicitly addressing the link between the NQF and validation, the priority given to learning outcomes can be seen as a precondition for further developing arrangements for validation of non-formal and informal learning.

According to the European inventory on validation (European Commission et al., 2010, Finland) ([82]), validation is benefitting a growing number of adults, with the system of competence-based qualifications of particular importance. The number of beneficiaries has increased from around 5 000 adults in 1997 to over 65 000 in 2008. In recent years, the number of participants has increased at an annual rate of around 2% to 20%. Validation is also used in all other parts of education and training but statistics are generally more unreliable; in some cases, for example HE, it is not registered to what extent validation has played a role when acquiring a qualification.

So far, no common standards or requirement have been introduced for validation that would include all different levels of education (Cedefop, 2010b) ([83]). The National Board of Education has drafted national qualification requirements for each competence-based qualification ([84]). The documents specify areas of assessment and standards/criteria for passing/failing. Such requirements are legally binding and therefore guide validation work carried out at the provider level by the tripartite assessment teams. In terms of higher education, the laws and decrees regulate higher education and no standards exist as such. In 2009 the Finnish Council of University Rectors and the Rectors' Conference of Finnish Universities of Applied Sciences also issued recommendations on validating informal and non-formal learning in Finnish higher education.

Finland has been actively involved in testing ECVET. Referred to as FINECVET, a national project piloting the ECVET system, these developments have so far been carried out separately from the development of the NQF and there is no indication in the government proposal on how to establish links to ECVET.

([82]) *European inventory on validation of non-formal and informal learning 2010: country report Finland*. http://libserver.cedefop.europa.eu/vetelib/2011/77460.pdf [accessed 26.11.2012].

([83]) *The development of national qualifications framework in Europe,* August 2010. http://www.cedefop.europa.eu/EN/Files/6108_en.pdf [accessed 5.12.2012].

([84]) The Finnish National Board of Education decides on the national core curriculum for each vocational qualification, determining the composition of studies and the objectives, core contents and assessment criteria of the study units. Preparation is carried out by tripartite expert groups and they are also discussed in education committees for each sector and qualification committees.

Referencing to the EQF

The Finnish national coordination point for EQF (which is the National Board of Education) was appointed in June 2008, before the work on the NQF started. Preparations for referencing national qualifications levels to the EQF have been going on in parallel to the work on the NQF proposal itself. Due to the delays encountered during 2011 and 2012, EQF referencing has been repeatedly postponed and will take place – given a decision by the Parliament – in spring 2013.

Important lessons and the way forward

This Finnish NQF may become a tool for long-term development. The introduction of learning outcomes based levels is seen by stakeholders as an instrument for increasing qualifications consistency in Finland. While learning outcomes are used widely in almost all education and training sectors, their interpretation varies, thus risking inconsistencies between institutions and sectors. The NQF is seen as something more than just an instrument for transparency; this transparency should be used as a reference point for improving the overall quality and relevance of Finnish qualifications.

The success of the Finnish NQF will depend on the extent to which it becomes an instrument for gradual improvement of qualifications at all levels, including the local and institutional. Will it, for example, become a reference point for assessment and validation practitioners; will it become a reference point for curriculum development; and will it influence the overall debate on quality assurance in education and training?

The delays encountered during 2011 and 2012 may have resulted in a loss of momentum at national level. The moment a decision from the Parliament exists, it will be important to restart the dialogue between stakeholders and invite them to influence the creation of an operational NQF. Without such renewed involvement and engagement there is a risk that the relevance of the Finnish framework for long-term developments will be reduced.

Main sources of information
Finnish Ministry of Education. http://www.minedu.fi/OPM/?lang=en [accessed 6.12.2012].
Finnish National Board of Education acts as NCP.
http://www.oph.fi/qualificationsframework [accessed 6.12.2012].

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Introduction

The former Yugoslav Republic of Macedonia has been working towards an NQF for some years. Initial development work focused on a national qualifications framework for higher education, supported by the TEMPUS IV project Designing and implementing the NQF (former Yugoslav Republic of Macedonia, 2009) ([85]). This was a high political priority. Based on the proposal developed by a working group, a Decree on Higher Educational Qualification was adopted in 2010, (former Yugoslav Republic of Macedonia, 2010) ([86]) which is now being implemented. This framework will constitute an integral part of the comprehensive national framework for lifelong learning.

Development towards a more comprehensive framework has been taken forward within the EU-funded CARDS project – technical assistance to the Ministry of Education and Science – which ended in March 2010. One aim was to outline basic NQF concepts, the structure of the framework, and quality assurance criteria, and to indicate how key agencies could build their capacity to support the process. Proposals also included changes in legislation.

Main policy objectives

The main objective of the national qualifications framework is to provide a transparent description of all qualifications within the Macedonian system of education. Finding the right balance between the descriptive nature of the framework and using it as a tool to support reforms in line with European developments is emphasised. The NQF is seen as an important tool and a valuable contribution to modernising education and training, with a view to improving quality and better adaptability of education to labour market needs.

([85]) *Bologna process, national report 2007-09*.
http://www.ond.vlaanderen.be/hogeronderwijs/bologna/links/National-reports-2009/National_Report_Macedonia_2009.pdf [accessed 3.10.2012].

([86]) УРЕДБА за Националната рамка на високообразовните квалификации [decree on the national framework for higher education qualifications].
http://www.mon.gov.mk/images/stories/dokumenti/NacionalnaRamka/uredba.pdf [accessed 26.11.2012].

Reforms are under way reflecting European initiatives, e.g. the implementation of the Bologna process. Qualifications and study programmes are being reformulated. Expectations are that the development of a qualifications framework and the new concept of learning, learning types and learning pathways will support this development.

A NQF is seen as a classification of qualifications where the employment sector is an important contributor, where qualifications will represent the outcomes of education, and where employers, schools, parents and prospective students are enabled to understand the achievements represented by the main qualification titles. It will also show how qualifications relate to one another.

By regulating the approval of qualifications to the national qualifications framework, the introduction of national competence based standards for occupations will be prepared and quality criteria will be defined.

The quality associated processes are intended to improve the credibility and transparency of qualifications in the NQF. The main quality assurance processes will be validation of qualifications for inclusion in the NQF and the accreditation of institutions to deliver and/or award these qualifications.

The main objectives of the NQF are to:

- make qualifications easier to understand and compare nationally and internationally, with clearly defined learning outcomes and qualification purposes;
- create confidence in qualifications and standards linked to quality standards, defined nationally by government and fully consistent with European standards and guidelines;
- aid recognition of Macedonian qualifications and support mobility between institutions and internationally;
- reinforce the use of learning outcomes in standard-setting, curricula and assessment;
- support lifelong learning and to clarify potential routes for progression;
- improve the links between education and training and labour market needs.

Stakeholder involvement and framework implementation

The Ministry of Education and Science has overall responsibility for developing and implementing the NQF. How to involve other ministries, notably the Ministry of Labour, which has not yet had a role in NQF development, is an issue to be resolved.

The working group was established by the Ministry of Education and Science (MES) in 2008 and again in 2009. It mainly comprises representatives of stakeholders from education: the Ministry of Education, the Bureau for Development of Education (BDE), the VET Centre, the Adult Education Centre (AEC), the State Examinations Centre (SEC), the State Education Inspectorate, the Accreditation Board (higher education) and the Agency for Higher Education Evaluation. Most of these agencies are involved in reforms in their respective sectors linked to the NQF.

The group is supported by two technical groups, preparing the proposal for the NQF outline and proposals for validating qualifications and accrediting institutions.

In 2012 a working group led by MES started discussions on a comprehensive NQF, including secondary and VET qualifications. To date, the focus has been on formal education.

It is intended that the processes of quality assuring qualifications/study programmes and institutions will continue to be the responsibility of the Ministry of Education and Science and existing agencies in respective education sectors, but a comprehensive framework would benefit from common criteria being implemented across education sectors. These might include publicly available information, requirements for the design and award of qualifications, and appeal processes. However, detailed arrangements would continue to be tailored to each area by the body responsible.

Another important area is accreditation of providers and quality assurance arrangements, including assessment and certification processes. The debate on the scope of NQF accreditation processes continues.

Level descriptors and learning outcomes

Eight levels, with a number of sublevels based on qualifications type, are suggested for comprehensive national qualifications framework.

The eight levels are characterised by level descriptors, defined in terms of expected learning outcomes: knowledge, skills and competence. Different dimensions of learning and capabilities, such as applied knowledge, practical skills, working with others and autonomy and responsibility, and complexity of the context, are taken into account. Sublevels will also relate to requirements of qualifications types. A step-by-step approach is emphasised in developing levels. The first step was to use the existing 'ladders' of provision in the country: general education qualifications, VET education and higher education qualifications as defined by laws.

The shift to learning outcomes is seen as an essential part of the national qualifications framework development. It is planned that qualifications and programmes will be completely revised in line with level descriptors.

Reforms are under way in different parts of education and training in line with the national education strategy for 2005-15, even though the progress has been limited (European Commission, 2010) ([87]). A VET strategy 2020 is at an advanced stage of development and government approval is expected in early 2013.

Higher education is subject to extensive change in line with the Bologna principles. A new Law on Higher Education, adopted in 2008, is the legal basis for the reforms ([88]). Descriptors for study programmes are being drafted. Common guidelines for describing learning outcomes, including the space for creativity and differences between study programmes, is needed to assist the greater involvement of academic staff in designing the programmes.

The government began a process of defining the qualifications obtained through vocational and professional education and training in 2001. A national classification of vocations and professions was created with standardised titles and codes based on the international standardised classification of professions ISCO/88.

In 2011-12 an EU Twinning project supported reform of VET standards and curricula based on occupational standards, prepared in cooperation with labour market actors. Outputs of this project are yet to be consolidated through training of VET practitioners (managers and teachers).

Important lessons and the way forward

The main challenges are capacity building of institutions involved in NQF development (insufficient preparation of the institutions involved) and to establish effective collaboration between stakeholders. The Ministry of Education and Science has overall responsibility, but it is important to include other ministries, especially the Ministry of Labour and Social Policy, and labour market stakeholders to improve links between education and the labour market, one of

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([87]) *The former Yugoslav Republic of Macedonia: 2010 progress report: enlargement strategy and main challenges 2010-11*, p. 69.
http://ec.europa.eu/enlargement/pdf/key_documents/2010/package/mk_rapport_201 0_en.pdf [accessed 26.11.2012].

([88]) *Bologna process, national report 2007-09.*
http://www.ond.vlaanderen.be/hogeronderwijs/bologna/links/National-reports-2009/National_Report_Macedonia_2009.pdf [accessed 3.9.2012].

the key objectives of national qualifications frameworks. Outputs from EU and other relevant international cooperation projects face difficulties in securing sustainability, due to low state funding and institutional capacity constraints.

Main sources of information

National qualifications website is available to users. http://www.mon.gov.mk [accessed 12.12.2012].

FRANCE

Introduction

The setting up, in 2002, of the National Committee for Professional Certification (CNCP) and the national register of vocational qualifications (RNCP) signals the establishment of the French national qualifications framework. Supported by the system for validation of non-formal and informal learning (*validation des acquis de l'experience*), the French framework can be seen as belonging to the first generation of European qualifications frameworks. While more limited in scope than the new comprehensive NQFs now developing throughout Europe, in its focus on vocationally or professionally oriented qualifications, its regulatory role is strong and well established.

A number of stakeholders consider the existing five-level structure dating back to 1969 to be in need of replacement, possibly by an eight-level structure more closely aligned with the EQF. This discussion has now been going on for a number of years, notably since 2009 when a note on the issue was submitted to the office of the Prime Minister. Partly due to the change of government in 2012, this reform has been further delayed and it is, for the moment, unclear when a new structure could be put in place.

The framework was referenced to the EQF in October 2010, using the original five-level structure as reference point. A new referencing report will be submitted as soon as a revised structure is in place, possibly in the next one to two years.

Main policy objectives

The French NQF, as defined by the RNCP, covers all vocationally or professionally oriented qualifications, including all higher education qualifications with a vocational and professional orientation and purpose [89]. The framework covers three main types of qualification:

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[89] The RNCP currently covers more than 6 000 qualifications published (in the Official Journal) certificate (qualifications) 'fiches'; 1 260 of these are 'old' certificates not awarded any more. By October 2012, certificates in higher education grades are as follows: 870 masters have been published, 323 titres d'ingénieurs (grade of master), 160 licences generales (grade of bachelor), 1 523 licences professionnelles grade of professional bacelors), 1 280 level 5 EQF (including higher education short cycles), 117 brevet de technicien supérieur (BTS), (in 2011) 29 BTSA (same thing in the field of agriculture), (in 2011) 43 DUT (diplomes universitaires technologique).

- those awarded by French ministries (in cooperation with the social partners through a CPC);
- those awarded by training providers, chambers and ministries but where no CPC is in place;
- those set up and awarded by social partners under their own responsibility.

To be registered in the RNCP, a qualification should meet a number of requirements; aiming at national coherence and strengthening the overall quality and transparency of qualifications. All qualifications registered in the RNCP must be possible to acquire through validation of non-formal and informal learning. Registration signals that all stakeholders, as represented in the CNCP, underwrite the validity of a particular qualification. Registration is necessary for:

- receiving funding;
- financing validation of non-formal and informal learning;
- exercising certain professions and occupations;
- entering apprenticeship schemes.

The French NQF has more limited scope than the comprehensive NQFs now being developed throughout Europe. Its focus is strictly on vocationally or professionally oriented qualifications and it does not include certain qualifications from general education, notably primary and lower secondary education (>16) and general upper secondary qualifications (the General *Baccalaureate*).

The French NQF is defined by its labour market focus. The framework responds to a situation where students increasingly find themselves without jobs after finishing education and training. Recent policy initiatives and reforms have emphasised the need to give higher priority to employability and having candidates better suited to the labour market. Universities have therefore been obliged to reformulate and clarify their qualifications also in terms of labour market relevance, in effect obliging them to use the same qualifications descriptors (skills, knowledge, competence) as other areas of education and training. This movement towards employability, and the obligations of universities to adapt, has been present in French policies since 2006.

This also means that, while the learning outcomes approach is now increasingly being implemented for the qualifications forming part of the responsibility of the CNCP, this principle is only to a very limited extent applied for general education at primary, lower and upper secondary level.

Stakeholder involvement and framework implementation

Belonging to the first generation of European frameworks, the French NQF is fully implemented and operational. It is a regulatory framework playing a key role in the overall governance of education and training systems, in particular as regards vocationally or professionally oriented qualifications. While emphasising the importance of transparency (for example by integrating the Europass tools), the framework directly influences access and progression in the system as well as funding and quality assurance issues. The number of qualifications covered by the CNCP has been steadily increasing in recent years.. A significant part of this growth was caused by vocationally and professionally oriented higher education qualifications, notably at EQF levels 5 and 6.

The CNCP (which is aslo an EQF NCP) is a platform for cooperation between all ministries involved in design and award of qualifications (Ministries of Education, Higher Education, Labour, Social Affairs, Agriculture, Culture, Youth and Sports, Defence, Finance) and for the social partners and other relevant stakeholders (chambers, etc.) in coordinating the French qualifications system and framework. This broad involvement is seen as necessary (both for technical and administrative reasons) to capture the diversity of qualifications in France, but also for reasons of credibility and ownership. CNCP is also entitled to be informed about any vocational qualification created by social partners, even in cases where there is no intention to register them in the national register.

The role of the CNCP as the 'gatekeeper' of the French framework is important. No qualification can be included in the official register without the approval of the CNCP. The strength of the CNCP lies in its openness to public and private providers and awarding institutions. The procedures and criteria developed and applied by the CNCP for this purpose are of particular interest to those countries currently in the process of implementing new (and open) NQFs. Any institution (public or private) wanting to register a qualification must respond to the following main issues:

- legal basis of the body (or network of bodies) awarding the qualification;
- indication of procedures if the awarding institution discontinues its activity;
- description of tasks addressed by the qualification;
- link to ROME;
- the competences (learning outcomes) related to these tasks;
- competences (learning outcomes) to be assessed;
- mode of assessment;
- relationship to existing qualifications in France and abroad;
- composition of the assessment jury;
- link to validation.

The French experiences since 2002 illustrate the need for NQFs to evolve continuously to stay relevant. One of the issues currently being addressed is the question of opening up to the development of qualifications at what would correspond to EQF level 2. Until now there has been agreement between public authorities and social partners that vocationally and professionally oriented qualifications (falling within the mandate of the CNCP) should only be developed and awarded from level 3 and upwards. This position has been defended by the trade unions in particular, fearing that an opening up to vocational qualifications at lower levels could threaten existing labour market agreements. The current crisis in the economy, with increasing youth unemployment, may lead to reconsideration of this approach. Technical work continues, looking at possible competence requirements for level 2 qualifications, using the experience of neighbouring countries like Luxembourg and Germany as reference point. It is expected that progress will be made in 2013, reflecting the current urgency attributed to this question.

Level descriptors and learning outcomes

The original five-level structure introduced in 1969 was used as the basis for referencing the French framework to the EQF in 2010.

The French qualification system has developed considerably since these levels were agreed in 1969 so the development and introduction of a more detailed structure of level descriptors is seen as necessary. In 2011, the national council on statistics (CNIS) commented on the need for a new level structure (CNCP, 2010) [90] by stressing that it '...would like to see these reflections lead to a new classification of certifications that take into account changes in the structure of qualifications and the links set up within European higher education.'

Although it is likely that a seven or eight-level structure will be chosen (based on technical work carried out so far), it is now unclear when a new draft structure could be presented. A particular issue is how the new structure will link to occupational standards, notably the national ROME and the international ISCO. The discussion is also closely related to the question of whether qualifications corresponding to EQF levels 1 and 2 will play any role in the future. This latter question is linked to labour agreements and negotiations on minimum wages and is particularly complicated.

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[90] *Referencing of the national framework of French certification in the light of the European framework of certification for lifelong learning.*
http://ec.europa.eu/eqf/uploads/file/Report-FR-NQF-EQF-VF.pdf
[accessed 5.12.2012].

Table 10   **Levels in the French national qualifications framework**

Level	Level definition	Learning outcomes
V	Personnel holding jobs normally requiring a level of training equivalent to that of the vocational studies certificate (BEP) or the certificate of vocational ability (CAP), and by assimilation, the level 1 certificate of vocational training for adults (CFPA).	This level corresponds to full qualification for carrying out a specific activity with the ability to use the corresponding instruments and techniques. This activity mainly concerns execution work, which can be autonomous within the limits of the techniques involved.
IV	Personnel holding jobs at a supervisory highly skilled worker level and able to provide proof of a level of training equivalent to that of the vocational certificate (BP), technical certificate (BT), vocational *baccalaureate* or technological *baccalaureate*.	A level 4 qualification involves a higher level of theoretical knowledge than the previous level. This activity concerns mainly technical work that can be executed autonomously and/or involve supervisory and coordination responsibilities.
III	Personnel holding jobs normally requiring a level of training equivalent to that of a diploma from a University Institute of Technology (DUT) or a technology certificate (BTS) or a certificate corresponding to the end of the first higher education cycle.	A level 3 qualification corresponds to higher levels of knowledge and abilities, but without involving mastery of the fundamental scientific principles for the fields concerned. The knowledge and abilities required enable the person concerned to assume, autonomously or independently, responsibilities in design and/or supervision and/or management.
II	Personnel holding jobs normally requiring a level of training comparable to that of a bachelor or master's degree.	At this level, exercise of a salaried or independent vocational activity involves mastery of the fundamental scientific principles for the profession, generally leading to autonomy in exercising that activity.
I	Personnel holding jobs normally requiring a level of training above that of a master's degree.	As well as confirmed knowledge of the fundamental scientific principles for a vocational activity, a level 1 qualification requires mastery of design or research processes.

In contrast to the use (to now) of the 1969 level structure as a basis for the French framework, there is a common policy on learning outcomes (expressed as 'competence') covering the entire (vocationally and professionally oriented) education and training system. This approach is broadly accepted within initial vocational education and training and gradually so by institutions operating at higher levels of education and training. The approach was strengthened by the 2002 Law on Validation of Non-formal and Informal Learning (VAE) and its emphasis on learning outcomes as the basis for awarding any kind of certified qualification.

The learning outcomes approach has only been partially introduced in higher education. Traditionally, university qualifications have been input-based and very much focused on the knowledge and research aspect. The new law of August 2009 (*Loi sur les responsabilités et libertés des université*s) creates the obligation for universities to set new services dedicated to employability. This law requires universities to improve their learning outcomes descriptions, both for employers and students.

The learning outcomes descriptions form the basis on which higher education qualifications are approved by the CNCP, a process which has to be renewed every four years. The Ministry of Higher Education has now (September 2012) issued ([91]) detailed criteria for writing learning outcomes for bachelor level (licences) divided into the following main areas:

- common generic competence;
- pre-professional competences;
- transferable competences;
- specific competences related to broad, disciplinary subject areas.

There are also many interuniversity teams working on learning outcomes with the triple purpose of helping the implementation of the VAE, the registration of degrees in the RNCP, and employability of students. A systematic effort is now being made to support the introduction and use of a learning outcomes-based perspective, in particular addressing higher education. A nationwide process was initiated in 2009-10 and regional meetings have been/are being held explaining the rationale behind the learning outcomes approach.

Initial vocational qualifications are defined according to the same logic as for higher education qualifications, in terms of skills, knowledge and competences. There are different forms of VET provision though, influencing the way learning outcomes are assessed, following four main approaches:

([91]) Ministere de l'enseignement superieur et de la recherche, 16 July 2012.

- qualifications based on training modules, the learning outcomes of each module being assessed separately;
- qualifications based on a two-block approach, theory and practical experience, the learning outcomes of the two blocks being assessed separately;
- qualifications linked to a single, coherent block of learning outcomes/ competences requiring a holistic approach to assessment of learning outcomes;
- qualifications based on units of learning outcomes, which can be assessed separately, and capitalised independently of any kind of learning process.

All four operate using a learning outcomes/competence-based approach, though in different ways.

The emphasis given to transparency is demonstrated by the way the French NQF actively uses the Europass certificate supplement. This format is seen as important for transparency reasons and as relevant at all levels, including higher education. The supplement has been strengthened as regards competence/learning outcomes. The main focus is on the three descriptor elements – knowledge, skills and competences – but the link to quality assurance and to validation of non-formal and informal learning is also addressed by the framework.

Links to other instruments and policies

Validation of non-formal and informal learning is treated as an integrated part of the French NQF and any qualification approved by the CNCP must be possible to acquire also on the basis of validation of experiences. The extensive use of validation, both for access and exemption, can be seen as an effort to build bridges between education and employment and as a key element in promoting lifelong and life-wide learning. The centrality of validation in the French approach explains the relatively low priority given to the use of credit systems in France, illustrated by the moderate implementation of ECTS and ECVET.

Referencing to the EQF

Work on referencing to the EQF has been going on since 2006 and a (preliminary) referencing report was presented to the EQF AG in October 2010. From the start the referencing process involved all ministries, social partners and other stakeholders (represented in the CNCP). The referencing work was also

supported by the EQF test and pilot projects, notably the Leonardo da Vinci Net-testing project. The result of the referencing can be seen in the following table:

Table 11 **Level correspondence established between the French qualifications framework and the EQF**

French 5-level structure	EQF
I – Doctorate grade	8
I – Master grade	7
II – Bachelor grade	6
III	5
IV	4
V	3
Not applicable	2
Not applicable	1

The referencing table shows the limitations of the five-level structure in terms of specificity and ability to reflect the diversity of qualifications covered by the French framework. This is exemplified by level 1 (highest) which covers both master and doctorate, and by level 5 (lowest) which covers all initial qualifications.

The (lack) of lower level vocational/professional qualifications has posed a particular challenge. Looking at the qualifications covered by the current level 5, it could be argued (from learning outcomes) that this broad category of qualifications covers both levels 2 and 3 of the EQF. A political decision has been made, however, to refer all these qualifications to level 3 of the EQF. Several of the countries represented in the EQF AG expressed some concern regarding this decision. Members of the advisory group argued that the non-existence of lower level qualifications in the French framework (in a worst case scenario) could prevent migrants holding qualifications at EQF level 1 or 2 from entering the French labour market, given that equivalents officially do not exist in the French system. Debate on this issue is now also evident at national level in France.

The timing for the presentation of an updated referencing report to the EQF AG is now uncertain and will depend on the revision of the level-structure and possibly on clarification of how to deal with the lower levels of vocational/professional qualifications.

Important lessons and the way forward

The French NQF operates with less clear distinction between VET and higher education than many other European countries. This signals a wish to promote vocationally and professionally oriented qualifications at all levels. Since the 1970s, vocational courses and programmes have been an important and integrated part of traditional universities and professional bachelor and master degrees are common. Outside universities we find specialist technical and vocational schools offering courses and certificates at a high level. These schools are run by different ministries covering their respective subject areas (agriculture, health, etc.), or by chambers of commerce and industry. *Ingénieurs* from these institutions or students in business schools hold qualifications at a high level, equivalent to those from universities with a master degree. The Ministry of Higher Education delivers the bachelor and master degrees and recognises the diplomas. This has an integrating effect on the diplomas awarded by other ministries such as culture or industry.

In reality, the situation is less clear-cut. As the French qualifications framework is currently defined by those qualifications registered in the RNCP, important general education qualifications are left outside the framework. Compared to other European countries, addressing both professional and general qualifications, the integrating function and role of the French framework is lessened, in particular as a key-qualification like the general Baccalaureate is kept outside the framework.

The introduction of a new level structure to replace the 1969 structure could help to move the French NQF further forward and strengthen comparability to other European NQFs.

Main sources of information

Information is available on the website of the National Committee for Professional Certification (CNCP). http://www.cncp.gouv.fr [accessed 6.12.2012].

GERMANY

Introduction

A final agreement on a comprehensive national qualifications framework for lifelong learning based on learning outcomes (*Deutscher Qualifikationsrahmen*, DQR) was adopted in March 2011 by the working group Arbeitskreis DQR [*Bundesministerium für Bildung und Forschung* (BMBF); *Kultusministerkonferenz* (KMK), 2011] [92]. In a high level meeting on 31 January 2012, stakeholders extended the agreement to align important qualifications from vocational education and training and higher education to the DQR levels. For the moment, qualifications from general education (for example the school leaving certificate, *Abitur*) are not included in the framework. The decision on this has been postponed and will be reviewed after a five-year period.

The DQR is the result of lengthy development work which started in 2006, when the Federal Ministry of Education and Research (BMBF) and the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* [regions] agreed to work together on it in response to the emerging EQF. Following extensive preparatory work, a proposal for a German NQF was published in February 2009. This proposal provided the basis for extensive testing to be followed by full scale implementation. The piloting stage (May-October 2009) used qualifications from four selected sectors (IT, metal, health and trade) as 'testing ground' to link qualifications to DQR levels. A broad range of stakeholders, including experts from school-based and work-based VET, continuing education and training, general education, HE, trade unions and employers, collaborated in testing the proposal [93]. Following the evaluation of the testing phase, amendments to the original proposal were introduced, for example to the level descriptors.

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[92] *The German qualifications framework for lifelong learning adopted by the 'German qualifications framework working group'*.
http://empleo.ugr.es/unilo/documentos/dqr_document_en_110322.pdf
[accessed 20.5.2012].

[93] http://www.deutscherqualifikationsrahmen.de/SITEFORUM?t=/documentManager/sfdoc.file.content&e=UTF-8&i=1215181395066&l=1&pathID=1282918786834 [accessed 5.12.2012].

Main policy objectives

Germany has actively supported the EQF initiative from the start and the extensive effort put into developing the DQR reflects this. The EQF, with its insistence on the learning outcomes perspective, is seen as an opportunity to classify German qualifications adequately and to use it as a tool to improve opportunities for German citizens in the European labour market (Hanft, 2011, p. 50) [94].

The learning outcome approach is seen as a catalyst for strengthening the coherence of the whole education and training system, linking and integrating various subsystems and improving progression possibilities [95]. The shift to learning outcomes is seen as a precondition for strengthening the overall permeability (*Durchlässigkeit*) of German education and training. Learners should be allowed to move between levels and institutions according to their actual knowledge, skills and competences, and be less restrained by formal, institutional barriers.

The DQR and the shift to learning outcomes have been seen by some stakeholders, notably the social partners, as an opportunity to focus on the parity of esteem between general and vocational education and training.

Another important issue is that providers of continuous training and those who provide training for groups at risk see opportunities to become part of the integrated system and offer better progression possibilities (Hanft, 2011, p 52) [96].

These considerations have been translated into a series of objectives, with the DQR expected to:

- increase transparency in German qualifications and aid recognition of German qualifications elsewhere in Europe;

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[94] The changing relevance of the *Beruf*. In: Brockman, M. et al. *Knowledge, skills and competence in the European labour market: what's in a vocational qualification?*. '... the clear outcomes and competence orientation of the EQF is first and foremost seen as an opportunity to classify German qualifications more adequately than existing international classifications, such as ISCED-97 or the 2005 EU directive for recognition of qualifications based on types of certificates and time spent in education and training.'

[95] One important principle of DQR is that each qualification level should always be accessible via various education pathways.

[96] The changing relevance of the *Beruf.* In: Brockman, M. et al. *Knowledge, skills and competence in the European labour market: what's in a vocational qualification?* 'One of the main concerns in the last 15 years in Germany is increased enrolment into the so-called 'transitional sector', where students stay for about 0.5-1.5 years; this includes different training schemes, which do not lead to full qualifications. 70-80% of students move into the dual system or full-time vocational schools afterwards.'

- support the mobility of learners and employees between Germany and other European countries and within Germany;
- improve the visibility of the equivalence and differences between qualifications and promote permeability;
- promote reliability, transfer opportunities and quality assurance;
- increase the skills orientation of qualifications;
- reinforce the learning outcomes orientation of qualification processes;
- improve opportunities for validation and recognition of non-formal and informal learning;
- foster and enhance access and participation in lifelong learning.

Stakeholder involvement and framework implementation

The development of the DQR is characterised by a bottom-up and consensus-seeking approach. A national steering group (*Bund-Länder-Koordinier-ungsgruppe*) was jointly established by the BMBF and the KMK at the beginning of 2007. This coordination group has appointed a working group (*Arbeitskreis DQR)* which comprises stakeholders from higher education, school education, VET, social partners, public institutions from education and the labour market as well as researchers and practitioners. Decisions are based on consensus and each of the members works closely with their respective constituent institutions and organisations.

At the beginning of 2012 an agreement was reached to assign qualifications from vocational education and training and higher education to the DQR levels ([97]). Additionally, a working group has developed 11 recommendations for inclusion of non-formal and informal learning in the DQR. In November 2012, the working group *Arbeitskreis* published a position paper with a proposal to establish a working group, which will align 'examples' of qualifications from the non-formal sector to the DQR ([98]).

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[97] The relationship between initial vocational qualifications acquired in the dual system, secondary school leaving certificate giving access to universities (*Abitur*) and higher education qualifications has been at the heart of discussions for many months. Ultimately it was decided, that general education qualifications will be included after a five year implementation period.

[98] See *Empfehlungen der Arbeitsgruppe zur Einbeziehung nicht-formal und informal erworbenen Kompetenzen in den DQR*.
http://www.deutscherqualifikationsrahmen.de/de/aktuelles/empfehlungen-der-experten-arbeitsgruppen-und-stell_h7i39o5t.html?s=7Li0EFHjokI9UolLT [accessed 12.12.2012].

A coordination point for the German qualifications framework has been set up in a joint initiative of the Federal government and the *Länder*. It has six members, including representatives from the BMBF and Federal Ministry of Economics and Technology and the KMK and the Conference of Ministers of Economics of the *Länder*. Its main role is to monitor the allocation of qualifications to ensure consistency of the overall DQR structure. The direct involvement of other ministries, social partners, representatives of business organisations and interested associations is, when their field of responsibility is concerned, ensured by the Federal Government/*Länder* coordination point for the German qualifications framework.

The German Qualifications Framework Working Group (Arbeitskreis DQR) remains active as an advisory boy and retains its former composition ([99]).

On behalf of the BMBF, a DQR *Büro* (DQR office) has been set up to provide technical and administrative support.

Level descriptors and learning outcomes

An eight-level structure has been adopted to cover all main types of German qualification.

Level descriptors describe the competences required to obtain a qualification. The overall structure is guided by the established German terminological and conceptual approach referring to *Handlungskompetenz*. The DQR differentiates between two categories of competence: professional and personal. The term competence lies at the heart of the DQR and signals readiness to use knowledge, skills and personal, social and methodological competences in work or study situations and for occupational and personal development. Competence is understood in this sense as comprehensive action competence (see below). Methodological competence is understood as a transversal competence and is not separately stated within the DQR matrix. The German DQR expresses only selected characteristics; the comprehensive and integrated notion of competence, underlying the DQR has a strong humanistic and educational dimension ([100]).

([99]) Federal Ministry of Education and Research and the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder*. *German EQF refercning report*. November 2012.

([100]) *Handlungskompetenz* in vocational school curricula is not restricted to the world of work, but implies individual ability and readiness to act adequately socially and individually responsible.

Descriptors are expressed as alternatives, e.g. 'field of study or work' and 'specialised field of study or field of occupational activity'. The table of level descriptors (DQR matrix) and a glossary are included in the DQR outline.

The broad and inclusive nature of level descriptors, using parallel formulations, makes it possible to open up all levels to different kinds of qualifications. That means that higher levels are not restricted to qualifications awarded within the Bologna process.

Table 12   **Level descriptors in the German qualifications framework for lifelong learning**

Level indicator ([101])			
Structure of requirements			
Professional competence		Personal competence	
Knowledge	Skills	Social competence	Autonomy
Depth and breadth	Instrumental and systemic skills, judgment	Team/leadership skills, involvement and communication	Autonomous responsibility, reflectiveness and learning competence

Each reference level maps comparable, rather than homogenous, qualifications. One of key principles of DQR is that 'alignment takes place in accordance with the principle that each qualification level should always be accessible via various educational pathways' (BMBF; KMK, 2011, p. 6) ([102]).

Orientation to learning outcomes is increasingly becoming standard in education, vocational training and higher education (BMBF; KMK, 2012) ([103]).

In VET, continuous development of the concept of *Handlungskompetenz* (ability to act), introduced in 1990s, has gradually assumed a key role in a qualifications definition, with clear input requirements about place, duration and content of learning. Competence-based training regulations and framework curricula with 'learning field' have been developed.

([101]) This is just the analytical differentiation; the interdependence between different aspects of competence is emphasised. See final outline, p. 5.

([102]) *The German qualifications framework for lifelong learning adopted by the 'German qualifications framework working group'* (AK DQR), 22 March 2011.
http://empleo.ugr.es/unilo/documentos/dqr_document_en_110322.pdf
[accessed 5.5.2012].

([103]) *German EQF referencing report*, p. 96.

Competence orientation is also characteristic of the reform process in general education and development of national *Bildungsstandards.* They currently exist for German and mathematics in primary education (*Hauptschule*); German, mathematics and first foreign language for the intermediate leaving certificate (*Realschule*); and German, mathematics and foreign language for the upper secondary school leaving certificate (*Abitur*) ([104]). In higher education, the modular structure and a learning outcome oriented description of the study modules are key prerequisites for the approval of a study course.

Links to other instruments and policies

The DQR, with its clear learning outcomes approach, also aims at improving opportunities for recognising informally acquired learning outcomes and strengthening lifelong learning. Promoting permeability across subsystems is also an explicit aim. Although the DQR does not have regulatory functions in this respect – being the province of other education policies – it will be an important tool to support it (Büchter et al., 2012) ([105]). Germany is active in ECVET implementation: it is currently testing an ECVET blueprint for mobility within EU projects and has piloted units and credits to improve progression within VET (e.g. between transition system and dual system or school-based VET and dual system or between VET and higher education ([106]).

Referencing to the EQF

The joint steering committee set up by the Federal government and the *Länder* in 2007 is in charge of referencing, supported by the DQR office. The referencing report was presented in December 2012.

Table 13 **Level correspondence established between the German framework of qualifications (DQR) and the EQF**

DQR	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

([104]) Ibid., p. 98.

([105]) *Der Deutsche Qualifikationsrahmen (DQR) – Ein Konzept zur Erhöhung von Durchlässigkeit und Chancengleichheit im Bildungssystem?*

([106]) For more information consult the DECVET website http://www.decvet.net/de/Projektpartner/site__185/ [accessed 5.12.2012].

Important lessons and future plans

First, the development of the DQR is embedded in the broader context of reforms to strengthen the outcomes-based orientation of German education and training. It is also linked to initiatives to support permeability within VET and between VET and HE, e.g. the ANKOM initiative ([107]) involves stakeholders from VET and higher education to support recognition of learning outcomes.

Second, the development of the DQR is also characterised by a comprehensive vision and a coherent set of level descriptors, spanning all levels of education and training. This approach makes it possible to identify and better understand the similarities and differences between qualifications in different areas of education and training. A permeable system with better horizontal and vertical progression possibilities is at the heart of DQR developments, as is parity of esteem between VET and general education and efforts to include non-formal and informal leaning.

Third, there are intense discussions about the influence the new paradigm may have on the *Beruf* as the main organising principle in German VET and on the labour market. It is feared that a learning outcome approach could split VET qualifications into different levels, leading to their fragmentation and individualisation. Other concerns are that NQF might undermine the value of qualifications by creating confusion, mixing different spaces of recognition and blurring the distinction between different types of knowledge (Hanft, 2011, p. 66; Gehmlich, 2009, pp. 736-754) ([108]).

Fourth, NQF development is also characterised by a strong and broad involvement of stakeholders from all subsystems of education and training (general education, school and work-based VET, HE), and from the labour market, ministries and *Länder*.

([107]) For more information see http://ankom.his.de [accessed 5.12.2012].

([108]) The changing relevance of the Beruf. In: Brockman, M. et al. *Knowledge, skills and competence in the European labour market: what's in a vocational qualification?* Kompetenz' and 'Beruf' in the context of the proposed German qualifications framework for lifelong learning. *Journal of European industrial training*, Vol. 33, No 8/9, pp. 736-754. http://www.emeraldinsight.com/journals.htm?issn=0309-0590&volume=33&issue=8&articleid=1822051&show=html [accessed 26.11.2012].

Fifth, stakeholders also agreed that alignment of the qualifications within German education to the reference levels of the DQR should not replace the existing system of access. Achieving the reference level of the DQR does not provide automatic entitlement to access the next level. The achievement of the reference level has also not been considered in conjunction with the implications for collective wage bargaining and the Law on Remuneration (BMBF; KMK, 2011, pp. 5-6). These are issues to be discussed in the coming years.

A 5-year implementation phase with scientific evaluation is planned.

Main sources of information

The Federal government/*Länder* coordination point assumes the functions of the EQF NCP. Information on the DQR development is available at http://www.deutscherqualifikationsrahmen.de [accessed 7.12.2012].

GREECE

Introduction

Greece is currently developing an NQF for lifelong learning (Hellenic qualifications framework, HQF), which aims to include all parts and levels of education, training and qualification and will accommodate non-formal learning.

The new Act on Lifelong Learning (Act 3879/10) was put in force in September 2010, introducing the development of the HQF and the concept of learning outcomes as essential elements of awards.

Preparatory actions have started. A new institution – National Organisation for the Certification of Qualifications and Vocational Guidance (Eoppep) – was set up in December 2011 to develop and put the HQF into practice. Mapping of existing and older qualifications has started to prepare foundations for the NQF. This is supported by methodological instruments (e.g. methodological guides for referencing learning outcomes to HQF levels) available since February 2011. It contains information on the basic principles and methodology on how to express qualifications in terms of learning outcomes and referencing them to the HQF levels.

Main policy objectives

Apart from responding to the EQF initiative, the work on the NQF is directly linked to the country's efforts to develop a framework for further improving lifelong learning policies and practices, which will allow for recognition and certification of all kinds of education and training, including non-formal learning. Compared to other EU countries, the participation of adults in lifelong learning in Greece is among the lowest ([109]) and systematic and coherent policies have largely been lacking. Strengthening the learning outcomes dimension in all parts of education and training is considered a precondition for moving towards lifelong learning. This will not only provide the basis for a more transparent and open qualification

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([109]) In 2010 only 3% of adults (25-64) participated in lifelong learning compared to European average of 9.1%. The national target is to reach 6% of adult participation in lifelong learning by 2013. European Commission (2011). *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020), country analysis for Greece*, p. 59.
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf [accessed 10.5.2012].

system, it will also allow individuals to have their learning validated and recognised throughout their lives. The new Law on Lifelong Learning (Law 3879/10), adopted in September 2010 is an important milestone in these developments. There is also broad agreement among different stakeholders on the need to put a validation system in place but practical arrangements have not yet been made. Recognition of learning outcomes was largely dependent on attainment in formal education and training (European Commission et al., 2010, Greece, p. 5) ([110]) and the system was largely input based.

It is agreed that the NQF could help to address the following challenges and needs:

- to increase coherence and consistency of the national qualification system and reduce fragmentation of current subsystems;
- to improve access and progression possibilities, eliminate dead ends and foster lifelong learning opportunities;
- to develop coherent approaches and procedures to certification and quality assurance;
- to have a solid basis for developing recognition for non-formal and informal learning.

The short-term objective is to develop coherent national certification procedures covering both IVET (there is an existing system) and CVET to support the consistency and portability of qualifications.

In the medium term the following objectives will be pursued:

- to improve the transparency and currency of qualifications through clear learning outcomes description;
- to develop procedures for validating non-formal and informal learning;
- to improve access, progression and recognition possibilities;
- to improve quality and portability of qualifications in general.

Long-term objectives will be developing coherent lifelong learning strategies and practices, improving the coherence of national reform policies, and using the NQF as a development instrument for change.

([110]) *European inventory on validation of non-formal and informal learning 2010: country report: Greece.* http://libserver.cedefop.europa.eu/vetelib/2011/77459.pdf [accessed 26.11.2012].

Stakeholder involvement and framework implementation

The Ministry of Education, Religious Affairs, Culture and Sports is the main national body in charge of developing and implementing the HQF. Stakeholders from public institutions, social partners, representatives of universities and external experts are included. The Ministry of Labour has not been involved so far.

Eoppep was set up to put the HQF and procedures for validation of learning outcomes into practice and assure quality in lifelong learning.

Level descriptors and learning outcomes

According to the Law on Lifelong Learning, the HQF will be a comprehensive framework covering all parts and levels of education and training. An eight-level structure has been proposed reflecting existing formal education and training systems in Greece. EQF level descriptors were taken as a starting point and further developed according to national needs. Levels are defined in terms of knowledge, skills and competence. Work on level descriptors for HQF and on a qualifications framework for higher education has been taking place separately, but the final objective is to have a comprehensive framework, covering all levels and types of qualifications.

Strengthening the learning outcomes approach is seen as an important dimension of current reforms in primary, secondary and tertiary education. A system for occupational standards is currently being developed, seen as a precondition for setting up a system for validating non-formal leaning. Additionally, these profiles will be used to review curricula in both initial and continuous VET and for accreditation of training programmes. The new curricula currently being developed are based on the learning outcomes approach.

These developments are supported by the methodological guide for referencing the learning outcomes to the HQF levels and promoting common understanding of the basic terms. They will also render the procedures transparent and promote quality assurance, while assigning qualifications to the HQF levels. A common template for description of qualifications has been prepared.

Working groups have been formed under the auspices of the Ministry of Education, Religious Affairs, Culture and Sports to draft the outcomes of qualifications provided in subsystems of formal education and to suggest their allocation to the eight levels of the HQF. This work continues on a technical level.

In general education, a framework for developing a 'new school' has been launched politically and renewal of curricula is planned.

Development works on the QF for higher education have started but level descriptors have not yet been prepared. It is expected that this work will reinforce the learning outcome approach in reorganisation of learning procedures and curricula to promote interdisciplinary and mobility in HE.

Links to other tools and policies

The HQF aims to include non-formal qualifications, mainly awarded in adult and continuing vocational training, and to support the validation and recognition of individual learning outcomes. The new Lifelong Learning Act provides the basis for a more coherent and integrated approach as the coordination of all issues to lifelong learning (including adult learning and initial and continuing VET) is now under the Ministry of Education; previously this was under the remit of the Ministry of Employment (European Commission et al., 2010, Greece, p. 6) ([111]). Further work needs to be done to put the new legal framework into practice: a system for accrediting the bodies which will be responsible for certifying the qualifications awarded outside formal education is planned.

Referencing to the EQF

The referencing of the national qualifications system levels to the EQF is scheduled to take place in 2013.

Important lessons and future plans

The involvement of a broad range of stakeholders in HQF development and implementation is seen as crucial, but also a challenge. All subsystems of formal education and training are included via the Ministry of Education, but there is a challenge to link two current development processes, one on NQF for lifelong learning and QF developments in HE. Also, the Ministry of Labour has not yet been involved.

Other challenges ahead include the referencing of the HQF of international sectoral qualifications, as well as of those qualifications acquired through

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([111]) *European inventory on validation of non-formal and informal learning 2010: country report: Greece*. http://libserver.cedefop.europa.eu/vetelib/2011/77459.pdf [accessed 26.11.2012].

programmes run by foreign universities, which cooperate with private institutions in Greece. There is a clear division between non-university, mostly private, institutions and the university sector, which is public and charges no fees in accordance with the Greek Constitution. Universities have the exclusive right to award traditional higher education qualifications (MA, BA and Doctorate). Referencing higher education qualifications awarded outside traditional universities, using learning outcomes-based level descriptors, is seen as a challenge.

Compared to many other EU countries, Greece has a weak tradition of using learning outcomes for defining and describing qualifications. The main challenges are seen in putting into effect the shift to learning outcomes and developing all necessary methodologies, procedures and standards. It is expected that the HQF will provoke reform of education and training and improve links to the labour market. It will bring to the attention of the general public issues of lifelong learning, validation, informal learning, and quality assurance.

Main sources of information

The National Organisation for Certification of Qualifications and Vocational Guidance (Eoppep) is designated as the NCP.

http://www.nqf.gov.gr/ΑρχικήΣελίδα/tabid/36/Default.aspx [accessed 7.12.2012].

HUNGARY

Introduction

A comprehensive NQF for lifelong learning was adopted in July 2012 by government decree and published in the Hungarian Official Journal. It will embrace all national qualifications that can be acquired in general and higher education and those vocational qualifications registered in the national qualifications register. All subsystems are included in accordance with the broad (general) national level descriptors which will allow subsystems to adopt more specific descriptors. These developments are designed to support validation and recognition of non-formal and informal learning.

The national register of VET qualifications and the current revision of professional and examination requirements in VET, as well as continuing fine-tuning in the cycle system and the focus of regulation towards outcomes in higher education in the Bologna process, contribute to the establishment of a single comprehensive NQF.

Main policy objectives

The development of an NQF will address the following issues:
- promote harmonisation of the different subsystems, helping the national qualification system to become more coherent, and supporting national policy coordination ([112]);
- improve transparency, transferability and comparability of national qualifications by showing the relationship between qualifications (there are many qualifications at levels 4, 5 and 6);
- support lifelong learning and enable stronger links between adult learning and formal education, awareness-raising related to different learning paths, in the long term: recognition of a broader range of learning forms (including non-formal and informal learning);
- reinforce the use of learning outcomes in standard-setting, curricula and assessment ([113]) and contribute to the establishment of a common approach for describing learning outcomes in different subsystems;

([112]) The connections between the management of public education, higher education, vocational education and training and adult training have been weak to date and developments are separated from each other.

- through referencing the NQF to the EQF, make Hungarian qualifications easier to understand abroad and make them more comparable, and more transparent, enhancing mutual trust;
- improve the relevance of qualifications in the labour market;
- support the career orientation and counselling system.

The NQF could play an important role in supporting lifelong learning in Hungary. Adult participation, at 2.8% in 2010, is below the EU average (European Commission, 2011) [114].

Stakeholder involvement and framework implementation

Overall responsibility for the development and implementation of the NQF is shared between the Ministry of Human Resources and the Ministry of National Economy.

The conceptualisation of an NQF started in early 2006 under the Ministry of Education and Culture (now part of the Ministry of Human Resources) and the Ministry of Social Affairs and Labour (whose responsibilities are now transferred to the Ministry of National Economy). In June 2008 the government adopted a decision (No 2069/2008) on the development of an NQF for lifelong learning and on joining the EQF by 2013 [115]. During 2008-10 the NQF developments were taken forward as part of the social renewal operational programme of the new Hungary development plan (2007-13), mostly funded by the European Social Fund (ESF) and European Regional Development Fund (ERDF) [116]. A new government decision (No 1004/2011) was adopted in January 2011, which further supports the establishment of a Hungarian qualifications framework to be referenced to the EQF. Based on this decision, the relevant ministries worked

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[113] The Hungarian education system has traditionally been characterised by a content-based approach to education and assessment with substantial differences between study fields and programmes.

[114] *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020), country analysis*, pp. 64-70. http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf [accessed 5.12.2012]

[115] 2069/2008 (VI. 6) *Korm határozata az Európai Képesítési Keretrendszerhez való csatlakozásról és az Országos Képesítési Keretrendszer létrehozásáró [government decision (No 2069/2008) on the development of an NQF for lifelong learnin*g]. http://www.okm.gov.hu/kozoktatas/2069-2008-kormhat [accessed 5.12.2012].

[116] *Social renewal operational programme 2007-13.* http://www.nfu.hu/?lang=en [accessed 5.12.2012].

together to create – in their respective fields of competence – the necessary legal, financial and institutional conditions for implementing the NQF.

An intergovernment task force was set up in February 2011 to programme, harmonise and monitor all phases of NQF development and implementation. It is chaired by the Deputy State Secretary for Higher Education and Science. It comprises representatives from all the ministries, the National Council for Public Education, the National Labour Office, the Hungarian Rectors' Conference, the Higher Education Planning Council, representatives of the Hungarian Chamber of Commerce and Industry. As the technical work is carried out in three separate projects according to the subsystems of education (VET, HE, public education), cross-subsystem cooperation seems to be a challenge.

Administrative support to the task force is provided by the Educational Authority. The national coordination point has been established as a project unit within this institution with the main task of coordinating the stakeholders and preparing the referencing process.

Level descriptors and learning outcomes

An eight-level structure has been adopted. Learning outcomes levels are defined in four categories: knowledge, skills/abilities, attitudes and autonomy/ responsibility. The descriptors were based on analysis of existing approaches in the relevant subsystems. Further, subsector-specific developments are planned.

The focus on learning outcomes has strong support among different stakeholders and is the subject of research studies in different education and training subsystems. In recent years, a number of steps have been taken towards a learning outcomes and competence-based approach. As of 2007, a national core curriculum based on key competences has been put in place in school-based education and the national competence assessment has been introduced in public education. Since 2006 the final secondary school examination (maturity examination) has been reformed, enabling more accurate assessment of competences acquired by students. The new core curriculum and curriculum framework of 2012 reregulated the content requirements of public education to achieve unified learning outcomes and results. The new regulation enforced the knowledge elements so they are in balance with the competences.

In VET, the national qualifications register (NQR) was reformed and competence-based vocational qualifications referenced into a five-level structure were developed.

The shift to learning outcomes in post-secondary VET involved the introduction of competence profiles, which are used as the basis for qualifications

and curricula design and are at the core of the competence-based examination system. Qualifications consist of core and optional modules. Advanced VET has been reorganised: it now belongs within the scope of HE. Learning outcomes descriptions were prepared in cooperation with providers in 2012 and higher education quality assurance measures apply.

In higher education learning outcomes have appeared in qualifications requirements through regulatory measures and acts. All first and second cycle higher education qualifications in Hungary are described in terms of both inputs and outcomes criteria. However, student-centred learning, outcomes-based orientation and use of learning outcomes in designing programmes and learning units are still key challenges in HE.

Referencing to the EQF

The draft referencing report is expected to be prepared and presented to the EQF AG by 2013.

Important lessons and future plans

One of the main roles of the NQF is to function as an interface between education and the labour market; therefore, it is crucial to get stakeholders on board. As NQF development is running within three separate projects, following three subsystems (VET, HE, public education), cross-subsystem cooperation is a challenge. There is some kind of coordination mechanism established through representation in the intergovernment task force ([117]).

Main sources of information
The Educational Authority delegates the member of the EQF advisory group, and the role of EQF national coordination point is also carried out by this background institution.

([117]) NCP survey, September 2012.

ICELAND

Introduction

Iceland is currently developing a national framework (ISQF) covering all levels and types of qualification. The framework will consist of seven learning outcomes based levels. Work started in 2006 and has been closely linked to the reform of the entire Icelandic education training system. While there is currently no single act or decree introducing the ISQF, its role and mandate are explicitly stated through a series of acts and decrees introduced between 2006 and 2012. Starting with the Act on Higher Education and followed by acts on pre-school education, compulsory education, upper secondary education, teacher training and adult education, a sufficiently strong formal basis exists for the framework to be able to move into an early operational stage during 2013. The ISQF is characterised by a clear borderline between levels 1 to 4 and levels 5 to 7. The development of these two parts of the framework has, to some extent, taken place separately and responds to the EQF and Bologna processes respectively (with separate referencing to the EQF and self-certification to the QF-EHEA).

Main policy objectives and scope of the framework

The ISQF is defined as a lifelong learning framework and aims to encompass all levels and types of education and training offered in the country, including adult education. The framework starts with, and is anchored to, general reform of Icelandic education and training initiated by the Act on Higher Education, adopted in 2006. While this act referred to the Bologna process and the introduction of a three cycle approach for Icelandic higher education, the acts on upper secondary education in 2008 and on adult education in 2010 address the remaining parts of education and training and point towards a comprehensive national qualifications framework.

The Icelandic NQF – through its systematic application of learning outcomes – is seen as a tool for reviewing the overall functioning of education and training and supporting long-term reform. This is exemplified by the Act on Upper Secondary Education which provides for a new approach to design and construction of study programmes. Education providers will gradually (and to be fully implemented from 2015) enjoy more autonomy in writing curricula in general education and VET. They will do this using an approach combining learning outcomes, workload and credits.

So far, no separate legislative basis has been developed for the ISQF: this has been deemed unnecessary due to the integration of framework developments into the 2006-10 reform. While this provides a strong legislative basis for the different parts of the framework, moving towards a comprehensive framework may be hampered by the fact that levels 1 to 4 and 5 to 7 have been developed in separate and parallel processes.

Stakeholder involvement of and framework implementation

A wide range of stakeholders from education and training, as well as the labour market, has been involved in developing the ISQF. Apart from the political debate surrounding the preparation and passing of the education and training acts (between 2006 and 2010), representative working groups have been active during all stages of the process. Development of framework structures has been combined with extensive efforts to introduce the learning outcomes perspective in curricula and in teaching and learning practices. The following main steps can be identified:

- the Ministry initiated the work on descriptors for lower ISQF levels in 2008 and 2009. Draft qualifications level descriptors were published and representatives of various academic and vocational study programmes, and students, were invited to discuss the proposal. All upper secondary schools in Iceland were invited to discuss the framework and its potential role and function. Between 2009 and 2012 the Ministry of Education (also acting as EQF NCP) has set up more than 20 working groups involving representatives of education and training and occupational sectors. These have played a key role in developing level descriptors and in agreeing on how the different qualifications can best be articulated in terms of learning outcomes and subsequently levelled to the NQF and the EQF;
- active involvement of this broad group of practitioners has significantly contributed to the 'anchoring' of the NQF proposal not only in education and training but also among labour market stakeholders. The new general curriculum guides for pre-schools, compulsory schools and upper secondary (May 2011) can be seen as resulting from this work, as can the new descriptions (standards) for vocational qualifications currently being developed;
- the Icelandic higher education sector started work on linking to the QF-EHEA in 2007, preceding the work on the comprehensive NQF. It is agreed that the three cycles of the higher education framework will provide the three

highest levels in the Icelandic NQF. Opening up of these levels to qualifications outside the university system has not yet been discussed;

- the higher education sector has only been partly involved in developing the NQF, the consequence being that the relationship between vocational and academic qualifications (and levels) has not been fully discussed and articulated. The framework has generally been received positively by the different stakeholders. This also applies to teachers and trainers who are actively involved in continuing reforms related to learning outcomes, curricula and key-competences.

Level descriptors and learning outcomes

Iceland has decided to introduce a seven-level framework based on knowledge, skills and competence-oriented descriptors. Compared to the EQF, competences are expressed in more detail and reflect the importance attributed to key competences. The development of level descriptors for the ISQF has formed an important part of this overall strategy to shift to learning outcomes. The NQF descriptors for level 1 to 4 were published in the national curriculum guide for upper secondary school in May 2011. The descriptors for three higher education levels were published in the form of a decree in 2011. Combined, these two-level approaches add up to a seven-level NQF.

The descriptors are increasingly being used to guide initiatives in different parts of education and training. This exemplified by the newly published national curriculum guide for primary schools. Some discussion has taken place on the role of the lower levels of the framework, whether it is sufficiently inclusive and whether it will serve individuals entering the system with few or no formal qualifications. Early proposals included entry levels; these were eventually not included in the proposal.

The shift to learning outcomes is seen as an important part of the reform of Icelandic education and training. A systematic use of learning outcomes, referring to a national set of descriptors, is seen as important for the future design of qualifications.

Links to other instruments and policies

The introduction of a system for recognising non-formal and informal learning is an integrated part of the effort to establish an NQF. The work on validation started in earnest in 2002 and the Ministry of Education has given the Education and Training Service Centre the role of developing a national strategy. This strategy will involve cooperation with lifelong learning centres, upper secondary schools, labour associations and other stakeholders linked to sectors.

The NQF will aid validation by offering increased transparency of qualifications and by introducing a more systematic approach to learning outcomes, thus clarifying the standards to be applied for validation. The existence of explicitly defined levels distinguishing knowledge, skills and competences will make it easier to integrate validation arrangements fully. The potential of assigning courses to levels should also lead to non-formal and informal learning. Validation is explicitly mentioned by the 2008 and 2010 Laws on Upper Secondary and Adult Education, with these arrangements as fully integrated parts of the formal system.

Referencing to the EQF

Preparations for referencing to the EQF have started; it is expected to be completed in 2013. During 2012 it has become clear that the five Nordic countries have different views on where to place primary and (lower) secondary education certificates in their frameworks. While Denmark and Iceland see EQF level 2 as the most appropriate location, Finland and Sweden favour level 3. As these countries have previously considered these qualifications as broadly similar, this has caused concern over the consistency of application of the learning outcomes principle.

Important lessons and the way forward

The ISQF is well linked to overall reform of Icelandic education and training. This may be seen as a strength and has already made it possible for the framework to be used as a tool for supporting continuing reform. A main challenge in the next few years is to continue the process of dialogue and information and gradually increase understanding of the framework, its impact on quality assurance, and how it aids international comparison.

The relationship between levels 1 to 5 and 6 to 8 will require more attention in the coming period. The parallel development of these two segments of the framework will need to be better connected in the next period.

Main sources of information

Information and documents covering the Icelandic developments can be found at http://namskra.is/ [accessed 7.12.2012] and http://eng.menntamalaraduneyti.is/Acts [accessed 7.12.2012].

IRELAND

Introduction

Ireland has implemented a comprehensive and learning outcomes based framework of qualifications (NFQ). The 10 levels of the framework capture all learning, from initial stages to the most advanced.

The majority of current and legacy national awards are now included in the NFQ, including those made by the State Examinations Commission, Further Education and Training Awards Council (FETAC), Higher Education and Training Award Council (HETAC) ([118]), the universities and the Dublin Institute of Technology (DIT).

Main policy objectives

The national objective of moving towards a 'lifelong learning society', in which learners can benefit from learning opportunities at various stages throughout their lives, was a key factor in the changes that have taken place in Ireland. This led to the need for a more flexible and integrated system of qualifications that could recognise all learning acquired by learners in Ireland. The policy goals of the Irish NFQ were to:

- create an open, learner-centred, coherent, transparent and widely understood system of qualifications in Ireland that is responsive to the needs of individual learners and to the social and economic needs of the country;
- ease access, transfer and progression opportunities for learners within and across the different levels and subsystems of education and training;
- increase mobility through understanding and recognition of Irish qualifications abroad and fully participate in the Bologna and Copenhagen processes.

It is important to note that NFQ is an inclusive framework, open to qualifications awarded outside the remit of national authorities. A number of awards made by professional and international awarding bodies are now included in the framework according to the policies and criteria published by the National Qualifications Authority (National Qualifications Authority of Ireland ([119]).

([118]) HETAC is the qualifications awarding body for higher education and training institutions outside the university sector.

([119]) http://www.nqai.ie/awardsframework.html [accessed 5.12.2012].

Stakeholder involvement and framework implementation

Development of the national framework of qualifications has been coordinated by the National Qualifications Authority of Ireland (NQAI), which was established in 2001 by the Department of Education and Science and the Department of Enterprise, Trade and Employment. A new agency, Quality and Qualifications Ireland, was established on 6 November 2012 under the Qualifications and Quality Assurance (Education and Training) Act 2012. The new Authority is being created by an amalgamation of four bodies that have both awarding and quality assurance responsibilities: the Further Education and Training Awards Council, the Higher Education and Training Awards Council, the National Qualifications Authority of Ireland and the Irish Universities Quality Board (IUQB). The new Authority will assume all the functions of the four legacy bodies while also having responsibility for new or newly-statutory responsibilities in particular areas [120]. This is an important step in consolidating the governance structure for deepening the implementation of the comprehensive NFQ.

The NFQ has reached an advanced operational stage, in particular by promoting more consistent approaches to the use of learning outcomes across different subsystems, especially in the sectors led by FETAC and HETAC. In universities and the school sector, NFQ implementation was by agreement and the impact has been more gradual and incremental.

The process was strongly supported by major stakeholders in the country. The NFQ has become widely known and is used as a tool for supporting other reforms and policy development in education, training and qualification. The visibility and currency of the NFQ inside and outside the education and training environment has increased (National Qualifications Authority of Ireland, 2009a) [121].

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[120] Based on the qualifications and quality assurance (Education and Training) Act, 2012). http://www.oireachtas.ie/documents/bills28/acts/2012/a2812.pdf [accessed 5.12.2012].

[121] *Framework implementation and impact study: report of study team.* http://www.nqai.ie/documents/FIISreportFINALsept2009.pdf [accessed 5.12.2012]. The study emphasises the importance of further strengthening the visibility of the framework in relation to the labour market (assisting development of career pathways, certifying learning achievements acquired at work, guidance, etc.).

Level descriptors and learning outcomes

The NFQ uses learning outcomes based levels. Each level has a specified level descriptor and at each level there are one or more award types also expressed in terms of learning outcomes. For each award type there are a wide range of qualifications which have been developed by awarding bodies. The 10 levels of the framework capture all learning, from initial stages to the most advanced; qualifications achieved in schools, further education and training and higher education and training are included.

Each level of the NFQ is based on nationally agreed standards of knowledge (breadth, kind), know-how and skills (range, selectivity) and competence. Competence is subdivided into context, role, learning to learn, insight. Knowledge, skills and competences are defined as expected learning outcomes to be achieved by the qualification holder.

Four classes of award-type have been determined: major, minor, special-purpose and supplemental. This is to ensure that the framework is capable of recognising all types and sizes of learning achieved by a learner.

The learning outcomes approach was central to the establishment of the NFQ and associated legislation and system reforms. The outcomes are indicators of what a person knows, can do and understands, rather than time spent on a programme. The determinations for the NFQ state that new framework awards are made using learning outcomes. The NFQ is intended to act as a reference point for curriculum development leading to NFQ recognised qualifications. The framework implementation and impact study (National Qualifications Authority of Ireland, 2009a) concluded that a learning outcomes-based approach has been implemented in all subsystems, but is progressing at variable speeds and that the NFQ had a stronger reform role in sectors led by FETAC and HETAC. NFQ implementation was generally slower than expected: '(…) there may still be a gap between redesigned and rewritten programmes and actual delivery and perception of these on the ground' ([122]).

Links to other instruments and policies

The Qualifications Authority has put in place various supporting policies; e.g. on access, transfer and recognition. These policies relate to access to programmes

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([122]) *Framework implementation and impact study: report of study team*, p. 39.
http://www.nqai.ie/documents/FIISreportFINALsept2009.pdf [accessed 5.12.2012].

of education and training, transfer between programmes and progression from one programme to another at a higher level of the NFQ ([123]).

National principles and guidelines for recognition of prior learning were developed. However, the framework implementation and impact study (National Qualifications Authority of Ireland, 2009a) identified obstacles and areas for improvement in the operation and application of recognition of prior learning. As an example, there appear to be inconsistencies in implementing policies or resistance to developing minor awards in some areas, e.g. in relation to crafts awards.

Referencing to the EQF

The referencing of the Irish NFQ to the EQF was completed in 2009. It built on the experiences and conclusions of the self-certification of the compatibility of the Irish NFQ with the QF-EHEA, completed in 2006.

Table 14   **Level correspondence established between the Irish national framework of qualifications (NFQ) and the EQF**

NFQ	1	2	3	4	5	6	7	8	9	10
EQF	1	1	2	3	4	5	6	6	7	8

Important lessons and future plans

Implementing the NFQ relies on the broad partnership approach, step-by-step development, and strong support of different stakeholders. The deeper the implementation, the more need for support from different stakeholders.

An international team of experts who prepared the framework implementation and impact study report summarised some key features in developing NQFs ([124]):

- the implementation of an NQF requires time to develop understanding concepts and to promote cultural change;
- the importance of stakeholder involvement in all phases of development and implementation to ensure ownership;

([123]) *Policies, actions and procedures for access, transfer and progression for learners.* http://www.nqai.ie/publication_oct2003a.html [accessed 5.12 2012].

([124]) http://www.nqai.ie/framework_study.html, p. 50 [accessed 5.12 2012].

- the NQF development is an iterative process, in which the existing education and training system and the framework are progressively aligned with each other;
- it is important to find balance between implementation within subsystems and cross-system developments;
- the need for a framework to be loose enough to accommodate different types of learning;
- qualifications frameworks may be more enablers than drivers of change; alignment with other supporting policies, institutional requirements is needed.

According to the study, awareness among the general public, following a marketing campaign was increased from 18% in 2006 to 32% in 2008.

Main sources of information

The most important information is available on the website of Quality and Qualifications Ireland (QQI), which is also the national coordination point.
http://www.qqi.ie/Pages/default.aspx [accessed 18.9.2012].

ITALY

Introduction

Italy has carried out technical work pointing towards a national qualifications framework ([125]). Political agreement is currently being sought on how to take this technical work forward ([126]), supported by the fact that, since 2003, reforms have been implemented in education and training (upper secondary general education and VET ([127]) and higher education) pre-empting the principles of a learning outcomes based NQF. The responsibility for taking forward this initiative is shared between the Ministry of Labour and Social Policies and the Ministry of Education, University and Research; the process is supported by regions and social partners.

In spite of not having secured political support for an NQF, Italy has started to link its qualifications levels to the EQF. According to the EQF recommendation this is possible, and Italy refers to the learning outcomes descriptions and definitions already in place for most of its education and training system. The Italian qualifications framework for higher education is already in place.

Main policy objectives

Italy faces a challenge of integrating different levels of lifelong learning systems into a coherent national qualification system. 'The absence of an explicit and adequately regulated national qualifications' framework is regarded as a barrier for taking forward coherent lifelong learning policies and validation of non-formal and informal learning and making learning pathways for lifelong learning more visible' (European Commission et al., 2010) ([128]). This is important to support

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([125]) EQF NCP survey, September 2012.

([126]) See also the 'Linee Guida per la Formazione' [Training guidelines] of February 17, 2010 signed by the Ministry of Labour, Regions and Social Partners, aimed at relaunching the national qualifications framework as a fundamental basis for the effectiveness and interoperability of non-formal and informal learning outcomes, in compliance with European indications.

([127]) Regulation for upper secondary school reform was approved by the Council of Ministers in February 2010. The institutional consultation round and the relevant information on reform can be found on http://nuovilicei.indire.it/ [accessed 5.12.2012].

([128]) *European inventory on validation of non-formal and informal learning 2010: country report: Italy*. pp. 1-3. http://libserver.cedefop.europa.eu/vetelib/2011/77467.pdf [accessed 5.12.2012].

participation of adults in lifelong learning, which was 6.2% in 2010, lower than the EU average of 9.1%. Also, labour market mobility between regions is hampered due to the fact that qualifications awarded in some regions are not always recognised in other regions (European Parliament; Directorate General for Internal Policies, 2012) ([129]).

The development of a 'national regulated system of qualifications' – in the direction of an NQF – would respond to several needs:

- it should make the integration of the different systems within the national context easier;

- it responds to the request of the EQF recommendation designed to ease dialogue between education systems and the labour market;

- it should make individual geographic and professional mobility easier, both at national and European levels;

- it should help individuals, along the course of their life, to capitalise on their non-formal and informal experiences. The system should promote social inclusion with reference to people who do not hold regular qualifications and competences needed in the labour market; the national system, based on the learning outcomes approach, and involving different stakeholders, is a precondition for validating non-formal and informal learning.

Evidence suggests that all the institutional, national and regional authorities (including the current government) are more explicitly aiming towards an NQF and a more clear commitment to EQF.

Stakeholder involvement and framework implementation

The Ministry of Education, University and Research and the Ministry of Labour and Social Policies are leading developments in EQF implementation, in agreement with the regions and autonomous provinces and the social partners as laid down in many agreements. At the technical level, the national institute for development of vocational training (ISFOL) set up the national methodologies and coordinates sectoral and professional expert groups involving social partners.

ISFOL is designated the NCP. Its main tasks include management of the EQF implementation process and preparing the technical referencing report,

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([129]) *State of play of the European qualifications framework implementation*, p.93 .
http://www.europarl.europa.eu/committees/en/studiesdownload.html?languageDocu
ment=EN&file=73578 [accessed 5.12.2012].

communication with stakeholders, and planning and implementation of the national qualifications database.

Level descriptors and learning outcomes

The NQF levels and level descriptors have not yet been defined, although there are components in place, e.g. QF for higher education (Quadro dei Titoli Italiani, n.d.) [130] and more recently at upper secondary level. Italy uses a learning outcomes approach and the EQF level descriptors as a basis for further developments.

Eight EQF levels and level descriptors have been used directly in the Italian referencing process to link all national qualifications from formal education and training to the EQF.

In the QF for higher education, Dublin descriptors are used nationally for three cycles agreed within the Bologna process. More specific descriptors are being defined for each programme by universities. Short cycle qualifications will be defined by subdescriptors taking into account differences in specific elements of qualifications (e.g. workload, length, access).

Italian education and training has introduced the learning outcomes approach at national and regional levels, with each subsystem having its own characteristics.

In February 2010, the reform regulation of the upper secondary education system was adopted [131].Three main secondary school pathways are introduced: general (lycées); technical and vocational education pathway, leading to five-year diplomas; and learning outcomes linked to the EQF.

In vocational training, where the regions have the main responsibility, according to the Italian constitutional reform (National Law No 3, October 2001, concerning modifications of V title of second part of Italian constitution) an update of the local qualification system adopting the learning outcomes approach has been launched. Curricula will be redesigned according to EQF indicators and descriptors. Three-year vocational qualifications and a four-year vocational diploma will be awarded. Implementation started in September 2010 and will continue up to 2013.

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[130] *Italian qualifications framework for higher education.*
http://www.quadrodeititoli.it/Index.aspx?IDL=2 [accessed 5.12.2012].

[131] Regulation for upper secondary school reform was approved by the Council of Ministers in February 2010. The institutional consultation round and the relevant information on reform can be found on http://nuovilicei.indire.it/ [accessed 5.12.2012].

The higher (non-academic) professional education and training pathway (IFTS) used a national standard system based on competences since 2000. After the decree of 25 January 2008, the National Committee on IFTS agreed to update the standards to make them more coherent with the learning outcomes approach. There will be a regional supply of training courses in IFTS (one year) and a national supply of IFTS courses (two years): the one-year courses are already based on national standards of profiles and competence units of learning outcomes but they will be suited to local needs. The two-year courses will soon be based on learning outcomes standards.

In academic education (universities) policy-makers strengthened the need to align diplomas and certificates to the commitments of the Bologna process. In particular, the national decree reforming the academic system (first cycle, three years) and Laurea Magistrale (second cycle, two years) states that the new programmes have to be based on learning outcomes compatible with Dublin descriptors.

Referencing to the EQF

The referencing report is scheduled to be presented in early 2013. Italy will reference its formal qualifications to the EQF without an NQF, adopting national methodology and criteria to present correlations between the national qualifications (and their learning outcomes) and the EQF levels.

Important lessons and future plan

Italy has been implementing reforms consistent with EQF principles and learning outcomes approach in various subsystems of education and training.

However, this process and linking implicit national levels to the EQF has been so far treated more as technical procedure (European Parliament; Directorate General for Internal Policies, 2012, p. 89) ([132]). Real discussions on national learning outcomes based qualifications levels, how qualifications from different subsystems (VET, HE, general education) are aligned to the explicit learning outcomes based levels, and how they relate to each other, seem to be pending. Clear political commitment seems to be lacking. The focus is now on

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([132]) European Parliament (2012). *State of play of the European qualifications framework implementation.*
http://www.europarl.europa.eu/committees/fr/studiesdownload.html?languageDocum
ent=EN&file=73578 [accessed 11.12.2012].

implementing the national Law on Labour Market, setting important priorities in defining national qualifications standards based on learning outcomes, and developing national register of qualifications and a national public certification system.

Main sources of information

For policy-related information the Ministry of Labour and Social Policies; for the technical level ISFOL; ISFOL acts as national coordination point. http://www.isfol.it [accessed 12.12.2012].

LATVIA

Introduction

Latvia has introduced an eight-level classification. Nationally recognised educational programmes from formal education system (i.e. from primary, secondary and higher education) are referred to a Latvian qualifications framework level (LQF) and linked to the EQF level. Master of crafts, journeyman and qualifications acquired in non-formal and informal learning will be attributed levels in the second phase (2013-15) of NQF development and consequently referenced to the EQF.

The present developments build on reforms initiated in the 1990s and, in particular, the introduction of a five-level structure of professional qualifications in 1999 (through the Vocational Education Law).

In October 2010, amendments to the Cabinet of Ministers regulations on the classification of Latvian education were approved. A new column was added to the table included in these regulations, outlining Latvian education stages and the respective programmes, and referencing each education programme to the LQF/EQF level. Additionally, eight-level descriptors, based on learning outcomes and developed in line with the EQF descriptors, were outlined.

Further developments are planned within the ESF supported projects (see below). Two important laws (Vocational Education Law and Higher Education Law) are in preparation. Both laws will further support the implementation of an eight-level national qualifications framework.

Main policy objectives

The framework, based on learning outcomes, is seen as an import tool for describing the Latvian education system both for international and national stakeholders, and for ensuring greater lifelong learning opportunities for all individuals according to their needs. Adult participation in lifelong learning in Latvia remains limited, only 5% of adults (age 25-64) participated in lifelong learning compared to EU average of 9.1% (European Commission, 2011, p. 84) ([133]).

([133]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020): country analysis*.
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf
[accessed 5.12.2012].

In this context, the development and implementation of a comprehensive LQF aims to:

- increase transparency and consistency of qualifications;
- develop a comprehensive NQF in line with the needs of lifelong learning;
- strengthen the link between the labour market and education;
- strengthen the cooperation of those involved in the design and award of qualifications;
- increase public understanding of national qualifications and ease their linking to the EQF.

The qualifications framework is based on the classification of education programmes in formal education and on current education provision. Implicit levels of education have been made explicit and linked to level descriptors, which describe expected levels of learning outcomes.

Stakeholder involvement and framework implementation

The Ministry of Education and Science has the leading role in developing and implementing the LQF. However, the ministry delegated responsibility for coordinating the referencing to the Academic Information Centre. In September 2009, a working group was set up to link Latvian qualifications to the EQF in accordance with the recommendation. The working group included representatives from ministries, national agencies, employer organisations, trade unions, student organisations, and education quality agencies. This working group mostly acted as a consulting and supervisory group, reviewing and approving materials prepared by the experts. There was the overall support of key institutions.

Consultation on the referencing report was organised and results presented to national conferences and workshops. It was emphasised that there is a need to communicate the results of the referencing to the wider audience and to strengthen ownership of the framework and commitment to implement it. Currently, awareness of the LQF remains low among the general public.

The Academic Information Centre has been appointed as the NCP and played a key role in coordination of the referencing process, preparing and updating the referencing report, and communication and dissemination of information among all relevant stakeholders.

Levels and descriptors and use of learning outcomes

An eight-level framework with level descriptors based on learning outcomes has been adopted. Level descriptors for each of these levels are defined as knowledge (knowledge and comprehension), skills (ability to apply knowledge, communication and general skills) and competence (analysis, synthesis and assessment). When developing the level descriptors, relevant state education standards, the EQF and Dublin level descriptors, and Bloom's taxonomy were used to provide evidence.

There is growing emphasis on learning outcomes in Latvia, although the term is not widely used and there is not yet a systematic approach. Skills and knowledge are commonly used terms.

Subject-based outcomes in general education have been defined in terms of knowledge, skills and attitudes. The compulsory education content is stated in the Cabinet of Ministers Regulations on the state standard in basic education and in basic education study subjects' standards (2006). The content of general secondary education is regulated by the Cabinet of Ministers Regulations on the state general secondary education standard and standards of general secondary education study subjects (2008).

The content of vocational education is regulated by state vocational education standards, occupational standards and vocational education programmes. The state vocational education standards determine the strategic aims of educational programmes, compulsory education content, and assessment principles and procedures for the education obtained. The occupational standards stipulate the basic tasks and obligations for the respective professional activities, the basic requirements of professional qualification, and the general and professional knowledge, skills, attitudes and competences needed to fulfil them. Vocational education programmes include the objectives and content of vocational education, an implementation plan, previous education requirements, and the necessary personal, financial and material resources. Programmes are developed by education establishments in line with the state education and occupational standards.

The framework for higher education is founded on three Bologna cycles, based on learning outcomes. They are defined as results of study programmes expected from an average student in the programmes (Academic Information Centre; Ministry of Education and Science of the Republic of Latvia, 2011) ([134]).

([134]) *Referencing of the Latvian education system to the European qualifications framework for lifelong learning and the qualifications framework for the European higher education area: self-assessment report.* http://www.nki-latvija.lv/wp-

The content of professional higher education programmes is determined by the relevant occupational standards and state education standards, which are outlined in the Cabinet of Ministers Regulations on the state first level professional higher education standard (2001). In July 2011, the Parliament (*Saeima*) adopted the Amendments to the Law on Higher Education Institutions which introduced the term learning outcomes.

Links to other instruments and policies

NQF developments are closely related to opening up the qualification system to competences acquired outside the formal system.

The system on validating professional competence obtained outside formal education is new in Latvia and was legally introduced in February 2011. Regulations stipulate the procedure for how professional competence (except for regulated professions) that corresponds to the EQF level 3 to 4 can be assessed, validated and recognised. In June 2011, the first qualifications were awarded using this procedure. For levels 5 to 8, in January 2012 the Cabinet of Ministers 'Regulations on recognising the learning outcomes acquired in previous education and professional experience' were approved to determine the procedures for assessing and recognising learning outcomes (for higher education) obtained during previous education or professional experience, as well as criteria for recognition.

Referencing to the EQF

Latvia referenced its national qualifications levels to the EQF and self-certified to the QF-EHEA in October 2011.

Table 15 **Level correspondence established between the Latvian qualifications framework (LQF) and the EQF**

LQF	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

content/uploads/2011/06/Latvian-education-system-referencing-to-EQF-Self-assessment-Report.pdf [accessed 5.12.2012].

Important lessons and future plans

The present referencing report is limited to formal qualifications; in a second phase, the exercise will be extended to include other qualifications accommodating the new legal regulations ([135]).

In the coming years several large projects with ESF support will support further development of the LQF. For example, the ESF project Development of sectoral qualification system and increasing efficiency and quality of vocational education (2010-13), aims to explore professions in 12 sectors by identifying relevant knowledge, skills and competences, and place these professions on the relevant LQF/EQF levels.

To promote the quality and efficiency of higher education, an ESF project for evaluating higher education programmes and developing recommendations has been launched within ESF activity. Improvement of study programme content in line with the needs of the national economy, implementation and development of academic personnel competence, and setting up a study field accreditation system are the main goals of this project.

Main sources of information

Information on the referencing process and the self-assessment report is available on the website of the Latvian national coordination point (Academic Information Centre). http://nki-latvija.lv or http://nqf-latvia.lv [accessed 5.10.2012].

([135])   NCP survey, September 2012.

LIECHTENSTEIN

Introduction

In February 2011, the government took the decision to develop an NQF for lifelong learning for Liechtenstein.

This decision was part of a process under way since Liechtenstein committed to the EQF in 2008. In December 2010, a proposal for a qualifications framework for higher education, in line with the QF-EHEA, was prepared (NQF.li-HE, 2011) ([136]). It will constitute an integral part of the NQF for lifelong learning. It is expected that the NQF will be established by spring 2014.

Since May 2011, the coordination and planning process has been under the National Agency of International Education Affairs (AIBA) in Liechtenstein.

NQF developments are coordinated with NQF development in Switzerland and Austria due to close connections with the education and training systems of these neighbouring countries. Most Liechtenstein students (in VET or higher education) do their studies in Switzerland but some also continue in Austria. An alignment of Liechtenstein NQF developments with framework developments in these countries, and particularly Switzerland, is crucial.

Policy objectives

One of the first objectives is to map and describe national qualifications in the NQF and to reference it to the EQF. It is planned that all new certificates will have reference to NQF and EQF levels.

In the longer term, NQF is seen as a tool which will support lifelong learning through better understanding of qualifications and learning opportunities, improved access to and participation in education and training, and participation, valuing all learning outcomes, in formal, non-formal and informal settings.

([136]) *Qualifikationsrahmen für den Hochschulbereich im Fürstentum Liechtenstein: NQF.li-HE, December 2011.* http://www.llv.li/pdf-llv-sa-nationaler_qualifikationsrahmen_entwurf_2011_12.pdf [accessed 5.12.2012].

Stakeholder involvement and framework implementation

Work on the NQF was initiated by the government. On behalf of the Ministry of Education, an expert from AIBA has been appointed to provide technical and administrative support to the process.

A steering group has been set up with representatives from the Office for Vocational Training and Career Counselling, the Ministry of Education (section higher education), the University of Liechtenstein, Chamber of Industry and Trade and the Chamber of Commerce, who are informed about progress and have the authority for final decisions.

For a public involvement and information there will be an NQFL homepage established by spring 2013, where all relevant information and updates can be seen and followed.

Liechtenstein started the Bologna process several years ago and this is now an integral part of the University of Liechtenstein. NQF developments will build on the experience with the development of the QF for HE.

Level descriptors and learning outcomes

Liechtenstein will have an eight-level framework though descriptors have not yet been formulated. Learning outcomes already play an important role in higher education and in the school system in general. VET qualifications are also evaluated in learning outcomes.

Referencing to the EQF

The referencing report will be adopted by the government in spring 2013.

Main sources of information
Ministry of Education. http://www.4icu.org/institutions/177.htm [accessed 24.8.2012].
National Agency of International Education Affairs (AIBA) in Liechtenstein.

LITHUANIA

Introduction

An eight-level Lithuanian qualifications framework (LTQF) was formally adopted through a government resolution 4 May 2010 (government of the Republic of Lithuania, 2010) ([137]). The LTQF is based on eight learning outcomes levels, and covers all officially recognised qualifications in primary and secondary general education, vocational education and training and higher education. The formal framework has been further strengthened through two amendments to the Law on Education (17 March and 24 August 2011) clarifying its role and function. A joint referencing/self-certification to the EQF and QF-EHEA was completed in late 2011, underlining the comprehensive character of the framework. The LTQF has now entered an early operational stage.

Rationale and the main policy objectives

The development of the LTQF forms part of a decade-long effort to reform and modernise Lithuanian education and training. The national education strategy for the period 2003-12 stresses the need for flexible and open education structures, for better coordination between general and vocational education and training, and for stronger links to non-formal and informal learning ([138]). The LTQF emerged from this strategy and addresses five main objectives:

- the framework should play a role in better adapting qualifications to the needs of the labour market and society;
- it should help to improve the clarity of the design of qualifications to improve assessment and recognition;
- it should increase transparency of qualifications and assist individuals in using them;
- it should support national and international mobility;
- it should encourage lifelong learning and allow individuals to build on outcomes of non-formal and informal learning.

([137]) *Resolution on approving the description of the Lithuanian qualifications, 4 May 2010.* http://www.kpmpc.lt/LTKS_EKS/LTQF_official_translation.pdf [accessed 5.12.2012].

([138]) Parliament of the Republic of Lithuania, 4 July. *Provisions for the national education strategy 2003-12.* http://planipolis.iiep.unesco.org/upload/Lithuania/Lithuania_National_Education_Strat egies_Provisions_2003-2012.pdf [accessed 20.12.2012].

The Lithuanian NQF is based on complete (full) qualifications. However, and according to the 2011 referencing report to the EQF, the medium- and long-term strategy is to introduce units of qualifications defined as the combinations of the competences needed for executing certain tasks. It offers the potential for referencing the qualifications units to certain levels of the NQF, but such possibilities are not yet foreseen in legal documents.

The LTQF includes qualifications awarded by formal education and training. There are currently no plans to open the framework up to qualifications offered by the private or non-formal sector.

Stakeholder involvement and framework implementation

Work on the NQF was initiated by the Labour Market Training Authority of Lithuania, which launched the ESF -funded project for the design of the NQF in 2006. Following extensive technical work, a National Authority of Qualifications was established in 2008 to coordinate NQF implementation. This authority was abolished in 2009, following the election of new Parliament late 2008; the Ministry of Education and Science then took over the main responsibility for NQF development in 2009 and has retained this role since. The Qualifications and VET Development Centre (QVETDC) has been appointed as the national coordination point for EQF and will take on the day-to-day responsibility for promoting and implementing the LTQF.

The development of the LTQF since 2009 has been dominated by stakeholders from education and training. Both the vocational and higher education sectors have contributed actively and jointly to the process, paving the way for one comprehensive framework. The limited direct involvement of social partners in the process does not mean, however, that the link to the labour market has been overlooked. The framework has a clear labour market orientation, for example defining qualification 'as the ability and right to engage in a certain professional activity recognised under the procedure established by laws, legal acts adopted by the government or an institution authorised by the government' (Qualifications and VET Development Centre, 2012) [139]. This orientation is also reflected by the activity focused level descriptors (see below), referring back to the work on VET-standards developed since the late 1990s.

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[139] *National report 2012: referencing the Lithuanian qualifications framework to the European qualifications framework for lifelong learning and the qualifications framework for the European higher education area.*
http://ec.europa.eu/eqf/documentation_en.htm [accessed 26.11.2012].

The influence of labour market stakeholders has been strengthened by the involvement of the Central Professional Committee in the referencing of the LTQF to the EQF. This is a tripartite committee, established under the Law on VET, signalling that an operational LTQF will require active involvement of stakeholders outside the education and training. This broadening of the LTQF base is also reflected by the fact that the Ministry of Economy (responsible for the human resource development strategy in Lithuania) was involved in the referencing of the LTQF to the EQF.

Level descriptors and use of learning outcomes

The eight levels of the LTQF combine the existing structure of the Lithuanian qualifications system with principles introduced by the EQF. The group of experts involved in designing the framework took as their staring point the two existing level arrangements, the five vocational education levels introduced in 1997 (and updated in 2001), and the three levels of higher education introduced in 1992. Combined with the priority attributed to the referencing to the EQF, it was decided that eight levels would be the optimal number for the LTQF. It is interesting to note that while qualifications equivalent to level 5 were awarded by vocational colleges until 2004, there are currently no qualifications being awarded at this level. It has been indicated that this may change in the future as the potential for developing advanced vocational education and training is of particular interest.

The level descriptors are defined according to two parameters: characteristics of activities and types of competences.

While the distinction between cognitive, functional and general competences broadly reflects the EQF distinction between knowledge, skills and competence, the criteria on activity can be seen as a further development and specification of the autonomy, responsibility and context aspects introduced – explicitly and implicitly – in the EQF descriptors. The combination of the two parameters results in a detailed description of each level. The slightly different descriptor logics of the LTQF and the EQF was not considered to create difficulties for the referencing, which was generally considered transparent by the EQF AG in 2011.

Table 16   **Level descriptors in the Lithuanian NQF**

Parameters		
	Characteristics of activities	**Types of competences**
Criteria	• complexity of activities • autonomy of activities • variability of activities	• functional competences • cognitive competences • general competences

The learning outcomes (competence) approach is broadly accepted and implemented in Lithuanian vocational education and training. VET uses a learning outcomes (competences) based approach both for definition of standards and for their translation into curricula.

The university sector is still at an early stage in using learning outcomes for defining and describing degrees and qualifications. A national project for implementing the ECTS system has been launched recently; this may support the use of learning outcomes in defining higher education degrees and qualifications. In vocationally oriented higher education, standards are already defined and described in terms of competences.

The current learning outcomes situation reflects different traditions and approaches. While VET has made some progress in standards and curriculum design, the provision of training is mostly oriented to subject and time/duration; learners are only partly able to tailor their own learning programme or pathway.

The implementation of the LTQF is seen as part of a strategy to move towards a more consistent and comprehensive use of learning outcomes across education and training levels and types.

Links to other tools and policies

There is currently no comprehensive strategy on validation of non-formal and informal learning in Lithuania. The LTQF is, however, seen as an instrument which can promote practices in this area and the existence of competence based standards in VET is seen as a positive factor. Recent legal reforms in education and training have also favoured validation and the report on EQF referencing states that political preconditions for recognition of prior learning now are in place. No plans currently exist for the introduction of ECVET in Lithuania though implementation of ECTS for higher education has started.

Referencing to the EQF

The Lithuanian NQF was referenced to the EQF in November 2011, with one integrated report covering both the EQF and QF-EHEA. The report outlines a one-to-one relationship between LQF and EQF levels.

Table 17 **Level correspondence established between the Lithuanian qualifications framework (LTQF) and the EQF**

LTQF	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

Important lessons and future plans

The LTQF has now moved into an early operational stage and its relevance to education and training and labour market stakeholders will have to be demonstrated in the coming years. It will be even more important to demonstrate the relevance of the framework to ordinary citizens and learners, a challenging task as the framework and its potential usefulness is relatively little known outside those committees and institutions that have developed it. In this sense Lithuania faces many of the same challenges as other emerging NQFs.

Main sources of information

The Qualifications and VET Development Centre (QVETDC) has been appointed as the EQF NCP.
More information to be found at http://www.lnks.lt [accessed 12.3.2013].

LUXEMBOURG

Introduction

Following an initiative of the Ministry of Education, a first outline of a comprehensive NQF was presented to the Council of Ministers in early 2009. While seen as broadly reflecting the existing qualifications system of Luxembourg, government approval was deemed necessary as it challenged some accepted features of the system, notably by placing vocational qualifications on par with general qualifications. Based on an initial governmental go-ahead, detailed work continued during 2010 and 2011, resulting in an eight-level Luxembourg qualifications framework (CLQ) covering all types and levels of qualifications. The framework is linked to adult education and to validation of non-formal and informal learning.

While the Law on VET adopted in autumn 2008 paves the way for the framework, in particular by stressing the need to promote a shift to learning outcomes, no separate legislative basis has been introduced for the CLQ. While some ambiguity remains as regards the formal/legal status of the framework, all other elements are in place, allowing the CLQ now to move into an early operational stage.

Main policy objectives

Development and implementation of the EQF is seen as an opportunity to make explicit the existing education and training levels and the relationships between them. This is important not only for the users of qualifications (to support lifelong learning for individuals and to enable employers to see the relevance of qualifications) but also for education and training providers. The explicit levels of learning outcomes introduced by the framework are expected to function as a reference point for curriculum development and may thus help to improve overall consistency of education and training provisions. Increased transparency of qualifications is a key objective underpinning the Luxembourg national framework. The CLQ is seen as contributing to the overall modernisation of national education and training. One element in favour of the CLQ is the geographical and labour market location of Luxembourg. Being host to a large number of workers from neighbouring countries like Belgium, Germany and France, Luxembourg sees the development of the NQF as a way to aid comparison and recognition.

In a second stage, the CLQ will open up to qualifications awarded outside the existing, official system. This reflects the high number of citizens holding this kind of 'unofficial' and non-recognised certificates and diplomas. To accomplish this, specific approaches to accreditation and quality assurance of these new qualifications have to be put in place. The CLQ is thus very much in line with the open approach applied to the French framework and the objectives set by the Netherlands, Belgium-Flanders, Sweden and Finland.

While procedures for inclusion of these non-traditional qualifications will be necessary as a part of the new framework, the system for validating non-formal and informal learning can aid a more open and flexible approach. The validation system forms an integrated part of the framework as any qualification at any level can be achieved either through school or by having prior learning assessed and validated (the only exception for the moment being the *Baccalaureate*).

Stakeholder involvement and framework implementation

The NQF process is being coordinated by the Ministry of Education in cooperation with the Ministry of Higher Education.

Following the first discussions on the framework in the Council of Ministers, broad consultation was launched towards the end of 2010. Besides a general approval of the plans for the NQF, main comments have been on the legal status of the framework and on the issue of lifelong learning, including the link to non-formal and informal learning. A particular issue being considered is the specific character of the Luxemburgish labour market and the implications of this for qualifications. The high immigration rate and the large proportion of foreign workers makes it necessary to pay particular attention to the coherence of the frameworks with those of neighbouring countries.

The attitude of higher education towards the NQF was originally sceptical. Stakeholders from this sector argued that EQF levels 6 to 8 should be mainly based on the Dublin descriptors of the EHEA. Following discussions during 2009 and early 2010 a common set of descriptors have been accepted by all stakeholders. This also provided the basis for common referencing/self-certification to the EQF and QF-EHEA in 2012.

Level 5 is now seen as the bridging level between both subsectors: in this level we find both VET and higher education qualifications. This means that the *Meister* qualification (Master craftsman) has been placed at level 5, beside the higher technician certificate (BTS).

Level descriptors and learning outcomes

Luxembourg has introduced an eight-level reference structure. While the number of levels corresponds with the EQF, the descriptors reflect the national tradition and context. At each level, descriptors are differentiated according to knowledge, skills and attitude *(connaissances, aptitudes, attitudes)*. While the level of detail is higher, the relationship to the EQF can be clearly identified. This is, for example, the case for the third ('attitude') column which is based on the principles of responsibility, autonomy and context, as is the case with the EQF.

The decision to use these concepts reflects gradual development of a learning outcomes or competence-based approach in vocational education and training. During the 1970s and the 1980s this approach was influenced by German tradition. The experiences related to the development of professional standards played a particularly important role as education standards were directly deduced from these. In recent years these approaches have been further developed through extensive cooperation with a number of other European countries, notably those with a dual VET system (Austria, Denmark, Germany and Switzerland). Links to France are also strong, partly influencing the way qualifications are designed and described.

The situation concerning use of learning outcomes (or 'competences') in Luxembourg education and training varies between subsystems. In initial vocational education, the 2008 law provided the basis for the introduction of a module-based system referring to learning outcomes. All qualifications have been described using learning outcomes and can be accessed via the register of the Ministry of Education and Vocational Training ([140]). For secondary education and training (both general and technical) progress is more mixed. Work continues on defining and describing the competence basis of these qualifications: information on this is available from the Ministry of Education ([141]) and the longer term aim is that the use of learning outcomes should apply to the entire secondary education system. Higher education is organised in modules lasting one semester, each constituting assessable units allocated credit points (ECTS). These modules are only partly defined and described using learning outcomes.

([140]) http://programmes.myschool.lu [accessed 5.12.2012].

([141]) http://www.men.public.lu/competences/index.html [accessed 5.12.2012].

Links to other tools and policies

Validation of non-formal and informal learning has become more important in recent years in Luxembourg and is now becoming central in the definition of priority actions for education and training. The 2008 Law on VET, recently complemented by the *Règlement grand-ducal du 11 janvier 2010*, introduces the legal basis on which validation arrangements are being put into practice. These arrangements are an integrated part of the education and training system, forming an alternative pathway for acquiring a formal qualification. This principle applies to all qualifications at all levels, including university qualifications. The only exception is the general upper secondary school leaving certificate, which is not described through learning outcomes. Validation may take a number of forms, ranging from granting somebody access to education and training to granting somebody a full qualification on the basis of their prior learning.

The adoption of the new Law on VET in 2008 allowed use of a modularised system. These modules can be assessed separately and can be seen as building blocks for ECVET. For the moment this link between the modularised and competence based approach and ECVET is not explicitly addressed by the CLQ; this may change in the future.

Referencing to the EQF

Luxembourg referenced its qualifications levels to the EQF and the QF-EHEA in June 2012 as illustrated below.

Table 18 **Level correspondence established between the Luxembourg qualifications framework (CLQ) and the EQF**

CLQ	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

Main sources of information

Ministère de l'Education nationale et de la Formation professionnelle acts as NCP. http://www.men.public.lu/ [accessed 12.3.2013].

MALTA

Introduction

Malta has been putting its comprehensive national qualifications framework for lifelong learning (Malta qualifications framework, MQF) in place since June 2007. It encompasses qualifications and awards at all levels, provided though formal, non-formal and informal learning.

Important developments took place in 2012 with amendments to the Education Act, which established the legal basis for the National Commission for Further and Higher Education (NCFHE), replacing the Malta Qualifications Council and the National Commission for Higher Education. Three legal notices were published: on quality assurance and licensing of further and higher education institutions and programmes; on validation of informal and non-formal learning; and on strengthening the legal basis of the MQF for lifelong learning as a regulatory framework for classification of qualifications and awards ([142]).

Main policy objectives

The MQF addresses the following issues:
- transparency and understanding of qualifications;
- valuing all formal, informal and non-formal learning;
- consistency and coherence in relating to different qualifications frameworks in European and international cooperation;
- parity of esteem of qualifications from different learning pathways, including vocational and professional degrees and academic study programmes;
- lifelong learning, access and progression, and mobility;
- the shift towards learning outcomes-based qualifications;
- a credit structure and units as building blocks of qualifications;
- the concept of mutual trust through quality assurance mechanisms that cut across all levels of the framework.

([142]) See Legal Notice 294. Malta Ministry of Education and Labour. Education Act. http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=23719&l =1 [accessed 5.12.2012].

The MQF is seen as an important tool to put lifelong learning and adult learning opportunities into practice. Adult participation in lifelong learning is modest at 5.7% in 2010, below the EU average (9.1% in 2010). The other policy challenge is a high rate of early school leavers, which accounted for 36.9% in 2010 (European Commission, 2011, pp. 100-105) ([143]).

Stakeholder involvement and framework implementation

A wide range of stakeholders has been involved with the MQF. The Malta Qualifications Council (MQC) initiated the work following Legal Notice 347 of 2005, in cooperation with all stakeholders including the National Commission for Higher Education (NCHE).

Following amendments to the Education Act in 2012, the MQC and the National Commission for Higher Education have been merged into a new body – the National Commission for Further and Higher Education – which decides on the inclusion of qualifications in the framework. This new agency provides strategic policies for further and higher education, promotes and maintains the MQF, accredits and licenses all further (post-secondary) and higher education institutions and programmes and assists training providers in designing qualifications, assessment and certification.

Qualifications included in the MQF should satisfy the following conditions:
- be issued by nationally accredited institutions;
- be based on learning outcomes;
- be internally and externally quality assured;
- be based on workload composed of identified credit value;
- be awarded on the successful completion of a formal assessment procedures ([144]).

The MQF register of regulated qualifications was launched in September 2012 and is being steadily constructed ([145]).

([143]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020): country analysis.*
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf [accessed 5.12.2012].

([144]) See Legal Notice 294.

([145]) The register has been placed online at www.mqc.gov.mt [accessed 5.12.2012].

Level descriptors and use of learning outcomes

The Maltese NQF has eight learning outcomes based qualification levels. Each level descriptor is defined in terms of knowledge, skills and competence. The descriptors highlight specific attributes such as communications skills, judgemental skills and learning skills. The level descriptors reflect complexity, volume and the level of learning expected for the particular qualification.

Progression within the MQF is recorded in terms of:

- knowledge and understanding;
- applying knowledge and understanding;
- communication skills;
- judgemental skills;
- learning skills;
- autonomy and responsibility.

Strengthening the learning outcomes approach has become fundamental to reforms across education and training in Malta and has been applied across qualifications and levels in recent years. One of the tasks of the National Commission for Further and Higher Education is to introduce national standards of knowledge, skills and competences and to ensure that these are systematically implemented and used.

For general education, the national minimum curriculum defines learning outcomes as educational objectives that enable learners to acquire knowledge, skills and attitudes. The school leaving certificate was redesigned following a series of consultation meetings between the Directorate of Quality and Standards in Education (DQSE) and the MQC to include informal and non-formal learning as well as the individual's personal qualities. Covering the first two levels of the MQF, this initiative is intended to instil a culture of acknowledging learning achievements irrespective of the context within which the learning process occurs, from the early stages of education.

The MQF is intended to ensure that the contents of VET curricula are led by key competences and learning outcomes based on feedback from industry. Development of occupational standards and sector skills units is work in progress.

Links to other instruments and policies

Improving lifelong learning policies and practices is the guiding principle underpinning development of the MQF.

Rrecognition of informal and non-formal learning (prior learning) is an important part of the MQF for lifelong learning. The MQC published a series of working documents entitled Valuing all learning, in 2008. Volume four of these documents acknowledges the country's legislative gap in validating non-formal and informal learning and states that legislation is the first step required to take forward validation in Malta. Following consultation with the general public, the legal framework for validation is now in place ([146]).

The MQF also accommodates credits as building blocks of qualifications. They are defined as workload for all learning activities leading to a qualification.

Referencing to the EQF

In 2009, Malta was the first Member State to prepare a single, joint report which references the MQF simultaneously to both the EQF and the QF-EHEA (Malta Qualifications Council and Ministry of Education, Culture, Youth and Sport, 2009) ([147]). This approach has been set as an example followed by many other countries in their own referencing process. The establishment of the MQF and its subsequent referencing have led to substantial modernisation efforts. As a result, in May 2012 an updated version of the report was presented to the EQF AG.

Table 19 **Level correspondence established between the Maltese qualifications framework (MQF) and the EQF**

MQF	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

([146]) See Legal Notice 295. *Validation of non-formal and informal learning*.
http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=23720&l=1 [accessed 5.12.2012].

([147]) *Referencing of the Malta qualifications framework (MQF) to the European qualifications framework (EQF) and the qualifications framework of the European higher education area (QF/EHEA)*. http://www.mqc.gov.mt/referencingreport?l=1 [accessed 5.12.2012].

Important lessons and the future plans

Development of the MQF has served as a catalyst for education reform, addressing key challenges in education, training and the labour market.

Consultation on the development of the MQF and preparation of the referencing to the EQF and the QF-EHEA were interrelated processes that led to a bridging exercise between stakeholders from different subsystems of education and employment.

The referencing process stimulated further developments including, in 2010, the design of an awards policy through the setting up of a new national awards system, and introducing validation of informal and non-formal learning into compulsory secondary education ([148]).

Main sources of information
The National Commission for Further and Higher Education is the designated national coordination point, http://www.mqc.gov.mt [accessed 7.10.2012].

([148]) The new school leaving certificate gives, for the first time, value to all formal, non-formal and informal learning activities in accordance with the guidelines, prepared by the Directorate for Quality and Standards in Education (Ministry of Education).

MONTENEGRO

Introduction

Montenegro has developed a comprehensive NQF for lifelong learning, based on learning outcomes. It includes all formal education qualifications (from general education, VET and higher education) as well as a system of national professional qualifications, which can be acquired though validation of non-formal learning.

In December 2010, the Parliament of Montenegro passed the national qualifications framework law (*Zakon o nacionalnom okviru kvalifikacija*, 2010) ([149]). The law defines the principles and objectives of the NQF, the structure of levels and sublevels, qualifications types to be included and the governance structure.

Main policy objectives

The government sees NQF development and alignment to the EQF as an important political priority. The adopted Law on NQF defines its principles and main policy objectives. Among the principles the focus is on learning outcomes defined as knowledge, skills and competences, the importance of quality assurance in all phases of qualifications development, establishing cooperation among stakeholders, and creating conditions for transfer of credits.

The main goals of the NQF as defined by law are:
- supporting the shift to learning outcomes-based qualifications;
- linking education and training more effectively to the labour market;
- better integrating the various education and training subsystems;
- making progression possibilities (vertical and horizontal) within the system of education and training visible;
- supporting lifelong learning, and aiding recognition of non-formal and informal learning;
- improving international comparability of qualifications;
- ensuring the quality of qualifications.

([149]) Law on NQF.
http://www.skupstina.me/cms/site_data/SKUPSTINA_CRNE_GORE/ZAKONI/ZAKON%20882.pdf [accessed 15.9.2011].

Stakeholder involvement and framework implementation

The Ministry of Education and Sports has overall responsibility for developing and implementing the NQF.

Different institutions are involved in developing and awarding qualifications at different levels. The National Council for Qualifications, established in May 2011 under provisions within the 2010 Law on the NQF, has overall responsibility for the national qualification system. The Council consists of representatives from ministries, institutions involved in the development of qualifications, employment services, universities, the social partners and the chambers of commerce, and representatives of employers and trade unions. The Council is a permanent body, whose principal tasks are to:

- make decisions on the inclusion and classification of qualifications into the NQF;
- make proposals for new qualifications to institutions in charge of developing qualifications;
- take decisions on the methodological documents for classification of qualifications;
- adopt guidelines for sector commissions, etc.

Level descriptors and use of learning outcomes

The Montenegrin NQF has eight levels, based on learning outcomes with sublevels at levels 1, 4 and 7. They cover all types of qualifications in formal education (in general education, VET, higher education).

The first four levels include qualifications from primary, secondary general, and vocational education. Level 5 is an intermediate level between upper secondary education and higher education (i.e. post-secondary VET qualifications). Levels 6 to 8 include qualifications awarded in higher education.

It is important to note that all NQF levels accept labour market oriented professional qualifications, as defined by the Law on National Professional Qualifications adopted in 2008 ([150]). This law defines procedures regulating validation and recognition of non-formal and informal learning. The law also refers to 'other qualifications'.

([150]) *Zakon o nacionalnim strucnim kvalifikacijama*.
http://www.iccg.co.me/ispitni/images/Razno/Regulativa/Zakon%20o%20nacionalnim%20i%20strucnim%20kvalifikacijama.pdf [accessed 5.12.2012].

The shift to learning outcomes is seen as an essential part of the national qualifications framework development. It is planned that qualifications and programmes will be reviewed and revised in line with the level descriptors. Reforms are under way in different areas of education and training in the line with the Book of changes, which covers preschool, elementary, secondary and adult education.

Much needs to be done in developing qualifications based on learning outcomes, which will allow them to be aligned to the NQF.

Referencing to the EQF

The time frame for the referencing of the NQF to the EQF has not been defined.

Important lessons and the way forward

The main aim is now to put the NQF into practice: an activity plan (April 2011 – April 2012) was prepared to guide actions. Capacity building among institutions (e.g. the Council for Qualifications and Sector Commissions) is an important task for the near future.

Much needs to be done in redefining and further developing qualifications to reflect the learning outcomes perspective and allow for alignment to the NQF. An important activity is raising awareness of the framework among stakeholders [151].

Main sources of information
An NQF website is available at http://www.cko.edu.me [accessed 12.3.2013].

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[151] For more information see http://www.mpin.gov.me/en/ministry [accessed 5.12.2012].

THE NETHERLANDS

Introduction

The Dutch government gave its support to setting up a comprehensive qualifications framework for the Netherlands (NLQF) in September 2011. This decision also approved the proposal for referencing the NLQF to the EQF, a procedure which was completed in October 2011. The NLQF builds on and integrates the qualifications framework for higher education which was self-certified to the European higher education area in 2009.

The eight-level framework addresses two main categories of qualification. First are those qualifications regulated by the three Ministries of Education, Economic Affairs and Health/Welfare; then there are those outside public regulation and developed by stakeholders (mainly) in the labour market. This strong emphasis on the double character of the national qualifications system – where private and public providers interact and supplement each other – is an important defining feature of the NLQF. A NLQF coordination point is now working in line with these principles and the framework can be considered as having reached an early operational stage.

Main policy objectives

The adoption of the framework has been rapid. Initial preparations started as late as January 2009 and it moved into an early operational phase in 2012. The NLQF is a systematic arrangement of all existing qualifications in the Netherlands, resting on two pillars. The first is qualifications regulated by the public sector (the Ministry of Education, Culture and Science, the Ministry of Economic Affairs, Agriculture and Innovation, and the Ministry of Healthcare, Welfare and Sports). The second pillar is 'other qualifications', notably those awarded by the private sector outside the formal system and related to the labour market. These often have a strong 'qualifying' power in the labour market and their inclusion in the NLQF is expected to increase their visibility and further strengthen their value. The inclusion and classification of these qualifications will take place at the request of the bodies responsible for awarding the diplomas and certificates; this is generally also the body which provides the learning programme leading to the qualification. By bringing Ministry-regulated and other qualifications together in one framework, the NLQF will provide a substantially

improved insight into the levels of qualifications offered and how these are related.

The NLQF addresses (Dutch Ministry of Education, 2012) ([152]) a wide group of potential beneficiaries and aims at:

- enabling people of all ages and in different situations to identify their level of education and training to find an appropriate education and training programme where they can use their abilities efficiently;
- enabling employers and individuals to understand the levels of existing national qualifications and international qualifications (through the EQF) and how they relate to each other;
- showing how the different qualifications contribute to improving workers' skills in the labour market.

The main objectives are:

- increase transparency within Dutch education;
- increase the understanding of qualifications within Europe;
- increase qualification level comparability;
- stimulate thinking in terms of learning outcomes as building blocks of qualifications;
- promote lifelong learning;
- increase the transparency of learning routes;
- increase the understanding of the level of qualifications by players in the labour market;
- aid communication between all stakeholders in education and employment.

In the Dutch EQF referencing report (op.cit. p.25) it is clearly stated that the NLQF has no role in reforming Dutch education and training, in regulating transfer and access, or in entitlements to qualifications and degrees. The framework is understood as a systematic arrangement of existing qualifications aiming at transparency and increased comparability. Whether the NQF will move from being a purely descriptive mechanism to an instrument supporting further development of Dutch education and training remains to be seen. Involving the private sector can be seen as moving beyond a purely descriptive role.

([152]) *The referencing document of the Dutch national qualifications framework to the European qualifications framework.*

Stakeholder involvement and framework implementation

The Ministry of Education, Culture and Science coordinates the development and implementation of the NLQF. A project plan was developed during spring 2009 and resulted in the setting up of a steering group consisting of the three main ministries (see above). A small secretariat was set up in charge of daily running of the project and to coordinate the support of an expert group looking into the technical design of the framework (outlining level descriptors, testing their relevance, indicating how existing qualification levels can be referred to the new levels). A small expert group (The Leijnse committee) reviewed the technical proposal and made the recommendation on which further work has been based.

Different from many other countries, the project steering group consisted only of representatives of the three ministries; other stakeholders, for example social partners, were not directly involved. The expert group was four professors recruited for of their expertise in education and training matters, not for their ability to voice different interests and positions. While a consultation process has made it possible for all stakeholders to express their position on the developing framework, the original NLQF proposal was only weakly linked to stakeholders outside the main ministries involved in development. The future impact of the NLQF will therefore require that it is seen as relevant to a wider group of stakeholders. The priority now given to the 'opening up' of the NLQF towards the private sector may – if it is successful – contribute significantly to this. The criteria and procedures detailed below illustrate the main principles now developed for the inclusion of 'other qualifications' into the NLQF.

The Ministry of Education has signalled that it will initiate revision of the existing legal texts underpinning Dutch education and training to make sure that the role of the NLQF is reflected. This revision will take time and may not be completed until 2015. This will not prevent the NQF carrying out its current work, but will ultimately strengthen the position of the framework.

The opening up of the NLQF: criteria and procedures

The NLQF – represented by the national coordination point – will from now on actively promote the possibility to have a qualification included in, and levelled to, the framework. This is being presented as an opportunity for providers to achieve better overall visibility, to strengthen comparability with other qualifications at national and European level, to be able to apply the learning outcomes approach and to strengthen links to the labour market.

If a provider such as a private company, wants to submit a qualification for inclusion, an accreditation (or in Dutch 'validation') has to take place. Issues like legal status, property rights, the continuity of the organisation and the existence of quality assurance arrangements will be checked. A list of approved quality assurance systems is included in the guidance material now developed. If the provider does not use such systems, an on-site visit will be organised.

When an organisation has been accredited (for five years) it can submit qualifications for inclusion and levelling. The organisation will indicate the level it sees as most appropriate and this will provide the starting point for the assessment on which a final decision will be made. When asking for inclusion, the organisation will have to indicate the learning outcomes in accordance with the main elements of the NLQF level descriptors (see below), the workload (no qualifications of fewer than 400 hours nominal workload will be considered), the assessment approaches to be applied, and the link to relevant occupational profile.

While the NCP will be responsible for organising the process, committees of independent, external experts will assess the applications and give their advice to the Board of the NCP, which will eventually make the final decision on inclusion. The Board includes all the major stakeholders involved in the NLQF, including ministries and social partners.

Organisations will have to pay to use the system. Accreditation will vary between 1 000 and 7 500 Euro, depending on whether an approved quality assurance system is in place. Submitting one qualification for inclusion is set at 2 500 Euro.

The NLQF builds on the qualifications framework for higher education developed (from 2005) in the context of the Bologna process. This culminated in the national qualifications framework for higher education in the Netherlands, which was verified by an independent external committee of peers, February 2009. The NVAO, the accreditation organisation for the Netherlands and the Flemish community of Belgium, guarantees implementation through the accreditation process, which is obligatory across formally recognised higher education. In January 2010, brochures in English and Dutch were published for wider communication purposes. The brochure and the national qualifications framework verification documents are available at the website of the NVAO ([153]).

([153]) www.nvao.net [accessed 5.12.2012].

Levels and descriptors

The NLQF operates with one entry level (lower than EQF 1) and eight qualifications levels. All levels are defined on the basis of learning outcomes. The diagram below shows how the Dutch qualifications are placed into the levels of the NLQF.

Table 20 **Types of qualification placed into the levels of the Dutch qualifications framework (NLQF)**

NLQF	Adult education	Pre-vocational education	Upper secondary vocational education	Upper secondary general education (Havo and Vwo)	Higher education	'Other qualifications'
8						
7						
6						
5						
4+						
4						
3						
2						
1						
Entry level						

Source: Dutch Ministry of Education, 2012. *The referencing document of the Dutch national qualifications framework to the European qualifications framework*, p. 32.

The NLQF is seen as offering a new way of describing existing qualification levels. The following key-principles are emphasised:

- levels do not refer to, and are not defined by, education sectors;
- NLQF levels are not referenced to degrees or titles (meaning, for example, that a qualification at level 6 does not automatically belong to higher education and the achievement of this qualification does not give automatic entitlement to a Bachelor degree);
- all NLQF levels are open to all qualifications of all education sectors.

These principles signal that the NLQF goes further than several other 'new' European NQFs. Not only is it a comprehensive framework with a broad scope, it also stresses the principle that all levels (including 8) are open to all qualifications. As the table below illustrates, however, it is yet to be seen whether this principle is also reflected in practice.

The learning outcomes approach used to describe the nine levels is based on the following elements.

Table 21   **Level descriptor in the Dutch national qualifications framework (NLQF)**

NLQF descriptors	
Context The context descriptions of the levels are used along with the described knowledge to determine the grade of difficulty of the skills.	
Knowledge Knowledge is the totality of facts, principles, theories and ways of working related to an occupation or a knowledge domain.	
Skills Cognitive abilities (logical, intuitive and creative thinking) and practical abilities (psychomotor skills in applying methods, materials, tools and instruments) applied within a given context	*Applying knowledge* Reproduce, analyse, integrate, evaluate, combine and apply knowledge in an occupation or a knowledge domain.
	Problem-solving skills Recognise or identify and solve problems.
	Learning and development skills Personal development, autonomously or under supervision
	Information skills Obtain, collect, process, combine, analyse and assess information.
	Communication skills Communicate based on conventions relevant to the context.
Responsibility and independence The proven ability to collaborate with others and to take responsibility for own work or study results or of others.	

The table demonstrates the influence of the EQF descriptors but differs in some important respects. As in several other countries, making context explicit has been seen as important. The subcategories introduced for skills can be seen as a way specifying the descriptors and making them more relevant to the Dutch context. They can also be seen as reflecting Dutch experiences in applying learning outcomes, for example in the VET (MBO) sector in recent years.

The learning outcomes, competence-oriented approach is broadly accepted and implemented in Dutch education and training. The Dutch referencing report to the EQF (2011) details a strong tradition of 'objectives-led' governance of education and training, an approach which has proved conducive for a competence-based approach. Vocational education and training is probably most advanced in competence orientation; following extensive reform, a new VET competence-based structure has been developed and implemented. The same tendencies can be observed in general and higher education, although somewhat less systematically. The introduction of the qualifications framework for higher

education has contributed to the overall shift to learning outcomes, as has the involvement of single institutions in the so-called 'Tuning project'.

The strong position of the learning outcomes approach is reflected in the relatively widespread use of validation of non-formal and informal learning in the Netherlands (EVC). The NLQF will strengthen the role of validation and turn it into an integrated part of the qualifications system. The use of validation as an integrated part of the framework will help to connect with a wider range of learning activities and learning settings, for example in the private sector.

Links to other tools and policies

Compared to other European countries, the Netherlands has a well-established system for validating non-formal and informal learning. Specific characteristics of the Dutch system are:

- validation always takes place according to a national standard and should be concluded through the award of a certificate of experience and/or qualification stating what the candidate knows, is able to do or understand;
- public and private education and training institutions can offer APL;
- validation is oriented to the labour market (career development) and to education and training (to shorten the education programme);
- everybody can follow an APL procedure, practices are not limited to particular education and training) sectors or institutions.

The use of APL is financially supported by tax measures for employers and individuals. In 2009-10 the government took steps to strengthen the quality assurance dimension of validation: only those validation providers respecting the official 'quality code' will be able to offer validation deductible from taxes. The existing validation system very much rests on the learning outcomes and competence approach already adopted in Dutch education and training. The NLQF is expected to further strengthen this basis by providing a better overview over existing qualifications where validation is possible.

There is no link established between the NLQF and ECVET. This reflects that credit systems play a relatively limited role in the Netherlands and is mainly limited to the use of ECTS for higher education institutions. Current work on ECVET is defined as 'bottom up' and is exclusively linked to mobility projects.

Referencing to the EQF

The Netherlands referenced its NLQF to the EQF in October 2011.

The process drew attention to the referencing of the VWO (academically oriented secondary education) to level 5 of the EQF: most other European countries have decided to reference these school leaving certificates to level 4. This convergence reflects a broad agreement, supported by the Lisbon recognition convention, on the general levelling of this qualification, playing a key role in access to higher education. While countries agree that it is up to the Dutch government to decide on the levelling of this qualification, several countries have criticised the decision for not being sufficiently transparent and supported by documentation. Subsequently, VWO qualifications were linked to the NLQF/EQF level 4.

Table 22   **Level correspondence established between the Dutch qualifications framework (NLQF) and the EQF**

NLQF	Entry level	1	2	3	4	5	6	7	8
EQF		1	2	3	4	5	6	7	8

Important lessons and the way forward

The Dutch NQF is now in an early operational stage and has started its work, notably by opening up to 'other qualifications' in the private sector. Future success will largely depend on whether the framework will be seen as relevant to stakeholders outside the limited circle of formal, public education and training. Stakeholders close to the process see the need to develop a comprehensive communication strategy in the coming period to ensure that as many of them as possible are involved in the further development and implementation of the framework. The responsible ministry must ensure that the role of the NLQF is clearly defined in planned revision of the existing legal basis.

Main sources of information
NCP is hosted by the (umbrella) organisation CINOP/Knowledge Center RPL, http://www.ncpnlqf.nl/ [accessed 12.3.2013].

NORWAY

Introduction

Norwegian NQF developments were triggered by the 2008 EQF recommendation and its inclusion into the Treaty of the European Economic Area (EEA) in March 2009. Following extensive preparatory work involving main stakeholders, a comprehensive Norwegian national qualifications framework (*Nasjonalt kvalifikasjonsrammeverk for livslang læring*, NKR) was adopted through government decision in December 2011 ([154]). A specific decree on the role of the NKR within Norwegian education and training will be adopted in 2013, further strengthening the formal basis of the framework. The decree will also clarify the role of the NKR in relation to existing laws on general, vocational, higher and adult education and training.

The NKR consists of seven levels and covers general, vocational and higher education. It is envisaged that, in a second phase, it will be opened to the non-formal and private sector; the procedures and criteria for this have yet to be agreed. The NKR will enter an early operational stage spring 2013, coordinated by the Norwegian coordination point for EQF (hosted by NOKUT, the Norwegian Agency for Quality Assurance in Education).

Norway will present a joint referencing/self-certification report to the EQF/QF-EHEA late spring 2013.

Main policy objectives

The NKR aims at describing the existing national education and training system in a transparent way to make it more understandable, at both national and international level. This should increase mobility, contribute to more flexible learning pathways and promote lifelong learning. The NKR will:
- give a comprehensive and general description of what is expected from a learner after completing a qualification;
- provide an overview of the inner logic of the education and training systems and so support education and career guidance and counselling;
- provide a description which will make possible comparisons with qualifications in other countries;

([154])http://www.regjeringen.no/upload/KD/Vedlegg/Internasjonalt/UNESCO/NasjonaltKvali fikasjonsrammeverk200612.pdf [accessed 5.12.2012].

- provide a better basis for dialogue with the labour market;
- offer the opportunity to develop new instruments for valuing competences acquired outside the formal system.

A more systematic use of learning outcomes is seen as a precondition for the NKR. Learning outcomes descriptors are supposed to clarify what is expected from any candidate who has successfully acquired a qualification of any type and at any particular level. This will help to clarify the similarities and differences between qualifications and the relationships between them.

The NKR is not seen as an instrument for reform. While it will describe Norwegian education and training, its intention is not to change it. The NKR is instead seen as:

- an instrument/tool that education and training can use for evaluation and further development;
- a platform for debate and dialogue.

The NKR will, for the moment, only cover qualifications awarded by publicly recognised and accredited education and training institutions. Certificates and diplomas awarded by others, for example in popular education and in enterprises, will not be directly included in the framework. Several stakeholders have criticised the framework for being too narrowly defined and failing to support a broader strategy on competence development and lifelong learning. In response, the Ministry of Education states that potentially incorporating 'other qualifications' will be addressed in a second stage, building on research commissioned in Autumn 2012.

Stakeholder involvement and framework implementation

The first phase of NQF development in Norway, from 2006 to 2009, was fragmented, with a series of different initiatives (in higher education, vocational education and training and tertiary VET) in parallel with limited coordination. This changed in 2009 when the Ministry of Education, reflecting input from stakeholders, stated an intention to work towards a comprehensive framework for lifelong learning and to merge existing strands of work into a single approach. The result of this decision was the presentation of the NKR proposal in January 2011, immediately followed by extensive public consultation. This process, involving education and training stakeholders as well as those in the labour market, demonstrated a significantly increased appreciation of the framework's potential for future education, training and labour market policies. In Spring 2012, the proposal for an NQF decree led to another public consultation, demonstrating

somewhat different expectations of the future role of the framework. The service employer organisation (in particular) criticised the framework for not being sufficiently accommodating of non-formal training and the private sector, and for being too narrowly oriented towards formal, public education and training. Others, for example the University of Oslo, questioned whether the proposal for a decree could interfere with the institutional autonomy fundamental to this sector?

The NQF for higher education was adopted in 2009 (although not self-certified to the QF-EHEA). The three highest levels of the proposed NKR are identical to the three cycles of the higher education framework, something which will be reflected in the joint referencing/self-certification to take place spring 2013.

Level descriptors and learning outcomes

The NKR adopted in December 2011 introduces a framework of seven levels, reflecting the structure of existing formal education and training in Norway ([155]). The table below shows this seven-level structure, as well as how main qualification types are expected to be placed (the table shows the situation in September/October 2012, before a final decision on the referencing to the EQF had been made).

While in principle considering of learning outcomes, the splitting of levels 4 to 6 into parallel but distinct categories can be read as a wish to signal differences in institutional types as well as in the duration and workload of qualifications.

([155]) It should be noted that several of these qualifications can also be acquired through validation of non-formal and informal learning. *European inventory on validation of non-formal and informal learning 2010: country report: Norway.*
http://libserver.cedefop.europa.eu/vetelib/2011/77474.pdf [accessed 5.12.2012].

Table 23 **Qualifications from formal education placed into the Norwegian qualifications framework**

There are no qualifications corresponding to EQF level 1; this level will not beconsidered part of the NKR which, for reasons of comparison, starts at level 2.			
Level 2	Completed primary and (lower) secondary education (10 years)		
Level 3	Basic competences acquired through upper secondary education		
Level 4	4A Completed general upper secondary education	4B Completed vocational upper secondary education	
Level 5	5.1 Post-secondary VET (Fagskole) 1	5.2 Post-secondary VET (Fagskole) 2	
Level 6	Partial Bachelor (short higher education)	Bachelor (Bologna 1st cycle)	
Level 7	Master		
Level 8	PhD		

Levels are described through the concepts knowledge (*kunnskap*), skills (*ferdighet*) and general competence (*generell kompetanse*). This approach was already adopted for the higher education framework and seems to be broadly accepted among stakeholders. While the EQF influence is admitted, the main difference lies in the term 'general competence' which refers to the kind of transversal, overarching competences of the learning objectives adopted for upper secondary education (ability to apply knowledge and skills in different situations by demonstrating ability to cooperate, by showing responsibility and ability to reflect, and ability in critical thinking). Using the term 'competence' in isolation would, according to the proposal, lead to confusion.

The three descriptor elements are further specified in the following way:

Table 24   **Level descriptors in the Norwegian qualifications framework**

Knowledge	Skills	General competence
Types and complexity: is it theoretical or practical knowledge, within a subject or a profession; how complex and comprehensive	**Types:** is it cognitive, practical, creative or communicative	**Challenges regarding change:** in which areas of education and work; how predictable and changeable are situations
Understanding: ability to contextualise knowledge	**Problem-solving**: how complex are the tasks to be addressed at a particular level	**Cooperation and responsibility:** extent to which candidate takes responsibility for own and others' work
	Communication: with whom, at what level of complexity, by which means	**Learning:** extent to which candidate takes responsibility for own learning and competence development

The discussion on the referencing of the NKR to the EQF has drawn attention to some issues. First, discussion between the Nordic countries on the levelling of lower secondary education has caused concern. For the moment it is likely that Finland and Sweden will refer these qualifications to level EQF 3, while Denmark has already made its reference of these qualifications to EQF level 2. This would signal a difference in level of learning outcomes which is considered out of tune with realities. It is not currently clear how Norway will refer level 2 qualifications in NKR to the EQF. Second, the placing of 'basic competences' at level 3 draws attention to a qualification which so far has received little attention in Norway. High drop-out rates from upper secondary education, and in particular from the vocational strand, points to the potentially important role of recognising partial completion at this level. Third, placing two year post-secondary VET qualifications at level 5 and the two year higher education at level 6 has caused controversy. Some stakeholders see this as reflecting a traditional view on the difference between vocational and academic qualifications, not on a balanced comparison of learning outcomes.

There is broad consensus in Norway on the relevance of the learning outcomes approach. *Kunnskapsløftet*, a wide-ranging reform started in 2004 and implemented in 2006, has been of particular significance and implied a comprehensive redefinition and rewriting of curricula objectives at all levels of basic education and training (i.e. primary and secondary education and training, years 1-13). Finding its main expression in a national core-curriculum, addressing all levels of education and training, the learning outcomes approach has started

to influence assessment and evaluation forms, in particular in VET. An important reason for using learning outcomes is to encourage the curriculum consistency at national level. While adaptation is possible at local level, national consistency is important for reasons of quality and also to support validation of non-formal and informal learning.

Adopting the qualifications framework for higher education has also triggered extensive revision of study programmes in higher education, aiming to introduce and apply the learning outcomes principle in all institutions and programmes. Post-secondary education and training (*fagskole*) have not so far applied the learning outcomes principle in the description of their programmes. The NKR developments are now directly influencing this and the proposal for learning outcomes descriptors for level 5 can be seen as an important starting point for this process. The priority given to validating non-formal and informal learning has also increased awareness of the potential of the learning outcomes approach. It is difficult to judge to what extent the learning outcomes perspective is influencing pedagogical approaches and learning methods.

Links to other instruments and policies

Validation of non-formal and informal learning (*Dokumentasjon av Realkompetanse*) has been on the Norwegian political agenda since the 1990s. All the most important acts on education and training, for primary, upper secondary and higher education and training, stipulate the right of individuals to have their 'real experiences' documented and validated. Existing curricula for lower and upper secondary education and study programmes in higher education are used as references for validation, so the shift towards learning outcomes will influence the way validation is carried out. The NKR proposal lists five areas where it will influence validation:

- introduction of learning outcomes as the underpinning principle for all qualifications;
- increased transparency of qualification levels;
- development of more fit-for-purpose methods, supporting more valid and reliable validation;
- more consistent conceptual basis;
- general shift of attention towards learning outcomes.

Credit transfer by the ECTS is already used to some extent in higher education. Though there is involvement in testing ECVET, the final position has yet to be clarified and there is no explicit link established between the NKR and this initiative.

Referencing to the EQF

Norway expects to finalise referencing to the EQF and self-certification to the QF-EHEA in late spring 2013.

Information sources

Norwegian Agency for Quality Assurance in Education (NOKUT) acts as EQF NCP. http://www.nokut.no/en/NOKUT-Knowledge/The-Norwegian-educational-system/The-Norwegian-qualifications-framework/ [accessed 12.12.2012].

http://www.regjeringen.no/nb/dep/kd/tema/livslang-laring/nasjonalt-kvalifikasjonsrammeverk.html?id=601327 [accessed 12.12.2012].

POLAND

Introduction

The Polish qualifications framework (PQF) currently under development forms part of a broad reform of the qualifications system ([156]). Coordinated by the Intra-ministerial Taskforce for Lifelong Learning ([157]), the reform aims at promoting lifelong learning and putting in place education, training and learning solutions better able to respond to the needs of the labour market and society in general. The PQF and the new national register of qualifications stand out as the two key building blocks in this reform.

The new framework is expected to consist of eight learning outcome based levels applicable to all types of qualifications; it will include those obtained in general education, vocational education and training, and higher education. The framework – and the register – will be open to the private and non-formal sectors as long as the qualifications in question meet agreed quality criteria. The new PQF builds on, takes into account, and integrates the work on a qualifications framework for higher education linked to the Bologna process.

A joint referencing to the EQF/self-certification to the QF-EHEA will be carried out in 2013, based on a mandate given by the interministerial taskforce for lifelong learning. The PQF has still some way to go before it reaches operational status; a number of amendments to existing laws will be required and take time.

Main policy objectives

The work on the qualifications framework is an integrated part of a broad reform and modernisation of the Polish qualifications system, addressing all levels and all subsystems. An important part of this reform, initiated in 2010, is an overall shift to learning outcomes. This requires a redesign of all programmes, standards and curricula, in general, vocational and higher education and training. The role of the framework is to promote this shift and to ensure that is consistent. The framework is also seen as an important instrument for strengthening the


([156]) By national qualifications system is understood the entirety of state activities related to the validation of learning outcomes to satisfy the needs of the labour market, civil society and personal development of learners.

([157]) Appointed by the Prime Minister and including Ministries of Education, Labour and Social Policy, Science and Research and Economy.

transparency and overall consistency of education and training, which is considered by some to be fragmented and difficult to overview and navigate. It is also underlined that while participation in initial education is very high in Poland, participation in lifelong learning is low compared to other European countries (less than 5% of 25-64 year olds report having taken part in LLL, compared to the EU average of 9%).

The direction chosen for the PQF is interesting in a wider European setting. First, the framework is seen as a tool for reform and change; its role goes beyond merely describing existing qualifications. Second, the qualifications framework is seen as one of several elements in a wider policy strategy. It is acknowledged that qualifications frameworks cannot operate in isolation; their impact depends on how they are integrated into a wider policy strategy. Third, while the framework introduces a coherent set of national levels and descriptors, it also identifies the need for additional learning outcomes descriptors to be used by subsystems and sectors and which will allow for a more detailed fit-for-purpose approach. This 'diversified' descriptor approach introduced by the PQF is (so far) unique and is outlined below:

Figure 2   **Three sets of level descriptors in the Polish qualifications framework**
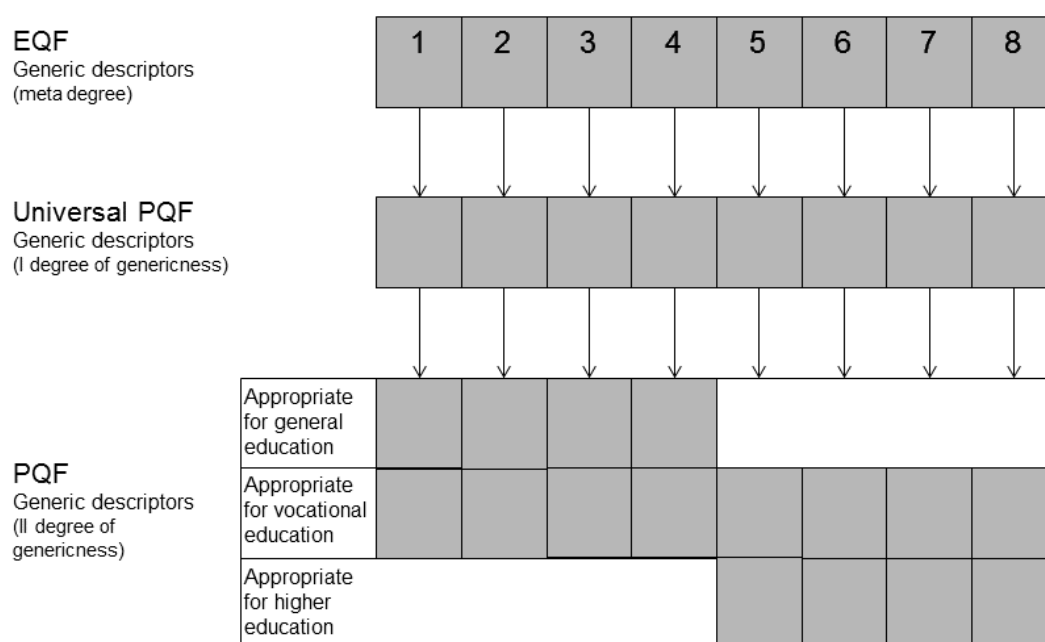
Source: Instytut Badań Edukacyjnych (IBE), 2011

The PQF thus includes three main sets of level descriptors, operating according to different degrees of generality. The universal PQF is the most generic (first degree). The second set of descriptors addresses the main

subsystems of education and training (higher education, vocational education, general education). The last of these can be further developed through a third set of descriptors (not indicated above), for example oriented towards specific fields of higher education (subject areas) or for VET in different economic sectors.

While the coexistence of several qualifications subframeworks is common in most European countries, the PQF takes one step further and tries to express how these can be made explicit within an overarching conceptual (learning outcomes) approach. This means that when, for example, the financial sector wants to establish a specialised sectoral qualifications framework, it should use learning outcomes descriptors clearly connected to the level descriptors operating at other levels of generality (including EQF). Third, while moving beyond the general, national level descriptors, the PQF is better able to link to current reform of standards and curriculum development and eventually to learning and assessment.

The new qualifications register is presented as a separate initiative closely linked to the PQF. The register is intended to contain a list of all qualifications which can be obtained in Poland. At this stage four different categories of qualifications have been identified:

- qualifications awarded under the provision of laws regulating general education;
- qualifications awarded under the provisions of laws and regulations on higher education;
- other qualifications established by national bodies;
- qualifications established by foreign entities that are awarded in Poland.

The link to the PQF will be assured by attributing all registered qualifications a level in the national framework and the EQF. Qualifications so far not registered in Poland can be included based on assessment by experts. The procedures and criteria for this inclusion process have yet to be developed, but may point in the same direction as developments in, for example, the Netherlands and Sweden.

Stakeholder involvement and framework implementation

In 2010 the prime Minister appointed two bodies to take responsibility for the overall reform of the Polish qualification system, including the development and implementation of the PQF and the national register of qualifications:

- an Intra-Ministerial Taskforce for Lifelong Learning Strategy, including the PQF comprising all institutional stakeholders: Ministry of National Education, Ministry of Research and Higher Education, Ministry of Economy, Ministry of

Labour and Social Policy, Ministry of Health. This team is led by the Ministry of National Education;

- a subgroup of the taskforce, the PQF Steering Committee, comprising all key institutional stakeholders (Ministry of National Education, Ministry of Research and Higher Education, Ministry of Economy, Ministry of Labour and Social Policy, Ministry of Health. In May 2011 the ministries of health, culture, and defence joined the committee). This committee is run by the Ministry of Research and Higher Education is supported by the Polish NCP as well as the Educational Research Institute. All projects supporting the development and implementation of the PQF are monitored and coordinated by the Steering Committee.

The authorities decided in 2009 that establishing the PQF will require additional administrative and research support. Two external institutions have been involved in the first stage of preparation (The Education Research Institute and the Cooperation Fund Foundation). In the second stage, the Education Research Institute has the main responsibility for coordinating the designing of the PQF, including relevant research, conceptual work and consultation. In addition to this the Bureau for Academic Recognition and International Exchange has been appointed as national coordination point for the EQF.

Different from many other countries, the bodies referred to above do not directly include representatives of social partners or civil society. It is stated that representatives of these can contribute to the work in an advisory capacity but it is not clear what this means for the involvement and ownership of stakeholders outside public administration. Seen from the outside, and compared to other countries, Polish developments can be described as a combination of top-down and research driven. Whether this could have a negative impact on the implementation of the framework is difficult to judge; how to ensure broad commitment and ownership also outside the public sector is certainly an issue to keep in mind in the next couple of years. However, two broad consultations have been carried out since 2011 and a high number of meetings (200+) has been organised across the country addressing a wide range of stakeholders.

It is envisaged that it will be necessary to appoint/establish an institution responsible for running the PQF and other instruments emerging from the reform of the qualifications system. Such an institution would, for example, be responsible for maintaining the qualifications register, accrediting awarding bodies, and monitoring the use of validation. A decision on this issue has yet to be made.

Level descriptors and learning outcomes

The PQF introduces descriptors for different purposes and at different levels of detail:

- Polish universal descriptors forming the basis for the comprehensive PQF;
- Polish descriptors for education and training subframeworks, for example for general, vocational and higher education;
- Polish descriptors for sector frameworks or for subject areas.

All of these refer back to the meta-level descriptors of the EQF and the idea is to introduce a consistent and interrelated set of descriptors meeting the needs of a diverse group of stakeholders and institutions. To what extent this approach will be able to promote communication between the different levels and subsystems can only be tested by an operational framework. The challenge is to avoid a fragmented approach where sectors operate in isolation and – in a worst case scenario – increase rather than reduce obstacles between institutions and sectors.

Originally the PQF was envisaged as a seven-level framework, closely resembling existing qualifications and degrees in the Polish system; it was later decided to introduce a new level 5 in the framework. While still empty, this will allow for a more appropriate placing of 'short cycle' academic qualifications as well as advanced vocational qualifications, possibly including the Master Craftsman (*Meister*).

The Polish QF is now based on an eight-level framework described according to the following three key categories:

Table 25 **Level descriptors in the Polish qualifications framework**

Knowledge	Scope
	Depth of understanding
Skills	Problem-solving and applying knowledge in practice
	Learning
	Communication
Social competence	Identity
	Cooperation
	Responsibility

These descriptors (first generic degree) are based on an agreement between stakeholders in general, vocational and higher education and are the common reference point for developments at sector (second generic degree) and subsector (third generic degree) levels.

Progress has been made in defining level descriptors for the different education and training sectors. The basic distinction between knowledge, skills and social competences will be used at the subsector PQF at second generic degree, but will differ in terms of specificity. This is exemplified by the proposal for vocational education and training ([158]) where each of the three main dimensions (K, S and C) have to be specified according to:

- information,
- ideas,
- cooperation,
- tools and materials.

For general education, the same three dimensions, based on initial expert proposals, were grouped under the following titles:

- native and foreign languages,
- maths/sciences,
- natural/environmental sciences,
- social functions,
- identity.

Level descriptors for the third generic degree have yet to be developed. It is possible, however, to see the work of the Tuning-project as relevant for defining learning outcomes in particular subject-areas of higher education.

Progress can be observed in the overall shift to learning outcomes in Polish education and training. Core curricula formulated in terms of learning outcomes have recently been introduced for all the main parts of education and training. The core curriculum for general education has been being gradually implemented since the 2009/10 school year and will be fully implemented as of the 2014/15 school year. These learning outcomes also form the basis for assessment. The core curriculum for vocational education will be implemented from the 2012/13 school year, being finalised by 2015/16. Also in this case the core curriculum forms the basis for assessment criteria. As of the 2012/13 academic year, the NQF for higher education, generally defining learning outcomes in eight areas of learning, will apply. Curricula for specific fields addressed by higher education institutions at the first and second cycles will have to be described in the terms of learning outcomes as well as show how they can be assessed. For third cycle studies (doctoral), regulations from the Ministry of Science and Higher Education describe the expected learning outcomes.

([158]) No official translation is available and the final version may contain slightly different terms.

Links to other tools and policies

The work on reforming the national qualifications system includes a number of links to related policy areas. In addition to the development and introduction of the PQF and the qualifications register, validation of non-formal and informal learning, along with credit accumulation and transfer, are an important part of the strategy.

The introduction of validation has been seen as important for, and consistent with, the development of the PQF. This reflects the lack of such arrangements in the Polish system; the existing legal framework does not include the concept of validation and there are no central regulations addressing validation of learning outcomes achieved other than in formal education.

Introducing a system for credit transfer and accumulation is also seen as a priority. It is stated that this approach will reflect European initiatives, the ECTS for higher education and ECVET for the vocational field.

Referencing to the EQF

The PQF is expected to be referenced to the EQF in 2013. A joint self-certification to the QF-EHEA will take place at the same time.

Important lessons and the way forward

The PQF developments are interesting in a broader international context as they represent an effort to combine the introduction of a comprehensive national framework with the parallel development of sector and subsector frameworks. While the coexistence of frameworks at different levels and for different purposes can be found in many countries, the Polish approach tries to introduce conceptual coherence, allowing for synergies between frameworks at different levels and in different sectors. Practical implementation of the PQF in the coming period should be followed closely as it may provide a model for other countries struggling to find ways to bridge and connect sectors and subsectors of education and training. Whether this complex model will work in practice, and how it can promote consistent use of learning outcomes across levels and subsystems and sectors, will have to be carefully monitored in the coming period. The progress made in introducing the learning outcomes approach in the different subsectors of education and training provides a good basis for future developments.

While providing a very interesting technical model, the translation of the current PQF proposal into a credible and politically agreed framework will require long-term effort. The forthcoming process of amending the existing legal basis will highlight this challenge. The future involvement of stakeholders outside education and training and research will be particularly important.

Main sources of information
Bureau for Academic Recognition and International Exchange acts as the NCP. http://www.buwiwm.edu.pl/eng/index.htm [accessed 12.3.2013].

PORTUGAL

Introduction

A comprehensive NQF (*Quadro Nacional de Qualificações* – QNQ) has been in place since October 2010 as a single reference for classifying all qualifications obtainable in Portuguese education and training. Established by the Decree Law No 396/2007 (Decreto-Lei No 396/2007), the framework (including eight levels and level descriptors of learning outcomes) was published in July 2009 (Portaria No 782/2009) ([159]). Higher education qualifications have been included in the more detailed framework of higher education qualifications (FHEQ-Portugal), which is part of the comprehensive NQF.

Main policy objectives

The NQF is seen as a tool for reforming Portuguese education and training. Initiated through the 2007 reform ([160]), the development of the national qualification system and NQF forms part of a broader education and training programme, notably the 'new opportunities' initiative and the 'agenda for the reform of vocational training'. These reforms aim to raise the low qualifications level of Portuguese population (youngsters and adults) ([161]).

Three main goals are emphasised:

- to reinforce vocational/technical pathways as real options for young people (European Commission et al., 2010, Portugal, p.1) ([162]);
- to upgrade the education and qualification level of the adult population;
- to promote attainment of secondary education as a minimum level of qualification in Portugal ([163]).

([159]) http://www.catalogo.anqep.gov.pt/boDocumentos/getDocumentos/163.
[accessed 5.12.2012].

([160]) Decree Law No 396/2007.

([161]) Despite fact that there have been attempts to invest in qualifications over the last two decades, the number of early school leavers (aged 18-24) is still among the highest in EU countries (28.7% in 2010) and the total population having at least upper secondary education was 31.9% in 2010 (Eurostat data).

([162]) The National Qualifications Agency set the objective that 50% of those enrolled in upper secondary level should achieve a vocational qualification. See *European inventory on validation of non-formal and informal learning 2010: country report: Portugal*. http://libserver.cedefop.europa.eu/vetelib/2011/77477.pdf
[accessed 5.12.2012].

For young people, the reform focuses on measures to prevent early school leaving and sets out to establish secondary level qualifications as a minimum requirement to be reached by everyone ([164]). For adults, the reform offers those with low qualifications a new opportunity, through formal education and training and validation, to complement and expand their level of knowledge, skills and competences. The validation arrangements are particularly important, offering opportunities in both general and professional fields.

From the public policy perspective, the development of an integrated national qualification system and framework was regarded as necessary and a further contribution to such an ambitious programme as the 'new opportunity'. The comprehensive approach of the EQF was seen as an inspiration for initiating reforms and developing a national qualification system and a comprehensive national qualifications framework. This will integrate and coordinate qualifications obtained in different education and training subsystems (general education, professional education and training, etc.) within the scope of a single framework, allowing people to combine and transfer qualifications.

The reforms also aim to develop, integrate and further develop the system for valuing and recognising competences acquired in non-formal and informal contexts, in progress since 2001. However, there have been policy changes in the last year due to the austerity measures.

There is also new impetus to promoting the attractiveness of vocational training. All vocational education and training should serve to strengthen both the education levels and professional certification of the workforce.

In parallel, a framework for higher education was established and used as a tool to support reforms and developments ([165]). The main aims were to set up clear learning standards and identify progression routes though levels of learning (MCTES-Minitério da ciência, technologia e ensino superior, 2009) ([166]).

Apart from the NQF's national reform role, improving comparability and transparency of Portuguese qualifications and their understanding abroad by linking them to the EQF was also emphasised.

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[163] Portugal has also raised the compulsory schooling age to 18 years.

[164] The National Agency for Qualifications has set an objective that 50% of the cohort at upper secondary level achieves a vocational qualification.

[165] The current rate of tertiary attainment at 23% (2010) is still below the EU average (33.6%), but Portugal has made significant progress in recent years.

[166] *FHEQ – Portugal: the framework for higher education qualifications in Portugal*. http://www.mctes.pt/archive/doc/FHEQ_in_Portugal.pdf [accessed 5.12.2012].

Stakeholder involvement and framework implementation

Initial work on the NQF was carried out by the Ministry of Labour and Social Solidarity, with the support of the Ministry of Education. In 2007, the Decree Law No 396/2007 was adopted as the legal basis for the development of the Portuguese qualifications system and framework. An agreement was signed between the government and the social partners on key elements: tools and regulatory systems to support development and the implementation of the national qualifications systems and framework. Three main steps were taken.

First, a new institutional model was developed to support setting up the national qualifications system and framework. A national Agency for Qualifications (*Agência Nacional para a Qualificação, I.P* – ANQ), under the responsibility of the, at the time, Ministry of Labour and Social Solidarity and the Ministry of Education, was established in 2007 to coordinate the implementation of education and training policies for young people and to develop the system for recognition, validation and certification of competences. This has a key role to play in achieving the targets set out by new opportunities initiative and responsibility for managing the national network of the new opportunities centres. These centres provide access to recognition, validation and certification of competences, to vocational training, and to interrelationships between them in a lifelong learning perspective of each individual. The National Council for Vocational Training was set up as a tripartite body.

Second, a national qualifications catalogue was created in 2007 as a strategic management tool for non-higher national qualifications and a central reference tool for VET provision. For each qualification it defines an occupational profile, a training standard (that awards a double certification) and a recognition, validation and certification of competences standard; the catalogue is permanently updated by the National Agency for Qualifications and Vocational Education and Training, a process supported by 16 sector qualifications councils.

Third, the system for recognising non-formal and informal learning (RVCC) was further integrated into the NQF. The system for recognising non-formal and informal learning refers to the qualification standards in the national qualifications catalogue, both to 'school-based competences' (four, six, nine or 12 years of school) and 'professional competences'. The key competences standards for adult education and training for basic and secondary level are structured into key competence areas, covering the different contents of subjects at these specific educational levels.

The National Agency for Qualification and Vocational Education and Training is the main public body in charge of implementing the NQF. The agency's main

responsibilities are for the education and double certified vocational training offer for adults and for young people, the national qualifications catalogue (with the help of the Sector Qualifications Councils) and the system for recognition, validation and certification of competences. The agency also acts as NCP and played a key role in referencing national qualifications to the EQF. Another important role is to articulate and communicate with the General Directorate for Higher Education regarding levels 5 to 8 of the NQF.

The NQF has reached an early operational stage. All VET is already organised based on the NQF: the databases are organised considering the structure of the NQF and the access to the financial support also takes the framework into consideration. Further, most national qualifications indicate the corresponding NQF qualification level, thus becoming increasingly visible to individuals. Education and training stakeholders are involved in the implementation of the NQF. There is still need to disseminate the information to a wide spectrum of stakeholders, especially in the labour market, where the NQF is not yet known ([167]).

Level descriptors and learning outcomes

An eight-level reference structure was adopted to cover all the qualifications awarded in the Portuguese system. National qualifications levels and level descriptors are the same as in the EQF in terms of categories and principles.

The level descriptors are defined in terms of knowledge and skills; in the third column, the term attitude is used. The term competence was already defined and used as an overarching concept within the national qualification system as 'recognised capacity to mobilise knowledge, skills and attitudes in contexts of work, professional development, education and personal development' ([168]).

The learning outcome approach plays an important role in reforming Portuguese education and training. There is a diversity of approaches and concepts and the level of implementation varies across education subsystems. Fine-tuning learning outcomes in qualifications design with the NQF level descriptors is a challenging task and is work in progress (e.g. in upgrading not only the national qualifications catalogue but also for qualifications in general education).

([167]) NCP survey, September 2012.

([168]) Defined by Decree Law No 782/2009 (Portaria No 782/2009) on national qualification system.

In general education, the national curriculum for basic education (essential competences) that was in place until last year, was a national reference document for planning learning activities at both school and class levels. It included general and specific competences which learners are expected to develop in compulsory education. Currently the Ministry of Education has a set of 'curricular outcomes' for each specific subject in each year of basic education (considering the first, second and third cycle). In general upper secondary education there is a set of competences and general objectives, expressed in terms of knowledge, abilities/skills and attitudes/values, for each subject. The curricular outcomes for each specific subject of secondary education are being prepared.

In VET, reforms concentrate on the learning outcomes dimension of developing qualifications standards and curriculum development. The qualifications obtained in VET subsystems are organised by the standards included in the national qualifications catalogue.

Links to other instruments and policies

Several public policies and initiatives have been developed for validating non-formal and informal learning in Portugal. Since 2001, a comprehensive national RVCC system has been developed, which is nowadays integrated into the national qualification system and framework. It integrates two main processes:

- the education RVCC process, aiming to improve the education level of adults, who have no basic or secondary education certificates;
- the professional RVCC process, for adults who do not have vocational qualifications in their occupational areas (European Commission et al., 2010, Portugal, 2010) ([169]).

Adults can acquire basic or secondary level education certificate and vocational qualification; such certificates have the same value as those awarded in formal education and training. RVCC processes are based on national standards for education and training (e.g. key competences in adult education and training reference framework) and integrated in the national catalogue of qualifications, which is used as a reference for vocational qualifications.

Access to higher education is ensured for those over the age of 23 and the introduction of technical specialisation courses (placed at level 5) also improved progression possibilities to continue studies in higher education.

([169]) *European inventory on validation of non-formal and informal learning 2010: country report: Portugal.* http://libserver.cedefop.europa.eu/vetelib/2011/77477.pdf [accessed 26.11.2012].

There are two other domains in which work has begun:

- the development of an overarching model for quality assessment for the national qualifications system, considering that currently there are different approaches, methodologies and tools, depending on the type of VET provider;
- the development of a credit system for training based on the national qualifications catalogue standards.

Referencing to the EQF

Portugal referenced its national qualifications levels to the EQF and self-certified to the QF-EHEA in June 2011.

Table 26 **Level correspondence established between the Portuguese qualifications framework (QNQ) and the EQF**

QNQ	1	2	3	4	5	6	7	8
EQF	1	2	3	4	5	6	7	8

Important lessons and future plans

The decision has been taken to adopt the EQF levels and level descriptors in the NQF and to set up a comprehensive NQF. This makes it possible to:

- integrate levels of education and a five-level structure for vocational training;
- formalise the double certification at levels 2, 4 and 5.

Important work has been done by writing the NQF users' guide (National Agency for Qualifications, 2011) ([170]) which provides specific criteria to place current, and guide inclusion of new, qualifications in the NQF. Further work on qualifications standards, based on explicit learning outcomes, will support the coherence and fine-tune the relationship between qualifications and qualifications levels. This work is still in progress. A clear institutional structure underpins the development.

([170]) See *Understanding NQF: users guide support,* summarised in Appendix 3 of the referencing report.

There is a need to disseminate the outcomes of the referencing and self-certification process to a wide spectrum of stakeholders, especially improving acceptance and use of the NQF by the labour market. In this context the relationship between the tertiary framework and other parts of the NQF (levels 1 to 5) needs to be made explicit, especially for those level 5 programmes where different ministries are involved.

A strategy is being prepared, in articulation with the General Directorate for Higher Education, for including the explicit reference to the EQF level in the national certificates, diplomas and Europass documents.

Main sources of information

The National Agency for Qualification and Vocational Education and Training is the national coordination point for the EQF in Portugal. Information is available on the ANQ website. http://www.en.anqep.gov.pt [accessed 10.10.2012]
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ROMANIA

Introduction

Romania has developed a comprehensive learning outcomes-based national qualifications framework. This brings together nationally recognised qualifications from both initial and continuing VET, apprenticeship at the workplace, general and higher education, and helps integrate the validation of non-formal learning into the national qualification system. A draft government resolution on NQF was presented in November 2011. This is expected to be formally adopted in late 2012 or early 2013.

The framework builds on reform in vocational education and training and the development of competence-based qualifications since the 1990s. The National Council for Adult Training (CNFPA) was established as the National Authority for Qualifications with responsibility for coordinating the national register of (vocational) qualifications and for putting the validation system into practice (e.g. authorising validation centres, certifying individual assessors, issuing formal competence certificates).

The comprehensive framework builds on work carried out in higher education. This work has been steered by the Agency for Qualifications in Higher Education (ACPART) and been taken forward in a partnership between universities and representatives of the Social and Economic Environment. A qualifications framework for higher education, in line with the Bologna process and the EQF, has been in development since 2005. Self-certification has been completed ([171]).

One of the main challenges in recent years was to link these two development processes, structures and stakeholders from VET, higher education and the labour market in a more comprehensive framework. An important step was taken in June 2011 when the National Council for Adult Training and the Agency for Qualifications in Higher Education were merged into one single body – the National Qualifications Authority – responsible for developing and implementing a comprehensive NQF.

([171]) http://cnred.edu.ro/pdf/Self_certification_Report_RO_2011.pdf [accessed 5.12.2012].

Main policy objectives

Apart from its transparency function, the comprehensive NQF is seen as a tool to support national reforms and modernisation of education and training. There is a reported lack of coherence in the qualification system and lack of progression possibilities between IVET, CVET and higher education systems. Several qualifications frameworks (notably for VET and higher education) exist and there is a lack of recognition for validation of non-formal and informal learning within formal education needed to support entry and mobility within the education system (European Commission et al., 2010, Romania, p. 2) ([172]). Adult participation in lifelong learning is low (1.3% in 2010) (European Commission, 2011) ([173]). Additionally, qualifications should respond better to labour market needs and there is a need for greater transparency of learning outcomes and labour force mobility. National qualifications also need to be understood abroad and linked to the EQF.

The development of a comprehensive national qualifications framework addresses the following policy objectives:

- integration and coordination of national qualification subsystems;
- improvement in transparency;
- making access to lifelong learning for all easier;
- assuring the progress;
- improving qualification quality in line with the needs of the labour market and broader society ([174]).

Stakeholder involvement and framework implementation

The Ministry of Education, Research and Innovation initiated work on the comprehensive framework in cooperation with Ministry of Labour, Family and Social Protection. Other ministries are involved (health, culture, etc.) as well as social partners and stakeholders from education and training.

([172]) *European inventory on validation of non-formal and informal learning 2010: country report: Romania.* http://libserver.cedefop.europa.eu/vetelib/2011/77479.pdf [accessed 5.12.2012].

([173]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020), country analysis for Romania*, pp. 123-126. http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf [accessed 5.12.2012].

([174]) Government resolution regarding the national framework of qualifications, 2011 [draft unpublished].

Building on developments in VET and the framework for HE, consolidating governance structures was considered an important step towards developing a more comprehensive framework. In June 2011, the National Qualifications Authority (NQA) was established, based on governmental decision No 556/2011. It aims to reorganise two institutions: the National Council for Adult Training, in charge of CVET qualifications, and the National Agency for Qualifications in Higher Education, responsible for higher education qualifications.

This single legal entity – under the coordination of Ministry of Education, Research, Youth and Sports – has the following competences:

- proposes elements of national policies and strategies, draft legislation on the national qualifications framework;
- develops, implements and updates the NQF and manages the national qualifications register;
- develops and updates the methodologies for NQF implementation;
- develops the instruments needed for monitoring, evaluation and control of the NQF;
- quality assures the implementation of the NQF;
- manages the national qualifications register.

A draft government resolution regarding the NQF has been prepared. It will provide the legal basis for NQF implementation and clarify stakeholder responsibilities.

Level descriptors and learning outcomes

An eight-level reference structure was proposed in the draft government resolution. Level descriptors are defined as knowledge, abilities and transversal competences: eight generic level descriptors were identified within these three categories. Knowledge is subdivided into two strands: knowledge, understanding and usage of specific language, and explanation and interpretation. The concept of abilities includes application, transfer and problem-solving; critical and constructive reflection; and creativity and innovation. Transversal competences refer to autonomy and responsibility; social interaction; and personal and professional development. The matrix makes a distinction between levels 1 to 5 and levels 6 to 8, which refer to the NQF for higher education and qualifications included in this framework.

There is a commitment to strengthening the learning outcomes approach as a part of the national reform programme.

Learning outcomes are already embedded in competence-based VET reform and arrangements for validating non-formal learning. Many learning

programmes developed in VET are based on competences. However, the evidence suggests that links between formal education and training and certification system are still not operational, and the two systems are not connected. Validation of non-formal learning is not recognised in the formal system (European Commission et al., 2010, Romania, p. 4).

Occupational standards are used in CVET, and are based on actual elements of competence that are to be proved in the workplace. Vocational training standards are newly established, approved by the Minister for Education and based on learning outcomes to be achieved by the holder of qualification.

Romania is revising methodological frameworks for qualifications development on the principle of the EQF. A new format for qualifications, using learning outcomes, was developed.

Links to other instruments and policies

The draft government resolution (article eight) refers to validation of qualifications obtained by non-formal and informal education to be included in the national qualifications framework, using level descriptors of the NQF.

Referencing to the EQF

The referencing report is expected to be submitted in early 2013.

Important lessons and future plans

It is important to have good cooperation between different stakeholders and structures. Merging the National Council for Adult Training and the Agency for Qualifications in Higher Education into the single body – the National Qualifications Authority – responsible for the development and implementation of a comprehensive NQF is seen as an important step in supporting more coherent approaches.

Main sources of information
The National Qualifications Authority is the EQF national coordination point. www.anc.gov.ro [accessed 12.3.2013].

SERBIA

Introduction

Developments in establishing a national qualifications framework have been under way since 2005, when a green paper on the NQF was prepared. The Education Law (2009) (Serbian National Assembly, 2009) ([175]) explicitly mentioned learning outcomes, competences and national qualifications framework. A Council for VET and adult education was established as a new body. This body has been empowered to develop level descriptors for levels 1 to 5. Descriptors for higher education are being developed separately.

Development of the NQF is one of the key activities in the 'national action plan for the implementation of the strategy for the development of the vocational education and training in the Republic of Serbia, 2009-15' ([176]) and is strongly supported in the recently adopted Education strategy 2020.

Main policy objectives

Apart of being a transparency and communication tool, the NQF is seen as an important support to national reforms in education and training.

The main policy objectives of the NQF are to:

- improve transparency of education and training though a clear system of qualifications and progression routes;
- improve international comparability of Serbian qualifications with the EQF and support student mobility;
- promote competence-based and learning-oriented education;
- improve links with the labour market and ensure that qualifications are aligned with up-to-date occupational standards;
- support lifelong learning and acquisition of knowledge, skills and competences at all ages and at all levels, though better connection between formal, non-formal and informal learning;
- improve quality of education though clearly defined education standards.

([175]) *Zakon o osnovama sistema obrazovanja i vaspitavanja* [The law on the foundations of the education system 2009].
http://planipolis.iiep.unesco.org/upload/Serbia/Serbia_Law_fundamentals_education_system_cs.pdf [accessed 19.12.2012].

([176])http://www.vetserbia.edu.rs/Strateski%20dokumenti/Akcioni%20planovi/ACTION%20PLAN%20VET.pdf [accessed 30.10. 2012].

Stakeholder involvement and framework implementation

The main body supervising the development of the NQF for VET is the National Council for Vocational and Adult Education, operational since 2011. Technical development is carried out by the VET Centre. A working group has been set up, consisting of representatives of ministries for Education, Labour and of Economic and Regional Development, National Employment Service, Statistical Office, chambers and educational institutions.

It is foreseen that a high level coordination body will be established, including representatives of three education councils, Ministry of Education, Ministry of Economic and Regional Development and public institutes.

Sectoral committees are being established to define a list of qualifications by sector and standards of knowledge, skills and competences.

Level descriptors and use of learning outcomes

A concept paper has been provided though the number of levels has not yet been decided. Level descriptors for levels 1-5 are being developed but levels 6-8 are currently out of the framework and are being developed separately in the higher education system.

Development of standards is seen as the key to promoting greater consistency across the education system.

Main sources of information
Ministry of Education and Sports. http://www.mpin.gov.me/en/ministry [accessed 12.3.2013].

SLOVAKIA

Introduction

In March 2011, set of level descriptors for a comprehensive NQF for lifelong learning was approved by the Ministry of Education, Science, Research and Sports. It will include qualifications from all subsystems of formal education and training (VET, general education and higher education). However, the government plans to review the NQF. The process will start in December 2012.

The work is based on the government decision on EQF implementation in Slovakia, adopted in February 2009 ([177]). This was confirmed by the Act on Lifelong Learning, stipulating the legal background for development of a national qualification system and framework.

A national register of qualifications – the backbone of the national qualification system and the NQF – is being established with the aim of including all national full and partial qualifications with qualifications and assessment standards.

The development is complemented by adoption of the following acts: the Vocational Education and Training Act No 184/2009 ([178]), the School Act No 245/2008 ([179]), and the Lifelong Learning Act No 568/2009, adopted in December 2009 ([180]). To apply the NQF as an integrated tool, changes in this legislation are planned. In November 2012, the amended Lifelong Learning Act introduced NQF into the education sector (Act No 315/2012). The review process for including formal qualifications from primary, secondary and tertiary education into the NQF will start in December 2012 closely linked to development of qualifications and assessment standards. There is a special challenge in including qualifications

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([177]) The decision is only available in Slovak:
http://www.rokovanie.sk/File.aspx/ViewDocumentHtml/Uznesenie-5819?prefixFile=u_ [accessed 5.12.2012].

([178]) *184/2009 Z.z. Zakon z 23 apríla 2009 o odbornom vzdelávaní a príprave a o zmene a doplnení niektorých zákonov.*
http://www.tnuni.sk/fileadmin/dokumenty/univerzita/dolezite_dokumenty/Zakon_184_2009_o_odbornom_vzdelavani.pdf [accessed 14.12.2012].

([179]) *245/2008 Z. z. ZÁKON z 22.mája 2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov* [Education Act No 245/2008 Coll.].
http://www.uips.sk/sub/uips.sk/images/PKvs/z245_2008.pdf [accessed 5.12.2012].

([180]) *568/2009 Z. z. ZÁKON z 1. decembra 2009 o celoživotnom vzdelávaní a o zmene a doplnení niektorých zákonov [Lifelong Learning Act]*
http://www.istp.sk/downloads/Pravne_predpisy_2012/Zakon_568_2009.pdf
[accessed 26.11.2012].

acquired outside formal education and training in a way that allows for recognition. This will follow in the second phase of the NQF implementation. Describing qualifications in learning outcomes and agreeing on standards for quality assurance are seen as preconditions for including qualifications acquired through non-formal education and training into the NQF.

Main policy objectives

Apart from its transparency function and ease of referencing to the EQF, a comprehensive NQF has the following specific objectives:

- link education and labour market needs better;
- improve the transparency and consistency of qualifications;
- support validation of non-formal and informal learning and enhance lifelong learning.

Adult participation in lifelong learning is below the EU average, at 2.8% in 2010 compared to the EU average of 9.1%. There are plans to review adult learning and continuing VET. Measures are planned to improve the match between labour market needs and skills supply (European Commission, 2011, pp. 128-131) ([181]). The NQF, with its clear learning outcomes orientation, aims to support these actions.

The main pillars of the NQF are the national register of qualifications and national register of occupations. The aim of the NQF is to create a system environment that will support comparability of learning outcomes achieved by various forms of learning and to enable recognition of real knowledge and competences independently of the way they were acquired. Unified methodology for defining learning outcomes will be prepared and used for developing and renewing state educational programmes and study programmes for continuous training.

Stakeholder involvement and framework implementation

Work on the NQF was initiated, and is coordinated, by the Ministry of Education, Science, Research and Sports. A steering group was established, chaired by the Director General for Adult Education and Youth Division. The members come

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([181]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020), country analysis.*
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf
[accessed 5.12.2012].

from the Ministry of Labour, Social Affairs and Family, the Ministry of Interior, the Ministry of Health, the Ministry of Economy, the Ministry of Construction and Regional Development, the Ministry of Transport, the Ministry of Agriculture, the Ministry of Culture. Administrative and research support is provided by the Ministry of Education. State institutes (State Vocational Education Institute and the National Institute of Pedagogy) are responsible for formal education (including vocational education) and will be involved developing the NQF.

A ministerial working group was created to analyse existing qualifications and to do preparatory work with employers and employees.

Coordination between NQF and Bologna implementation had already been established through cooperation with the national team of Bologna experts and the higher education department at the Ministry of Education of the Slovak Republic.

A NQF review process is planned to start in December 2012 to link it closely to development of the national system of qualifications.

Level descriptors and learning outcomes

An eight-level structure was approved to cover the main characteristics of the national qualification system and also be compatible with the EQF in terms of principles, categories and level descriptors. Level descriptors are defined as knowledge, skills and competence. However, they will be subject to further revisions with more focus on skills descriptor to be in line with other national documents and to allow for inclusion of non-formal qualifications.

The learning outcomes approach has been recognised as a part of the reform agenda and is being integrated in all new developments. The modernisation programme Slovakia 21 and the National Reform Programme 2008-10 (Ministry of Finance of the Slovak Republic, 2008) ([182]) were adopted by the government of Slovakia to achieve better visibility of learning outcomes in the education system. The learning outcomes approach is described in action plans, e.g. related to:

• change in accreditation processes at higher education institutions, with the shift of emphasis to the output indicators instead of criteria focused on input;
• improved employability through increased interconnection between the content of education and the demands of the labour market.

In general education (primary/secondary) learning outcomes are being implemented in line with the School Act No 245/2008. At the moment there is a

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([182]) *National reform programme of the Slovak Republic for 2008–10*.
http://www.finance.gov.sk/en/Default.aspx?CatID=450 [accessed 10.5.2012].

review of state education programmes for general and VET oriented secondary schools.

In VET, the learning outcomes approach is being reinforced through the new Vocational Education and Training Act No 184/2009 and curriculum reform. Renewed examination of educational programmes helps respond better to labour market needs as well as occupations.

It is expected that work on the NQF will have an impact on the use of learning outcomes in higher education.

The Act on Lifelong Learning aims to contribute to unified accreditation and certification practices by recognising full and partial qualifications based on competence acquired regardless of the learning setting. Development of qualifications and assessment standards included in the national register of qualifications is a precondition for recognition of non-formal and informal learning; developments are at an early stage (European Commission et al., 2010, Slovakia, p.4) ([183]).

Referencing to the EQF

The referencing report is expected to be presented by second half of 2013.

Important lessons and future plans

To establish a good partnership platform between all stakeholders, involving social partners, is one of the preconditions for developing an NQF.

As there are still discussions on purpose, role and added value of the national qualifications framework, more at political than technical level, progress so far has been slow. Initial expectations that NQF development will be classified as the highest priority have fallen, so it is difficult to operate within the planned deadlines.

The NQF review process is planned for late 2012 to link it to development of the national system of qualifications.

Main sources of information
Ministry of Education, Science, Research and Sports – Adult Education and Youth Division. http://www.minedu.sk [accessed 17.12.2012].
www.nkr.sk [accessed 14.12.2012].

([183]) *European inventory on validation of non-formal and informal learning 2010: country report: Slovakia*. http://libserver.cedefop.europa.eu/vetelib/2011/77480.pdf [accessed 5.12.2012].

SLOVENIA

Introduction

Slovenia has reached an advanced stage of national qualifications framework development. A 10-level comprehensive Slovenian qualifications framework (SQF) was developed by the steering committee in April 2011 (Institute of the Republic of Slovenia for vocational education and training, 2011) ([184]) and consulted on with stakeholders. Agreement was reached on bringing major national qualifications into NQF levels, including qualifications from formal education and training (in VET, HE, general education, adult education) and the system of national professional qualifications under the remit of the Ministry of Labour. It also proposes inclusion of additional or supplementary qualifications, which need to be further discussed and developed.

The development builds on a series of education and training reforms since the mid-1990s (in VET, higher education, general education and adult education) and introduction of certification and validation of non-formal learning in 2000.

In 2006, the Slovenian government adopted the decree on the introduction and use of the eight-level classifications system of education and training with two sublevels (*Klasius*) ([185]) (OG, No 46/2006), which, together with relevant sectoral legislation, provided the basis for building the national framework. This national standard is used to collect, process, analyse and demonstrate statistical and analytical data, which are important to illustrate social, economic and demographic developments in Slovenia.

Other elements underpinning the SQF are the national register of occupational standards and the register of assessment qualifications catalogues for professional qualifications. A platform for the SQF register, including all nationality-recognised qualifications, is now being developed ([186]). The SQF

([184]) *Slovenian qualifications framework: proposal by the steering committee group on the preparation of the national qualifications framework*. 2011.
http://www.nok.si/en/files/nok/userfiles/datoteke/68_file_path.pdf   [accessed 7.10.2011].

([185]) *Uredba o uvedbi in uporabi standardne klasifikacije izobraževanja (Klasius) [Regulation on the introduction and use of the standard classification of education].* http://www.uradni-list.si/1/content?id=73174 [accessed 15.12.2012].

([186]) http://www.nok.si/en/qualifications-framework-register.aspx [accessed 15.12.2012]. The whole register (including all qualifications) is still to be developed. Descriptions of individual qualifications will gradually be supplemented by professional fields by the end of 2013. Currently, descriptions of qualifications from the field of computing, hotel, restaurant and catering, and tourism are available.

register describes the qualifications in accordance with the set of SQF and EQF parameters.

Main policy objectives

All subsystems of education and training in Slovenia have been reformed since the mid-1990s. There is a general view that the system functions well in terms of permeability; there are almost no dead-ends at upper-secondary level and individuals can move vertically and horizontally without major obstacles. However, there is a need to strengthen cooperation and coordination between different education and training subsystems and to increase participation in lifelong learning. It is necessary to improve the link between education and certification and the responsiveness of qualifications to labour market and individual needs, and to have a reliable tool for assessing and recognising non-formal and informal knowledge and skills. Slovenia has achieved good results in recent years (e.g. the participation of adults aged 25-64 was 16.2% in 2010 and drop-out is one of the lowest in Europe). However, making vocational education and training more attractive remains a challenge (European Commission, 2011, pp. 133-137) ([187]).

The main objective of the SQF is 'to integrate and harmonise Slovenian qualifications subsystems and enhance transparency, accessibility, progress and quality of qualifications being responsive to the needs of labour market and civil society' (Institute of the Republic of Slovenia for vocational education and training, 2011) ([188]).

The following policy objectives are addressed in more detail:

- improving transnational understanding and comparability of Slovenian qualifications as well as the potential for transfer and recognition;
- supporting coherent approaches to lifelong learning by providing access, progression, recognition of learning, coherence and better use of qualifications;
- ensuring capacity to certify knowledge, skills and competence that have not yet been incorporated in formal education and training and provide better

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([187]) *Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020): country analysis.* http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf [accessed 5.12.2012].

([188]) *Slovenian qualifications framework: proposal by the steering committee group on the preparation of the national qualifications framework.* 2011.

links and transferability between education and training and certification systems;

• improving efficiency in achieving qualifications focused on the needs of the labour market (e.g. requalification);

• providing individualised pathways mainly for adults and drop-outs.

Stakeholder involvement and framework implementation

The work was initiated by the Ministry of Education and Sport, in cooperation with the Ministry of Higher Education, Science and Technology and the Ministry of Labour, Family and Social Affairs, in 2005 through the EQF consultation process.

In January 2010, a national steering committee for referencing NQF levels to the EQF was nominated by the government. It is composed of representatives of the Ministry of Education and Sport (chair), the Ministry of Higher Education, Science and Technology, Ministry of Labour, Family and Social Affairs, the Statistical office, the National Institute for VET and Social Partners. The group has prepared the proposal for the SQF, which was broadly debated in the national consultation processes.

NQF developments are at an advanced development stage. A Law on NQF – under preparation – will define responsibilities of various stakeholders.

Level descriptors and learning outcomes

The SQF has 10 levels. The descriptor for each level contains three categories of learning outcomes: knowledge, skills and competences. Each qualification in the framework includes all three categories, although it is not necessarily the case that each category has equal weight within the qualification. Such a selection of categories allows 'capture' of the full diversity of learning outcomes and qualifications that, though acquired in different settings and for different purposes, are comparable in terms of learning outcomes.

The SQF is a framework of communication that also includes elements of reform. The starting points for the classification of qualifications in the SQF are the relevant sectoral legislation and the classification system of education and training (Klasius). The SQF aims to establish a flexible connection between the education and the qualification structures. It links two concepts: the concept of educational activities/programmes and the concept of learning outcomes.

For qualifications acquired after completion of nationally accredited programmes, additional input criteria are used: access requirements, typical length of the programme, and inputs in terms of volume of learning activities in VET and higher education defined also in credit points.

There is a proposal to include three types of qualifications:

- those awarded after completion of education programmes at all levels (general, vocational or higher);
- national professional qualifications defined as work-related vocational or professional capacity to perform an occupation at a certain level of complexity; these can be achieved through recognition of non-formal and informal learning in line with national standards;
- inclusion of additional or supplementary qualifications acquired in further and supplementary training and not issued by the national authorities, widely debated in the national consultation process and strongly supported by stakeholders. It was decided to deal with this issue in the second stage of NQF implementation.

The learning outcomes approach, following reforms carried out since the 1990s, is already embedded in the Slovene education system and well accepted.

Education programmes have moved from a content-based to an objectives-based approach. Reforms have supported and broadened assessment of learning outcomes. A balance is sought in emphasising the role played by general knowledge and acquired key competences, sufficiently broad technical knowledge and certain pedagogical processes in defining educational outcomes.

In VET, the learning outcomes approach is seen as a very useful way of bringing vocational programmes and schools closer to 'real life' and the needs of the labour market. The basis for all VET qualifications is a system of occupational profiles and standards, identifying knowledge and skills required in the labour market. National VET framework curricula define expected knowledge, skills and attitudes to be acquired by students. The school curriculum was also introduced and is an important innovation in Slovenia, giving schools increased autonomy in curriculum planning, especially in taking into account the local environment and employers' needs when developing the curriculum.

Assessment in VET (at NQF levels 4 and 5) is in the form of project work, testing practical skills and underpinning knowledge; written tests are also used at level 5 to test theoretical professional knowledge and knowledge of general subjects (Slovenian language, foreign languages, mathematics), which are tested externally.

New programmes in general education (compulsory and upper secondary) include learning outcomes, to be achieved either at the end of the three stages in compulsory education or at the end of upper-secondary education tested in the external Matura examination.

Links to other instruments and policies

Europass, ECVET and EQAVET are closely coordinated with the NQF because all are implemented and promoted within the National Institute for Vocational education and training. The NQF includes the system of national professional qualifications, which are under the remit of the Ministry of Labour and are mainly achieved though validation of vocationally-related knowledge, skills and experiences acquired out of school (the National Professional Qualifications Act). The national professional qualifications and the validation of non-formal knowledge in Slovenia are based on assessment qualifications catalogues (catalogues of standards for professional knowledge and skills).

The NQF will also make a link to credit systems in place for higher education and VET. The same credit point convention is applied for both.

Referencing to the EQF

One joint report to reference national qualifications levels to the EQF and QF-EHEA is expected to be presented at the beginning of 2013.

The national steering committee also decided that, in line with the second EQF milestone, the EQF number will be written on Europass supplements.

Important lessons and future plans

Developments in Slovenia are based on an incremental approach and reforms under way since the mid-90s and on a good situation in education, training and qualifications developments compared to EU benchmarks.

However, at the system level some drawbacks have been identified, e.g. better linking/bridging to formal education and training governed by the Ministry of Education and the certification system, steered by Ministry of Labour, to allow individuals to combine learning outcomes better from different settings; opening up the qualification system to additional/supplementary qualifications is planned. Quality assurance is regarded as essential and is being focused increasingly on outputs, e. g. quality indicators like the destination of graduates is being tested.

One of the weakest points of the system is the communication between education and the labour market and the mismatch between skills and knowledge obtained in education and training and the needs of the labour market. The current second stage of the VET curriculum and qualifications reforms, based on learning outcomes, provides this sector with an opportunity to improve its attractiveness and strengthen links to the labour market.

Further planned developments will focus on strengthening cooperation between different stakeholders in developing and implementing effective lifelong learning.

Main sources of information

The National Institute for Vocational Education and Training, where qualifications registers are accessible and the NQF proposal is published. http://www.cpi.si [accessed 7.10.2012].

SPAIN

Introduction

Spain is currently developing an NQF for lifelong learning (*Marco Español de Cualificaciones*, MECU), based on learning outcomes. It will link and coordinate different education and training subsystems. The framework will include qualifications obtained in compulsory education, in post-secondary and higher education and will integrate validation of non-formal and informal learning processes.

The draft Royal decree on the introduction of MECU has now been prepared following delay due to restructuring of the government. It defines levels and level descriptors as the basis for referencing the MECU to the EQF levels. It has been supervised and positively reported by the national advisory bodies ([189]). It is expected to be adopted in 2013.

The higher four levels of MECU will be linked to the qualifications framework for higher education *(Marco Español de Cualificaciones para la Educación Superior*, MECES), which has been put in place separately ([190]).

Main policy objectives

One of the main objectives of developing a Spanish qualifications framework for lifelong learning compatible with the EQF and the QF-EHEA is to make Spanish qualifications easier to understand by describing them in terms of learning outcomes; it should also clarify relations between them. It is expected that this will improve the extent to which stakeholders are informed about national qualifications, raising trust and making mobility easier. The NQF aims to support lifelong learning, link IVET and CVET, and improve access and participation for everyone, including the disadvantaged. Through the NQF – it is expected – it will be easier to identify, validate and recognise all kinds of learning outcomes (including non-formal and informal learning), regardless of the way they were acquired. It will support better use of qualifications at national and European level.

([189]) *Spanish qualifications framework. State-of- play.* October 2012 [internal].

([190]) http://www.boe.es/boe/dias/2011/08/03/pdfs/BOE-A-2011-13317.pdf
[accessed 5.12.2012].

Developments take into account experiences with the national catalogue of professional qualifications, established by the Law on Qualifications and Professional Training in 2002. Of special attention, and lively discussion, are levels 3 and 4 of the NQF, where formal vocational qualifications/titles, regulated by the Ministry of Education and professional qualifications/certificates under the remit of Ministry of Labour would be assigned. They are different in scope of learning they acquire, but can be linked to the same level of the catalogue.

Another important aim is to support transition and progression possibilities within the various subsystems of education and vocational training, e.g. the progression from short cycle to university programmes and opening up higher education for non-traditional learners, who might have no school leaving certificate. Another challenge is to put procedures in place for recognising non-formal learning and to reduce early school leaving (18-24 age group) (Cedefop ReferNet Spain, 2010, pp. 17-18; European Commission, 2011, pp.138-143) ([191]).

The MECU should also have an important communication role for diverse stakeholders.

Stakeholder involvement and framework implementation

The Ministry of Education, Directorate General for Vocational Training, is coordinating NQF development and implementation in cooperation with other ministries (e.g employment and social security, industry, energy and tourism, health, social services and equality, economy and competitiveness). The development work includes a wide range of other stakeholders such as social partners (unions, Spanish Confederation of Employers' Organisations, Spanish Confederation of Small and Medium Enterprises), institutional coordination bodies (e.g. Sectoral Conference of Education, General Conference for University Policy), consultative bodies (State School Council, Vocational Training Council, Arts Education Council, University Council), agencies for evaluation and others (professional corporations and associations).

([191]) *VET in Europe country report: Spain 2010*.
http://libserver.cedefop.europa.eu/vetelib/2011/77419.pdf [accessed 5.12.2012].
Analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020), country analysis for Spain.
http://ec.europa.eu/education/lifelong-learning-policy/doc/joint11/wp2_en.pdf
[accessed 5.12.2012]. The percentage of the population in this age group that has not finished the second phase of secondary education and is not in education or training rose to 30.8% in 2005, slightly decreased in 2006 to 30.6%, but in 2008 it increased to 31.9%; in 2010 it was 28.4%, twice the EU average.

Cooperation with the Bologna process is ensured with members represented in both the Committee for MECU and in the group for MECES to achieve methodological and structural coherence, making possible the alignment of the two frameworks.

Level descriptors and learning outcomes

An eight-level framework has been proposed to cover all main types of Spanish qualification. The four highest levels are compatible with the Spanish QF for higher education, which is based on the Dublin descriptors.

Level descriptors are defined in terms of knowledge, skills and competence. They have been inspired by the EQF level descriptors, but adopted to suit the national context. This is particularly the case for skills, where the ability to communicate in different languages and analytical skills are emphasised. Competence is defined as autonomy and responsibility and including learning skills and attitudes.

Broad generic descriptors for the NQF will be supplemented with more detailed descriptors when necessary (e.g. for professional qualifications).

The learning outcomes approach is seen as an essential part of the development of the MECU and is supported by all stakeholders. It is work in progress. It is expected that the development of both MECU and MECES will further support the strengthening of learning outcomes at all education and qualification levels to make qualifications more readable and easier to compare.

The Ministry of Education, Culture and Sport has established national core curricula for the various levels of education: pre-primary, primary, lower secondary, upper secondary and vocational training. These are determined by central government. The core curricula determine the general objectives for each stage of education as well as specific objectives for each area or subject. They also establish the content and evaluation criteria for each area and the basic skills for each stage of compulsory education.

The new VET qualifications are already defined in terms of learning outcomes. The professional modules contained in each qualification gather the learning outcomes and the corresponding assessment criteria that show that the qualification holder knows, understands, and is able to do as expected on completion of the programme. These learning outcomes are closely related to work activities and required professional competences.

In higher education, new study programmes have to include expected outcomes and achievement of learning objectives set for the student. All study programmes have to be accredited according to national guidelines.

Links to other instruments and tools

The NQF aims to reinforce the link to validation of non-formal and informal learning. In July 2009, the new Royal decree for the recognition of professional competences (1224/2009) was adopted; this regulates the procedures for validating professional competences acquired through non-formal and informal learning and professional experience. The national catalogue of professional qualifications is used as a standard for validating non-formal learning as well as for official diplomas on vocational training.

Referencing to the EQF

The draft referencing report is expected to be prepared in early 2013. The self-certification report has been prepared. Spain has not yet decided whether there will be one joint report prepared to reference to the EQF and self-certify to the QH-EHEA.

Important lessons and future plans

Dialogue with stakeholders is a cornerstone of the process. It is a challenge to link the two NQF development processes and to strengthen cooperation between stakeholders from all subsystems. Reinforced cooperation with the Ministry of Employment and Social Security has been developed recently.

Main sources of information

The Ministry of Education is the main source of information on NQF development, (MECU and MECES), also for all formal qualifications, including VET diplomas. http://www.educacion.es/portada.html [accessed 14.12.2012].

The Directorate General for Vocational Training has been designated the national contact point.

The MECU website has been launched http://www.educacion.gob.es/mecu [accessed 14.12.2012].

SWEDEN

Introduction

A formal decision of the Swedish government adopting a comprehensive Swedish national qualifications framework (SEQF) is expected during the first half of 2013, possibly in the form of a *Förordning (*decree). A report on the referencing of the SEQF to the EQF will be presented to the EQF Advisory Group in spring 2013. Formal adoption means that the SEQF now is moving into an early operational stage, building on the extensive work carried out since 2009. A decision has been made to carry out separate self-certification of the Swedish higher education system to the European higher education area.

Main policy objectives

The December 2009 decision to initiate work on a comprehensive NQF was primarily presented as a way to aid referencing to the EQF; the framework should make it easier for individuals and employers to compare Swedish qualifications with those in other EU Member States. While this objective still stands, later developments show that the NQF is now increasingly playing a role at national level, in particular by addressing the linkages between formal education and training and the learning taking place in non-formal and informal contexts. This 'opening up' of the framework is visible in the following areas:

Going beyond traditional education and training

The NQF proposal goes beyond existing practices by including qualifications offered by public bodies outside the education and training sector, for example police and customs services. While offering the obvious added value of transparency, the setting up of the NQF provides a new platform for systematic cooperation between all public bodies involved in education and training.

Going beyond the public system

The aim to develop an inclusive framework open to qualifications awarded outside the public system – in particular in the adult/popular education sector and in the labour market – is emphasised in the original 2009 proposal. This focus on the inclusive character of the framework responds to particular features of Swedish education and training. First, the role of adult and popular education is

generally very strong, largely explaining why Sweden consistently scores high in all international comparisons on adult and lifelong learning. These courses are offered by a wide range of stakeholders and institutions, both public and private; their link to the ordinary public system is not always fully transparent and clear. An inclusive framework could increase overall transparency of Swedish qualifications and clarify options for progress and transfer. Second, a very important part of vocational education and training is carried out by enterprises and sectors. While upper secondary education (*Gymnasieskolan*) offers a full range of (three-year) vocational courses, acquiring a full qualification (enabling someone to practise a vocation), will sometimes require additional training and certification at work. This extensive system of labour market based education and training is diverse and in some cases difficult to overview. Linking this 'non-formal' sector to the NQF is seen as crucial for increasing overall transparency. A first outline on how to manage this 'opening up' of the framework was developed during 2011. This proposal suggests establishing a National Council for Qualifications to act as the 'gatekeeper' of the NQF. The Council – involving all relevant stakeholders – would make sure that qualifications aspiring to be included in the framework meet nationally established quality criteria and requirements. Separate work aiming at the development of quality criteria for inclusion was launched in 2012 and a final proposal was presented on 16 November. These criteria will specify how to apply the learning outcomes approach when describing and levelling qualifications, and indicate requirements on quality assurance and transparency to the awarding institution.

Opening up levels 6 to 8 to non-academic qualifications

The NQF proposal presented to the government in October 2010 states that all eight levels of the NQF – including levels 6 to 8 – should be open to all types of qualifications, academic and non-academic. Not only is this seen as being in line with the spirit of EQF, it also reflects the de facto existence of high level qualifications awarded outside universities and academic institutions. This proposal has been received differently by different stakeholders. In a consultation carried out in spring 2011 (200 stakeholders addressed, 60 responses received) reactions could be divided into two main groups. Most universities and academic institutions were in favour of restricting levels 6 to 8 to qualifications covered by the Bologna process. Most public authorities, social partners and regional bodies, however, were in favour of opening these levels to all types of qualifications. The main employer organisation (Svensk Näringsliv) states the overall legitimacy of the framework would suffer ('be lost') if levels 6 to 8 were to be reserved for the university sector. A report summarising the feedback from the consultation was

presented to the government in June 2011 (*Återrapportering av regeringsuppdrag*, 2011) ([192]) and recommends levels 6 to 8 to be kept open to all types of qualifications. The report acknowledges – in line with the comments from several universities – that an opening of levels 6 to 8 requires robust and visible quality assurance mechanisms making sure that the overall level of Swedish higher education is not negatively affected. The quality criteria currently being developed for inclusion of qualifications into the framework (see above, expected November 2012) will provide a basis for developing practical solutions. It will be up to the government to decide on a final solution, reflecting the divergent opinions expressed through the consultation.

Stakeholder involvement and framework implementation

The Ministry of Education and Research has overall responsibility for work on the NQF and referencing to the EQF. The national agency for higher vocational education (*Myndigheten för yrkeshögskolan*, YH) has been given the mandate to coordinate the development of the framework and is also (as of 1st July 2009) functioning as the Swedish national coordination point for EQF. A number of expert and working groups were formally established following the December 2009 decision:

- a national advisory board has been chaired by YH and consists of representatives of the national agency for education (*Skolverket*), the national agency for higher education (*Högskolverket*), the employers federation, regional authorities, main trade union associations and the public employment services;

- a national reference group consisting of organisations and agencies forming part of public education and training, or closely associated to it. Participants in this group are, among others, the Swedish University Association, the Swedish Student Association and the Swedish Association for Popular Education (*Folkbildning*);

- a number of project groups have been working on particular aspects of the framework and its implementation. In 2011 and 2012, working groups were set up to consider how to open up the framework to external qualifications;

([192]) *Avseende en nationell referensram för kvalifikationer i Sverige.*
http://www.eqfinfo.se/Documents/EQF/%c3%85terrapportering/yh_aterrapportering_nqf_1105.pdf [accessed 5.12.2012].

how to use level 6 to 8 of the framework; and how to include public qualifications awarded outside the education sector;

- public consultations were carried out in both 2010 and 2011. Approximately 50 organisations and authorities responded to the outline of the framework submitted for consultation in June 2010. Most responses were positive and saw the proposal as a good basis for further development. Two saw no need for the framework. A slightly higher number of stakeholders responded to the 2011 consultation focusing on levels 6 to 8 of the framework (see above). A number of national conferences and events have also been organised.

Development of the SEQF since 2009 has involved a broad group of stakeholders, from education and training and the labour market. This reflects the objective of the Ministry to open up the framework to qualifications offered outside the public sector. The discussion on the opening up of levels 6 to 8 to non-academic qualifications has also contributed to raising interest in the proposal.

While still at a stage of development, interest in the framework is growing and some stakeholders have used it as a reference for their work. This is exemplified by the sports-sector (*Svenska Riksidrottsforbundet*) where the NQF is seen as an instrument for better structuring existing education and training offers. Another example is provided by the 26 institutions responsible for the qualifications of teachers and trainers in VET which have used the NQF as an instrument to identify available pathways into teacher-training and to indicate minimum requirements as regards prior learning and qualifications. A third example is provided by the construction sector, where the framework is being used to indicate alternative progression routes for those wanting to qualify as construction site managers. This approach shows that the traditional higher education pathway (civil engineer) is not the only possible alternative; several combinations of work experience and formal education (both upper secondary and post-secondary VET) are possible.

A first proposal for a qualifications framework for higher education (in relation to the EHEA) was presented in June 2007. While this work is integrated in the 2010 proposal for an NQF for lifelong learning, a decision has been made to carry out separate self-certification to EHEA.

This decision, and the reasons for it, is not discussed in the proposals on the Swedish NQF presented to the government in 2010 and 2011. While the character of levels 6 to 8 in the NQF is extensively discussed, future interaction between the Swedish qualifications framework for higher education and the NQF for lifelong learning is not addressed explicitly, apart from the general decision, in line with EQF, that academic qualifications will be placed automatically at levels 6

to 8. The consultation carried out in spring 2011 on the opening up of levels 6 to 8 show that there are differences in opinion between the (academic) higher education sector and others involved in developing the NQF. Universities seem to fear that the creation of a comprehensive NQF may come to threaten the overall quality and status of Swedish higher education. It may be assumed that these concerns have influenced the decision to go ahead with a separate self-certification of higher education.

A particular feature of the Swedish process is the central role attributed to YH, the national agency for higher vocational education, in coordinating the development of the NQF. The national agency was set up as late as 2009 with the responsibility of administering what is a new strand of Swedish higher education and training. Providing high level education and training directly relevant to the labour market, *Yrkeshögskolan* has attracted a lot of interest both among individuals and employers. Offering an alternative to the traditional university sector, for example by combining theoretically and practically oriented learning, the new institutions can be seen as complementing existing education and training provisions and qualifications.

This means that coordination of framework developments is carried out by an institution with a clear position on the role of non-academic qualifications at levels 6 to 8. This is a challenging position as the neutrality of the authority may be questioned.

Level descriptors and learning outcomes

The SEQF is based on an eight-level structure where each level is described through knowledge (*kunskap*), skills (*färdigheter*) and competence (*kompetens*). The explicit objective has been to develop a set of descriptors as closely aligned with the EQF as possible. While the influence of the original EQF descriptors is apparent, the level of detail has been increased. The difference from the EQF can be seen with 'competence' which is defined as the ability to take responsibility, to decide and act independently and to cooperate; the EQF speaks about taking responsibility and acting independently.

The learning outcomes perspective is an important and mostly implemented feature of Swedish education and training. At political level the learning outcomes approach is closely linked to the 'objective-based governance' in use since the early 1990s. While the term learning outcomes is not commonly used (the term 'knowledge objectives' is used for compulsory education), the principles behind it are well known and accepted. The core curricula for compulsory education have

recently been revised, further strengthening and refining the learning outcomes-based approach.

Universities follow national regulations on examinations, requiring the use of learning outcomes, though how these learning outcomes are translated by individual institution varies. These are autonomous institutions where national authorities have less direct influence. The Bologna process has been influential, as have a number of local initiatives.

A particular challenge faced is the extent to which the learning outcomes perspective is influencing assessment practices. Professionals may have problems seeing that assessment methods and criteria have to relate directly to the objectives expressed in the curricula. This is a continuing process illustrating the long-term challenge involved in the shift to learning outcomes.

Links to other tools and policies

The development of the SEQF is seen as an opportunity to promote the work on validating non-formal and informal learning. While progress can be observed (European Commission et al., 2010, Sweden) ([193]), not least reflecting the extensive use of learning outcomes, it is too early to speak of a fully integrated national system for validation. The challenge is being addressed in two main ways. First, the official aim is to include the learning taking place in non-formal settings (in enterprises, adult and popular education) in the new NQF. National quality criteria have to be developed for this purpose, making sure that the outcomes of education and training meet agreed quality standards. Second, the NQF is also expected to support validation of individual learning outcomes. The 2010 NQF proposal gives general support to strengthening validation arrangements in Sweden, aided by the NQF, but refers to separate development processes taking place in this area. A set of quality criteria for validation were published in 2012: while the formal status of these criteria and their subsequent implementation at national level is somewhat uncertain, this shows that progress is being made in this field.

([193]) *European inventory on validation of non-formal and informal learning 2010: country report:* Sweden. http://libserver.cedefop.europa.eu/vetelib/2011/77476.pdf [accessed 5.12.2012].

Referencing to the EQF

Referencing to the EQF will, given the adoption of the SEQF by the government in early 2013, take place spring 2013. Some concern is expressed as regard the placing of the final certificate from primary and (lower) secondary education. An original analysis (based exclusively on a technical analysis of learning outcomes) carried out by the National Agency for Education (Skolverket), placed primary and (lower) secondary education at EQF level 2. This was changed to level 3 in a report to the government, reflecting an analysis of primary and (lower) secondary education curricula. This change has been intensively discussed, including in the four other Nordic countries, indicating different interpretations of the application of the learning outcomes principle for referencing.

Upper secondary education (*Gymnasieskolan*), both general and vocationally oriented, is suggested to be placed at level 4. In line with the proposal to open levels 6 to 8 to all qualifications, academic and non-academic, one type of advanced vocational education (*Kvalifiserad* yrkeshögskoleexamen) is placed at level 6.

Important lessons and the way forward

Given that only three years will have passed since the formal go-ahead was given by the government to start development of the SEQF, the process has been rapid. Compared to other countries, Sweden has, from the start, emphasised the need to open up to non-formal education and training and make it possible to establish links to the diverse and extensive field of continuing and popular education and training run by the private sector and non-governmental organisations. The overall success of the framework will partly depend on the extent to which the framework is seen as relevant to stakeholders outside formal, initial education and training.

The Swedish NQF still has some way to go as a platform for cooperation. While the involvement of stakeholders has been systematic and extensive, the continued separate qualifications framework for higher education – and the separate self-certification of this to the QF-EHEA – points to the need for closer dialogue between the university sector and the remaining parts of education and training.

Dialogue between higher education and the remaining parts of education and training is important to address another important objective set for the SEQF, the opening up of levels 6 to 8 to all types of qualification, including those awarded outside the traditional University sector. While the social partner organisations express clear support for this (for example the Confederation of Swedish Employers), the attitude of higher education is more mixed and the final solution will depend on government decision. This decision will eventually influence the extent to which the SEQF is seen as relevant outside the existing, public system for initial education and training.

Main sources of information
The Swedish National Agency for Higher Vocational Education is designated as NCP
http://www.yhmyndigheten.se/hem/higher-vocational-education--hve/
[accessed 12.3.2013].

SWITZERLAND

Introduction

While Swiss education and training is generally considered to be of high quality, many of its qualifications are relatively unknown in other countries, potentially hindering Swiss citizens seeking employment abroad. Switzerland sees the link to European cooperation on qualifications frameworks, both the EQF and the QF-EHEA, as an opportunity to strengthen the transparency and comparability of its national qualifications in a European and wider international context. In 2009 Switzerland adopted an NQF for higher education (nqf.ch-HS) ([194]) in line with the Bologna-process. In 2011 the proposal for an NQF for vocational and professional qualifications (NQR-CH ([195])) was launched for public consultation (15 February to 15 May 2012). This latter framework is explicitly oriented to the EQF and suggests the introduction of an eight-level structure defined through knowledge, skills and competence. Switzerland joined the EQF Advisory group in 2012 and will seek to reference its qualification levels to the EQF in the foreseeable future. Switzerland also sees referencing to the EQF as a part of aligning to the Copenhagen process on co-operation in VET. Due to reorganisation at federal level, it is possible that some form of linkage between the two framework initiatives will be created. Whether this will result in one comprehensive framework covering all levels and types is not clear. As the framework for higher education has not been self-certified to the QF-EHEA, it is still possible that Switzerland will go for a joint referencing/self-certification.

Main policy objectives

The proposal for the Swiss national qualifications framework for vocational and professional education and training (VET/PET) (*Nationaler Qualifikationsrahmen für Abschlüsse der Berufsbildung* – NQR-CH-BB) was presented in February 2012. The framework consists of eight learning outcomes based levels described

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([194] Information on the NQF for higher education can be found at www.crus.ch/information-programme/qualifikationsrahmen-nqfch-hs.html [accessed 5.12.2012].

([195]) Following feedback received in the consultation process, the name of the NQR-CH has been changed to NQR-CH-BB, indicating that it is not an overarching framework but rather one for VET and PET (BB = *Berufsbildung*). The new name will be used in this publication.

through knowledge, skills and competence, as in the EQF. While limited to vocationally and professionally-oriented qualifications, it could be argued that the current proposal is modelled as a comprehensive NQF for lifelong learning. It is clear, however, that moving in this direction will require a political decision. Whether such development is possible is not clear. The recent reorganisations at ministerial level, bringing the responsible departments closer together, could provide a closer link between the two initiatives. Even in a case where the two frameworks are taken forward separately there will be a need to clarify the relationship between professional qualifications at levels 5 to 8 of the NQR-CH-BB and the three levels (cycles) of higher education covered by the nqf.ch-HS.

Stakeholder involvement and framework implementation

The development of the NQR-CH-BB has been rapid and was initiated in 2009-10. During 2011 the responsible ministry ([196]) organised a series of roundtables where representatives of cantons, trade associations, and the social partners participated. Based on the oral and written comments received on the proposal during these gatherings, the documents forming the basis for the consultation spring 2012 ([197]) were amended.

The proposal has received support from the stakeholders (cantons, trade associations and social partners), linked to two issues in particular. First, the NQF is seen as a precondition for increasing the visibility and value of Swiss qualifications abroad and supporting employment opportunities for Swiss citizens. Second, the NQF builds directly on the shift to learning outcomes initiated by the 2004 reform of the federal act on vocational and professional education and training. This reform introduces a more outcomes-oriented approach to defining VET programmes and qualifications. A total of more than 600 different qualifications have been redefined in a dialogue between trade associations and public authorities, preparing the ground for the overarching learning outcomes approach now taken forward by the NQR-CH-BB. The NQF for higher education, in contrast, enjoys a weaker link to stakeholders outside the education sector itself. However, in their responses to the consultation, most participating stakeholders point to the problem caused by the limited scope (vocational and

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([196]) *Eidgenössisches Volkswirtschaftdepartement* (EVD).

([197]) Reactions to the consultation are available at
http://www.bbt.admin.ch/themen/01051/01071/01076/01312/index.html?lang=de
[accessed 5.12.2012].

professional education and training) of the NQR-CH-BB as well as to the lack of clarity caused by the existence of two framework initiatives in Switzerland. A message from the stakeholders is to develop one, comprehensive framework covering all qualifications.

Level descriptors and learning outcomes

The shift to learning outcomes has been fundamental to reforming Swiss vocational and professional qualifications in recent years. This work has led to the gradual development of methods for writing learning outcomes ([198]). The use of learning outcomes for general and higher education is more limited but can be observed in these areas as well.

The level descriptors of the NQR-CH-BB build on the main categories of the EQF but also reflect extensive national experience in using learning outcomes for the description and definition of qualifications. While staying close to the knowledge and skills categories, the main elements of the descriptors are presented below:

Table 27   **The main elements of descriptors in the Swiss NQF**

• **Knowledge**	• Declarative knowledge	
	• Understanding	
• **Skills**	• Procedural skills	
	• Senso-motoric skills	
• **Competences**	• Vocational or professional competence	
	• Personal competence	• Self-competence
		• Social competence
		• Leadership competence

Links to other tools and policies

The proposal for NQR-CH-BB is closely linked to the use of diploma and certificate supplements. These will be given to all candidates awarded a qualification and will indicate its profile as well as its level according to the NQR-

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([198]) For information on the method for writing learning outcomes as well as for examples of profiles, consult
http://www.bbt.admin.ch/themen/hoehere/00160/index.html?lang=de   [accessed 5.12.2012].

CH (and in the future, the EQF). The Swiss version of the diploma and certificate supplement will not be identical to the ones currently used by European universities and will contain a more generic description of the qualification achieved, as much as possible in line with the Europass diploma and certificate supplement.

The Swiss system for validation of informal and non-formal learning has reached an advanced level of implementation. Through the so called *Validation des acquis*, individuals are offered a structured procedure where prior learning can be registered, where professional competences can be certified, and where a formal qualification is issued.

There is currently no plan to link a credit system to the proposed NQF.

Referencing to the EQF

There is currently no indication on when a referencing to the EQF can take place. This will depend on progress made on the NQR-CH as well on how its link to the nqf.ch-HS will be addressed.

Important lessons and the way forward

Swiss NQF developments are in a critical phase where the linkages between the two existing initiatives have to be clarified. The eight-level structure proposed by the NQR-CH provides, compared with other European countries, a very good technical basis for moving towards a comprehensive NQF. However, a technical basis is not sufficient. What is needed is a political mandate indicating in which direction developments should now go.

On a general level Switzerland is in a good position to introduce a learning outcomes based framework. Work during the last decade on the shift to learning outcomes and on validation provides a very good starting point for such a development.

Main sources of information
Federal Office for Professional Education and Technology (OPET) participates in the NCP meetings as observer. http://www.bbt.admin.ch/index.html?lang=en [accessed 12.3.2013].

TURKEY

Introduction

A comprehensive NQF (Turkish qualifications framework, TQF) is being developed in Turkey. It aims to bring together a national vocational qualification system (NVQS), led by the vocational qualifications Authority, a qualifications framework for higher education, developed in the Bologna process, and integrate them with the qualifications awarded by Ministry of National Education. Draft level descriptors for a comprehensive framework have been prepared.

Passing the Vocational Qualifications Authority (VQA) Law (No 5544, 2006) was the most important legal stage for developing a national vocational qualification system of labour market oriented qualifications. Through this law, a tripartite Vocational Qualifications Authority was established in 2006, coordinated by the Ministry of Labour and Social Security with a wider range of stakeholders, including the Ministry of National Education. Its main objective was to develop the national vocational qualification system and framework, based on occupational standards and with strong sectoral involvement.

According to the law amendment (November 2011), the NQF is defined as 'Principles of qualification designed in compliance with the EQF; and gained through vocational, general and academic education and training programmes including primary, secondary and higher education as well as other learning routes.' By this definition it is clearer that NQF (TQF) is a comprehensive framework, comprising all qualifications from all learning paths. Another new law article determines the scope of the qualifications to be included in the NQF (TQF) as all quality assured qualifications are to be incorporated.

The main challenge is to link these qualification systems and processes in a coherent and comprehensive national qualifications framework. Developments of national standards and cooperation and coordination between the Vocational Qualifications Authority, Ministry of National Education and the Council of Higher Education is crucial to development of a more coherent national qualification system.

Main policy objectives

Setting up a national qualification system and national qualifications framework is seen as an important instrument to support national reforms in education and qualifications. According to government programme documents, including the

action plan for the strengthening of relationship between education and employment, one of the main objectives of creating an NQF is to reduce mismatches and increase effective employment and training programmes.

Compared to EU Member States, employment in Turkey is still low, especially among women; at 23.8% (2008) this is well below the lowest EU performers (ETF (2010) ([199]). Also, educational attainment of the population is still low ([200]) compared to EU Member States.

The VET system is undergoing major reform with substantial EU support; development of occupational standards, which are the basis for validating non-formal learning, is under way. Educational standards, defined by the Ministry of National Education, are different from those used in the system of vocational qualifications, under the remit of the Vocational Qualifications Authority (European Commission et al., 2010, Turkey, p. 1) ([201]). However, they are increasingly being used for reform of VET standards and curricula. After the process of aligning national curricula with occupational standards and the quality assurance of training institutions is completed, schools will be allowed not only to issue the school certificate, but also a secondary level vocational qualification (European Commission et al., 2010, Turkey, p. 1).

The following policy objectives are addressed by developing the NQF:

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

On a short-term basis, all new VQA qualifications developed according to the new legislation (Law 5544) will be included in the NVQS.

([199]) *Country information note 2010: Turkey.* 2010, p. 2.
http://www.etf.europa.eu/pubmgmt.nsf/(getAttachment)/371E87C744EDB330C12577 3800300A15/$File/NOTE864C9X.pdf [accessed 5.12.2012].

([200]) According to Eurostat data for 2010 only 28.4% of the population (aged 24-65) completed upper secondary education, and reducing early school leaving (46.6% for age 18-24) is a big challenge.

([201]) *European inventory on validation of non-formal and informal learning 2010: country report: Turkey*. http://libserver.cedefop.europa.eu/vetelib/2011/77657.pdf [accessed 26.11.2012].

In the medium-term, it is expected that all formal qualifications (secondary and higher education diplomas and other qualifications) will be placed in a single comprehensive TQF, consisting of three subframeworks; progression between all kinds of qualifications will be possible. One of the expected benefits is that, through the NQF, the qualifications will be more labour-market oriented and dynamic. For individuals, the NQF will provide career mobility, flexibility, all kinds of learning activities to be valued, and progression routes to be clearly defined.

Stakeholder involvement and framework implementation

The work on NQF development was initiated by the Ministry of National Education in 2005 through the EQF consultation process. Since the Vocational Qualifications Authority was established in 2006, it has been coordinating the process together with the Ministry of National Education, the Council of Higher Education and other stakeholders.

Passing the Vocational Qualifications Authority Law (No 5544, 2006) was the most important legal stage for developing a national vocational qualification system. Through this law, a tripartite Vocational Qualifications Authority was established in 2006, coordinated by the Ministry of Labour and Social Security with a wider range of stakeholders, including the Ministry of National Education. Its main objective was to develop the national vocational qualification system and framework, based on occupational standards and with sectoral involvement. It is being developed as a parallel system to existing formal education under the responsibility of Ministry of National Education ([202]). It is used also for validating non-formal and informal competences and skills.

The VQA become operational in 2007, governed by an assembly and executive board. Employee, employer and professional organisations are members of the executive board of the VQA with representatives from government: the Ministries of Labour and Education, and the Council of Higher Education.

([202]) The certificates awarded under the VQA system are different from awards in formal education and can be provided via a process of validation. The process of aligning formal and non-formal curricula with the standards in this system continues. Once the system of standards is developed, qualifications in the formal system will be aligned with those used in the VQA system. For more information see *European inventory on validation of non-formal and informal learning 2010: country report: Turkey*. p 1. http://libserver.cedefop.europa.eu/vetelib/2011/77657.pdf [accessed 5.12.2012].

The Council of Higher Education is in charge of developing a qualifications framework for higher education.

As Turkey has decided to adopt a more comprehensive approach and to link better initial VET and the emerging national vocational qualification system, an NQF Preparation Commission was established in August 2010. Its main task was to prepare a proposal for a comprehensive NQF. In April 2011 a Feedback Forum consisting of 80 relevant institutions was established to provide feedback to the NQF development studies and a two-day briefing event was held to inform the members of the forum about the NQF concept and recent studies in Turkey. During the second half of 2011 and mid 2012 an NQF (TQF) consultation paper was prepared consisting of all the technical and administrative issues related to TQF and presented to the Feedback Forum members and other main stakeholders. Consultation was carried out during summer to obtain comments and advice from forum members and the general public.

All the comments and advice of the various institutions and experts was gathered and taken into consideration by the NQF working group. The TQF consultation paper is being turned into a white paper for approval.

Another study being carried out parallel to TQF White Paper preparation is the development of secondary legislation for the TQF which will be implemented following Cabinet approval. All of the issues regarding the development, implementation, management and updating of the TQF will be set out in the secondary legislation. A first draft of the regulation is prepared and there will be consultation with relevant public and social institutions in November 2012.

Apart from the Vocational Qualifications Authority, responsible for developing national occupational standards and vocational qualifications to be placed at levels 1-7, except for the regulated occupations defined in the Law Article 1 ([203]), there are two further bodies responsible for education and national qualifications in Turkey. The Ministry of National Education is responsible for developing qualifications up to the fifth level and The Council of Higher Education is an autonomous public body responsible for planning, steering, governing and supervising higher education institutions and qualifications. An independent Quality Assurance Agency is planned.

([203]) VQA Law Article 1 paragraph 2 defines these professions: medical doctors, dentists, nurses, midwives, pharmacists, veterinary doctors, engineers and architects as well as any other professions requiring education on a graduate level as a minimum, for which conditions for inception of respective professions are regulated by law.

Level descriptors and learning outcomes

The proposed draft NQF consists of eight levels defined in terms of knowledge, skills and competence. Knowledge is defined as theoretical and/or practical knowledge involving the comprehension of facts, principles, theories and practice. Skill is defined as utilisation of knowledge, problem solving, transferring knowledge and skills to others which requires the ability to use logical, intuitive and creative thinking and dexterity, method, material, tools and instruments. Competence is defined as utilisation of knowledge and skills in an area of work and/or learning by taking responsibility and/or displaying autonomy, determination and satisfaction in learning requirements. Descriptors are still under discussion.

Higher education has determined descriptors in terms of learning outcomes, which are compatible with EQF and QF-EHEA. Competence is further divided into four components: autonomy and responsibility, learning to learn, field specific competences, and social and communication skills with an emphasis on foreign language competences and ICT.

The learning outcomes approach is seen as an essential part of the development of the TQF and is the stated intention of current reform in all subsystems of education and training, supported by main stakeholders. The Ministry of National Education has launched curriculum reform in secondary education (for both general and vocational and technical schools). Vocational qualifications will be learning outcome based.

A format for national occupational standards (NOS) was determined and describes labour market needs in terms of duties and tasks with corresponding performance criteria. At present, 351 occupational standards ([204]) have been approved, mainly at level 2 to 5: an important positive aspect is that labour market actors have been significantly involved in these processes. Qualifications developed from occupational standards are described in terms of learning outcomes and recently 120 national qualifications were approved by the VQA. Awarding criteria for bodies setting vocational qualifications were established.

The learning outcome approach is an essential part of the implementation of the NQF for higher education.

A system for validating non-formal learning is at development and piloting stage. The NQF and Vocational Qualifications Authority will play the key role (European Commission et al., 2010, Turkey).

([204]) http:///www.myk.gov.tr [accessed 5.12.2012].

Referencing to the EQF

According to the work plan, the referencing process will start at the end of 2012 following the official approval of the TQF. A working group will be established consisting of national and international independent experts and a draft referencing report is expected to be prepared by mid-2013.

Important lessons and the way forward

A very important condition for establishing an NQF is to have clear responsibilities, defined roles and a coordination body which has a clear mandate. The first step was reaching agreement on establishing the Vocational Qualifications Authority in Turkey in charge of developing and implementing the national vocational qualification system.

As the ultimate goal is to introduce a single comprehensive national framework, encompassing all stages of formal and all kinds of informal learning, it will also be important to develop an effective and sustainable cooperation between stakeholders across all three sectors. Strengthening and adjusting governance structures are also needed and are being discussed. The TQF regulation deals with all of the issues mentioned above and strengthens the basis for TQF.

One important objective of the TQF is to use it as vehicle for developing new occupational standards and qualifications, required by the labour market, and to use them for validation and reform of curricula. To retrain employer engagement in qualifications development seems crucial.

The other challenge is to develop the quality assurance of learning outcomes of education and training underpinning the whole TQF. This would require development of some comprehensive quality assurance approaches and mechanisms in the future.

Main sources of information

The Vocational Qualification Authority is the NCP. Information is available on its website. www.myk.gov.tr [accessed 7.10.2012].

For QF for higher education detailed information is available on its website. http://bologna.yok.gov.tr [accessed 7.10.2012].

THE UNITED KINGDOM

A total of five different qualifications frameworks currently operate in the UK. In England and Northern Ireland we find the framework for higher education qualifications (FHEQ) established in 2001, the qualifications and credit framework (QCF) established during the period 2006-08 and the NQF established in 2003. The Scottish qualifications framework has operated since 2001; in Wales the credit and qualifications framework of Wales (CQFW) has also been in place since 2001. This multitude of frameworks is partly explained by the gradual devolution of powers to the UK nations, in particular giving more autonomy to Scotland and Wales. The many frameworks also reflect the needs and interests of subsectors of education and training, explaining the existence of a separate framework for higher education qualifications in England and Northern-Ireland and the continued co-existence of the QCF and NQF. In contrast, Scotland and Wales have chosen to develop comprehensive frameworks covering all levels and types of qualifications. These developments show that frameworks have come to stay and can play an important role in promoting and modernising education, training and lifelong learning. They also show that frameworks develop and change continuously. This has been the case for England, where policy directions have changed frequently and to some extent, seen from the outside, reduced rather than improved the transparency of qualifications. From the perspective of the new and emerging frameworks introduced throughout Europe 'post EQF', the Scottish and Welsh frameworks are important learning cases. Both are comprehensive and have set themselves ambitious targets for lifelong learning. The relative complexity of the UK situation has led to the publishing of a brochure (National Qualifications Authority of Ireland et al., 2011) ([205]) explaining to users how the frameworks interact as well as how they link to the Irish framework.

([205]) See *Qualifications can cross boundaries: a rough guide to comparing qualifications in the UK and Ireland*.
http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/Quals_cross_boundaries.pdf [accessed 5.12.2012].

England and Northern Ireland

Introduction

There is no single comprehensive national qualifications framework covering all levels and types of qualification in England and Northern Ireland. The QCF mainly addresses vocational and pre-vocational education and training areas but without including secondary education (school leaving certificates) and higher education. The latter qualifications are covered by the framework for higher education. The QCF was referenced to the EQF in 2009 and the FHEQ to the EHEA-framework in 2008. There is currently no formal link between these two frameworks but comparison is aided by use of parallel level approaches supporting transparency.

The QCF is a regulatory credit and qualifications framework for England, Wales and Northern Ireland. It is presented as covering all levels and types of qualification, although with the important exception of secondary and higher education qualifications. The QCF recognises skills and qualifications by awarding credit for qualifications and units. It is supposed to enable people to gain qualifications at their own pace along flexible routes. The QCF was formally adopted – after a two-year trial period – in autumn 2008. The OFQUAL is responsible for the daily running of the framework. In comparison the FHEQ is not a regulatory framework but introduces some common objectives (benchmarks) to be pursued voluntarily and provides a language of communication supporting transparency and the positioning of qualifications to each other.

Main policy objectives

The QCF is a 'mature' NQF which can be traced back to the framework for NVQs established in 1987. This framework – operating with five levels – was set up to deal with a diverse and intransparent national VET system. As stated by Lester (2011) ([206]), '... the NVQ-framework was developed to impose some order in this apparent chaos and classify qualifications according to their level and occupational sector' (Lester, 2001, p. 206). The NVQ framework was heavily criticised as being too rigid in its application and too narrow in its scope, mainly

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([206]) The UK qualifications and credit framework; a critique. *Journal of vocational education and training*, Vol. 63, No 2, June 2011, pp. 205-216.

addressing work-based awards. In 2003 the NVQ-framework was replaced by the national qualifications framework for England, Northern-Ireland and Wales. This framework introduced an 'eight plus one' approach, combining eight ordinary qualifications levels with an entry level for basic skills. The main difference to the NVQ approach was a broadened scope, addressing both work and school based awards. The original idea was that the QCF would cover all publicly-funded qualifications, including general and vocational education but excluding degree-awarding institutions (higher education) ([207]). The QCF (tested between 2006-08) contains the same number of levels as the NQF (number of levels, coverage) but departs significantly by using (Lester, 201, p. 207) ([208])'... units rather than qualifications (...) as the primary currency, and all units would carry a credit rating based (as in higher education) on one credit equalling 10 notional hours of learning'.

Reflecting the above developments, the following four official aims have been identified for the QCF. It should:

- ensure a wider range of achievements can be recognised within a more inclusive framework;
- establish a framework that is more responsive to individual and employer needs;
- establish a simpler qualifications framework that is easier for all users to understand;
- reduce the burden of bureaucracy in the accreditation and assessment of qualifications.

The QCF also sets out a series of strategic benefits of implementing the new framework. These are:

- the framework is simple to understand, flexible to use, and easy to navigate;
- the framework is responsive so that employers and learning providers can customise programmes of learning/ training to meet particular needs;
- unit achievement is recognised and recorded;
- all learners have an individual learner achievement record;
- improved data quality in relation to qualifications and achievement for users, stakeholders and government;

([207]) By the end of 2010 all vocational qualifications were to be accredited to the QCF. At this point the QCF replaced the NQF for vocational qualifications. General educational qualifications – principally the general certificate of secondary education (GCSE) and the general certificate of education at advanced level (A levels) – will continue to be located in the NQF until a decision is made whether or not to move them into the QCF. The NQF uses the same system of levels (Entry 1-3).

([208]) The UK qualifications and credit framework: a critique. *Journal of vocational education and training*, Vol. 63, No 2, June 2011.

- the introduction of the QCF reduces administrative bureaucracy and costs.

The QCF differs from most new NQFs now being developed throughout Europe in its:

- regulatory approach;
- integrating not only qualifications, but also units, placed on levels;
- integration of credits;
- the direct link to individual learners (the learner achievement record).

These features reflect that the framework is embedded in a wider political and institutional context and that it is recognised as a key instrument supporting national education and training policies. In this sense the framework can be described as 'tight' or 'strong', as it has been by some commentators (Tuck, 2007) ([209]). But the framework also differs from most the new 'EQF inspired' frameworks by only covering a part of the qualification system. A nationwide qualifications framework, showing the relationship between all types and levels of qualifications, is still lacking in England and Northern Ireland.

Stakeholder involvement and implementation

Responsibilities for regulating the QCF in England, Wales and Northern Ireland lie with the following qualifications regulators:

- in England, the qualifications regulator for all external qualifications is the Office of the Qualifications and Examinations Regulator;
- in Northern Ireland, the qualifications regulator is the Council for Curriculum, Examinations and Assessment, which regulates external qualifications other than NVQs.

A separate FHEQ has been established for England, Northern Ireland and Wales. This framework has five levels and is based on the concept that qualification is awarded for demonstrated achievement. These levels are comparable to levels 4 to 8 of the QCF, although a different approach (descriptors) is used to describe them ([210]). The five levels of the FHEQ are differentiated by a series of generic qualifications descriptors that summarise the knowledge, understanding and the types of abilities that holders are expected to have. The FHEQ is certified against the QF-EHEA (Bologna), but not against the EQF. The attitude of FEHQ in relation to the EQF is significantly different from that signalled by the QCF. A 'scoping group' was set up in 2008 to explore the

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([209]) *An introductory guide to national qualifications frameworks: conceptual and practical issues for policy-makers.*

([210]) See Annex 3.

relationship between FHEQ and the EQF, concluding that, while they support the lifelong learning goals of the EQF, the group was not aware of any additional benefits which might accrue to the higher education sector at present by referencing the FHEQ to it. The group recommends that the position can be reviewed again, taking into account development of the EQF and the Bologna process and a monitoring of levels of interest expressed by professional, statutory and regulatory bodies.

Level descriptors and learning outcomes

The QCF comprises nine levels from entry level (subdivided into entry level 1 to 3) to achievement at level 8.

The level descriptors ([211]) provide a general, shared understanding of learning and achievement at each of the nine levels. The level descriptors are designed to enable their use across a wide range of learning contexts and build on those developed through the Northern Ireland credit accumulation and transfer system (NICATS), the existing level descriptors of the NQF, and a range of level descriptors from frameworks in the UK and internationally. The five upper levels are intended to be consistent with the levels of the framework for higher education qualifications in England, Wales and Northern Ireland.

Level is an indication of the relative demand made on the learner, the complexity and/or depth of achievement, and the learner's autonomy in demonstrating that achievement. The level descriptors are concerned with the outcomes of learning and not the process of learning or the method of assessment. The indicators for each level are grouped into three categories:

• knowledge and understanding,
• application and action,
• autonomy and accountability.

Apart from the levels, the QCF consists of a system of units and credits. One credit is based on 10 hours of learning, regardless of where and when the learning took place. The QCF also includes principles for assembling qualifications from units, specifying which units must be achieved for each qualification. A set of principles for recognising prior certified and non-certified learning is also included.

The learning outcomes approach underpins the English and Northern Irish qualifications systems. Actively promoted since the 1980s, this perspective is broadly accepted and implemented.

([211]) See Annex 3 for detailed descriptors.

Referencing to the EQF

The QCF was referenced to the EQF in February 2010 as a part of the overall UK referencing process. The following relationship was established.

The higher education framework (FHEQ) is not referenced to the EQF. While this option was discussed during the referencing process, agreement was not reached on this point. As the five upper levels of the QCF are consistent with the FHEQ, an implicit and indirect link is established. Preparations are under way for presenting an updated referencing report to the EQF AG (possibly) in 2013. Such a report would make it possible to revisit the linking of the FHEQ to the EQF.

Table 28 **Level correspondence established between the qualifications and credit framework (QCF) and the EQF**

QCF	Entry level 1	Entry level 2	Entry level 3	1	2	3	4	5	6	7	8
EQF			1	2	3	4	5		6	7	8

Important lessons and the way forward

The adoption and implementation of the QCF demonstrates the need to continue to develop national qualifications frameworks. Building on the experiences from two previous framework approaches (the NVQ and the NQF), the integration of credits clearly moves the framework to a new stage of development.

QCF experiences are important as they demonstrate the challenges involved in pursuing a learning outcomes (and credit) based approach to qualifications. The QCF demonstrates that it is possible to develop and also sustain a qualifications framework over time, gradually refine its objectives and increase its impact. However, the QCF also demonstrates that national frameworks have to be fit for purpose and designed in accordance with the national context. The QCF is a reflection of the particular strengths and weaknesses of English and Northern Irish education and training; it can hardly be used as a blue-print at European level.

The limited coverage of the QCF – and the lack of formal linkages between the QCF and FHEQ – also demonstrates the difficulties involved in building a comprehensive framework with nationwide coverage. The fact that many European countries are now moving towards comprehensive frameworks indicates that the new generation of framework development in response to the EQF actually goes beyond the scope of pioneering frameworks like the English and Northern-Irish one.

Main sources of information

Office of Qualifications and Examinations Regulation (Ofqual) acts as EQF NCP for England.
http://www.accreditedqualifications.org.uk/office-of-qualifications-and-examinations-regulation-ofqual.html [accessed 12.3.2013].

Council for the Curriculum Examinations and Assessment Northern Ireland acts as the NCP for Northern Ireland, website to be added.

Scotland

Introduction

The Scottish qualifications framework (SCQF) promotes lifelong learning in Scotland. The framework was originally implemented in 2001 but has since been gradually revised and refined. SCQF governance is organised as a company (see below), which is a unique solution in Europe, and a charity was set up in 2006. The framework covers all levels and types of qualifications but is not a regulatory framework. The SCQF assists in making clear the relationships between Scottish qualifications and those in the rest of the UK, Europe and beyond, thereby clarifying opportunities for international progression routes and credit transfer. The SCQF sees itself as an integrating framework, supporting everyone in Scotland, including learning providers and employers, by:

- helping people of all ages and circumstances to get access to appropriate education and training so they can meet their full potential;
- helping employers, learners and the general public to understand the full range of Scottish qualifications, how qualifications relate to each other and to other forms of learning, and how different types of qualification can contribute to improving the skills of the workforce.

Level descriptors and criteria for inclusion are common across all levels and types of qualification.

Main policy objectives

The objectives pursued by the SCQF are:

- to support lifelong learning;
- to clarify entry and exit points for qualifications and programmes of learning at whatever level;
- to show learners and others possible routes for progression and credit transfer;
- to show the general level and credit (size) of the different types of Scottish qualifications;
- to enable credit links to be made between qualifications or learning programmes to assist learners to build on previous successes.

It will do this by making the overall system of qualifications and relevant programmes of learning easier to understand and providing a national vocabulary for describing learning opportunities. The SCQF has a clear ambition to promote integration and progression across levels and types of qualification. While the existence of a common set of descriptors and criteria is seen as an important precondition, the development of a fully integrated framework is seen as a long term task. As one of the oldest comprehensive NQFs in Europe, the SCQF illustrates the potential of frameworks as instruments for development and, to some extent, reform. The SCQF has been described (by Raffe, 2009a, 2011) as a 'communication framework' without strong regulatory or reform functions. Experiences may indicate that it is too simple to operate with the distinction 'communication' and 'reform' frameworks, the SCQF seems gradually and increasingly to operate from a middle position where it acts as a reference point for revision and renewal of curricula and education and training in general. This is closely related to the important role played by learning outcomes throughout the Scottish education and training landscape, supported and made possible by the NQF. As important is the role played by the SCQF as a platform for dialogue between stakeholders and its ability to initiate and sustain a 'common conversation'.

The SCQF is an 'open framework' in the sense that it explicitly addresses the private sector and employers, and encourages these to have their training provisions accredited and included under the framework. The benefits of such an inclusion are presented on the SCQF website ([212]) as follows:

- it gives your in house training national recognition and a comparison with nationally recognised qualifications;
- it helps employees to map their learning pathways and gain personal recognition for what they have achieved. It also allows them to progress into more advanced learning programmes whether in-house or via an external learning or training provider;
- it encourages employees to undertake learning, raises morale and increases company loyalty;
- it promotes skills development and helps support effective skills utilisation.

As in the case of Wales (see below) the unit-based approach used in Scotland aids inclusion of qualifications of differing character and size. Normal procedures applied for the framework as a whole can also be used for qualifications outside the traditional, public sector. It is interesting to note that a big proportion of the SCQF database contains what can be termed non-traditional

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([212]) http://www.scqf.org.uk/Employers/ [accessed 5.12.2012].

qualifications (by the SCQF estimated to approximately 400 out of 1500), it is also interesting to note that a number of 'international qualifications', notably awarded by multinational ICT companies, are included in the SCQF.

Stakeholder involvement and framework implementation

The framework is maintained by the Scottish credit and qualifications framework partnership which is a company limited by guarantee and also a Scottish charity. The partnership is made up of the Scottish Qualifications Authority, Universities Scotland, Quality Assurance Agency, Association of Scotland's Colleges, and Scottish Ministers.

A high degree of ownership can be observed with the SCQF. This reflects how the framework established in 2001 brought together three previously developed frameworks covering different types and levels of qualifications, ranging from the qualifications of higher education institutions, Scottish vocational qualifications, and the national and higher national qualifications.

Level descriptors and learning outcomes

The SCQF has 12 levels ranging from access at SCQF level 1, up to Doctorate at level 12. The different levels indicate the level of difficulty of a particular qualification and increases in levels relate to factors such as:

- the complexity and depth of knowledge and understanding;
- links to associated academic, vocational or professional practice;
- the degree of integration, independence and creativity required;
- the range and sophistication of application/practice;
- the role(s) taken in relation to other learners/workers in carrying out tasks.

The Scottish level descriptors were revised in 2012. This does not represent a radical departure from the past approach but can be seen as part of continuous evolution of the framework based on experiences gained. The three access (entry) levels are seen as important in addressing the needs of individuals with particular learning needs and as an important part of an overall lifelong learning strategy. For some, the access level can function as a way back to formal education and training.

It is a requirement of the framework that all learning to be included in the framework is described in terms of learning outcomes. Closely linked to the learning outcomes approach is the use of recognition of prior learning. While involved in development of RPL since the 1990s, there is still debate on how to make further progress in this field. A main distinction is between RPL as exclusively about recognition of prior formal learning and RPL as recognition of non-formal and informal or experiential learning. A toolkit has been developed for the last and more challenging form of recognition and will be used as a basis for future developments.

Referencing to the EQF

The SCQF was referenced to the EQF in February 2010 as a part of the overall UK referencing process and resulted in the following referencing:

Table 29 **Level correspondence established between the Scottish qualifications framework (SCQF) and the EQF**

SCQF	1	2	3	4	5	6	7	8	9	10	11	12
EQF			1	2	3	4	5	5	6	6	7	8

Main sources of information
Scottish credit and qualifications framework partnership acts as NCP for Scotland.
http://www.scqf.org.uk/ [accessed 12.3.2013].

Wales

Introduction

The CQFW is a descriptive voluntary framework developed by bringing together a number of subframeworks already in existence in Wales: the framework for higher education qualifications (FHEQ); the NQF for regulated national courses; and the quality assured lifelong learning. It embraces both academic and vocational qualifications and can be described as comprehensive. The CQFW can be seen as a second generation framework emerging from the NQF for England, Northern Ireland and Wales. In certain areas, for example for general upper secondary qualifications (GCSEs) the Welsh framework overlaps with the frameworks of England and Northern Ireland. Recent developments, in 2012, where England will discontinue the GSCEs while Wales will retain them, may have consequences for the CQFW. Some stakeholders believe that the split on GSCEs will result in an even more independent CQFW, developing more according to the Scottish NQF model.

Main policy objectives

The CQFW is positioned as a key part of Wales' lifelong learning policy and strategy. For formal education and training, the framework supports all recognised, credit-based learning within:

- higher education,
- regulated general and vocational qualifications.

This means that the CQFW enables any learning post-14 to be formally recognised but is not in itself a regulatory mechanism; any regulatory requirements are supplied through its relationship with regulating bodies. The framework is unit-based; it defines one credit as 10 hours of learning time and has nine levels (the lowest subdivided into three) with supporting level descriptors.

The system for quality assured lifelong learning forms a third and integrated pillar of the CQFW. It takes as its starting point that all learning wherever and whenever it takes place should be valued and recognised, making the Welsh framework one of the few European frameworks where validation and/or recognition of prior learning is fully integrated. In the last few years much effort has been invested in putting this system into practice. While enjoying some success, the number of individuals actually using this opportunity has been

relatively limited and there is currently a discussion on how to adjust the approach, for example by reducing the complexity of procedures.

The CQFW can be considered an 'open framework' in the sense that its unit-based approach at the outset is oriented towards a multitude of awarding bodies and education and training formats. This aids inclusion of units developed (for example) by the private sector and as part of continuing and enterprise-based education and training. This means that the procedures and quality criteria applied within the quality-assured lifelong learning (QALLL) can exemplify how an NQF can establish links beyond the traditional, formal education and training sector.

Level descriptors and learning outcomes

There are nine levels in the CQFW, entry plus eight levels. There are common level descriptors which apply to all types of learning programmes and qualifications.

All qualifications and learning programmes within the CQFW are based on learning outcomes and must have quality assured assessment of these outcomes. The CQFW uses two measures to describe qualifications:

- the level of the outcomes of learning;
- the volume of outcomes, described by the number of CQFW credit points.

Referencing to the EQF

The CQFW was referenced to the EQF as a part of the overall UK referencing process in February 2010.

Table 30 **Level correspondence established between the CQFW and the EQF**

CQFW	Entry level 1	Entry level 2	Entry level 3	1	2	3	4	5	6	7	8
EQF			1	2	3	4	5		6	7	8

As with England and Northern Ireland, no link was established between the FEHQ and EQF. This was based on the argument from the HE-sector that no additional benefit of such a link could be observed. This decision can be reviewed in the future, possibly in 2013, depending on the developments of the EQF and feedback from potential users of the frameworks.

Main sources of information
Wales – Welsh assembly government acts as NCP.
http://wales.gov.uk/topics/educationandskills/qualificationsinwales/creditqualificationsframework/;jsessionid=C19211C601E5A0EFC47151D5B921CEE3?lang=en
[accessed 12.3.2013].

List of abbreviations

ACPART	National Agency for Qualifications in HE
AIBA	National Agency of International Education Affairs in Liechtenstein
AKOV	Flemish Agency for Quality Assurance in Education and Training (Agentschap voor Kwaliteitszorg in Onderwijs en Vorming)
ANQ	Agency for Qualifications (Agência Nacional para a Qualificação)
BMBF	Federal Ministry of Education and Research
BMUKK	Federal Ministry of Education, Arts and Culture
CLQ	Luxembourg qualifications framework
CNCP	French National Committee for Professional Certification
CPC	consultative vocational committee
CQFW	credit and qualifications framework of Wales
CROQF	Croatian qualifications framework
CVET	continuing vocational education and training
DQR	German qualifications framework
DUT	University Institute of Technology
ECTS	European credit transfer and accumulation system
ECVET	European credit system for vocational education and training
EHEA	European higher education area
Eoppep	National Organisation for the Certification of Qualifications and Vocational Guidance
EQF	European qualifications framework
ESF	European Social Fund
EstQF	Estonian qualifications framework
FETAC	Further Education and Training Awards Council
FHEQ	framework for higher education qualifications
FQF	Flemish qualifications framework
GCSE	general certificate of secondary education
HE	higher education
HETAC	Higher Education and Training Award Council
HQF	Hellenic qualifications framework
HROO	Croatian credit system for general education
ISCO	international standard classification of occupations
ISFOL	National Institute for Development of Vocational Training
ISQF	Iceland qualifications framework
IUQB	Irish Universities Quality Board
IVET	initial vocational education and training
Klasius	regulation on the introduction and use of the standard classification of education
KMK	Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder*

LQF	Latvian qualifications framework
LTQF	Lithuanian qualifications framework
MECES	Marco Español de Cualificaciones para la Educación Superior
MECU	Marco Español de Cualificaciones
MQC	Malta Qualifications Council
MQF	Malta qualifications framework
NCP	national coordination point
NKR	Norwegian national qualifications framework (Nasjonalt kvalifikasjonsrammeverk for livslang læring)
NLQF	qualifications framework for the Netherlands
NOKUT	Norwegian Agency for Quality Assurance in Education
NQAI	National Qualifications Authority of Ireland
NQF	national qualifications framework
NSK	national register of qualifications
NUV	National Institute for Education
NVAO	Nederlands-Vlaamse Accreditatieorganisatie
NVQ	national vocational qualification
NVQS	national vocational qualifications system
OPET	Federal Office for Professional Education and Technology
PQF	Polish qualifications framework
QALLL	quality-assured lifelong learning
QCF	qualifications and credit framework
QF-EHEA	qualifications frameworks in the European higher education area
QNQ	Portuguese qualifications framework (Quadro Nacional de Qualificações)
QQI	Quality and Qualifications Ireland
RNCP	national register of vocational qualifications
ROME	register of occupations in the French labour market
RVCC	national system for the recognition, validation and certification of competences
SCQF	Scottish qualifications framework
SEQF	Swedish national qualifications framework
SERV	Social and Economic Committee
SFMQ	service francophone des metiers et qualifications
SQF	Slovenian qualifications framework
VET	vocational education and training
VQA	Vocational Qualifications Authority
VWO	upper secondary pre-university education

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Annex 1
List of informants

Country	Name and Surname	Institution
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	Ingrid Vanhoren	EQF-NCP – Agency for Quality Assurance in Education and Training
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	Alain Kock	Formation Belgium
Bulgaria	Mimi Daneva	Ministry of Education, Youth and Science
	Ivana Radonova	Ministry of Education, Youth and Science
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	Jitka Pohankova	EQF NCP – National Institute for Education (NÚV)
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	Allan Bruun Pedersen	EQF NCP – Danish Agency for Universities and Internationalisation
Estonia	Külli All	Ministry of Education and Research
	Olav Aaarna	EQF-NCP Estonian Qualification Authority
Finland	Carita Blomquist	EQF NCP-National Board of Education
France	Brigitte Bouquet	EQF NCP – Commission Nationale de Certification Professionnelle (CNCP)

Germany	Heiko Weber Sylvia Kestner	DQR Office
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Hungary	Szlamka Erzsébet	Ministry of National Recourses
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England and Northern Ireland	Mike Coles	Colsultant
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Annex 2
Short overview of NQF developments

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Austria	Comprehensive NQF has been designed. At levels 6-8 two strands in the NQF coexist: • the Dublin descriptors are used for allocating qualification related to Bologna cycles; • VET and adult learning qualifications, provided outside higher education (HE) institutions, will be allocated based on NQF descriptors, developed in response to the EQF descriptors. Currently, the NQF includes qualifications awarded in higher education, selected 'reference qualifications' from VET and a qualification from a prevocational programme. Decision on how to include	Eight levels are adopted	• knowledge • skills • competence NQF level descriptors reflect and contextualise EQF level descriptors.	Officially launched in late 2009 with the adoption of an NQF position paper by the Council of Ministers.	Formal adoption	Federal Ministry of Education, Arts and Culture initiated and is coordinating the developments in cooperation with Federal Ministry of Science and Research NQF Steering group is the main body responsible for the NQF implementation. It comprises representatives of all ministries and *Länder* representatives as well as social partners and other relevant	A joint referencing report to link national qualifications levels to EQF and QF -EHEA was presented to the EQF AG in June 2012. The NCP was set up as a staff unit within the OeAD (*Österreischischer Austauschdienst*) – Austrian Agency for International Cooperation in Education and Research. It has communication, information and dissemination tasks and is in charge of establishing an internet-based NQF information system including an NQF register.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	qualifications from general education including the *Reifeprüfung* certificate from AHS schools (upper secondary school leaving certificate from general education) still needs to be taken. A framework with transparency function and as a tool to improve validation of non-formal and informal learning.					stakeholders from education and training, in charge of qualifications design, award and legislative framework conditions in different subsystems of education and training.	
Belgium (Flanders)	A comprehensive NQF is being implemented. It includes educational and professional qualifications. A framework with transparency function. It is also seen as tool to improve the national qualification system and the relationship between educational and professional qualifications. A qualifications framework linked to the QF-EHEA has been developed separately (since 2003) but forms an	Eight levels have been adopted	• knowledge/ skills • context/ autonomy/ responsibility	The Flemish NQF was adopted in April 2009 by the Flemish Parliament Since 2009 intense discussions with social partners on the placement of professional qualifications to the NQF levels. Decrees covering inclusion of	Formal adoption Early operational stage	The Ministry of Education is the competent authority Other ministries are involved (labour, finance) as well as social partners and other relevant stakeholders from education and training Broad consultation has been carried	Referencing to the EQF was carried out in June 2011. The NCP is embedded in the Agency for Quality Assurance in Education and Training. Its tasks are: communication, information and dissemination, coordination of the stakeholders in the implementation of the NQF and monitoring and evaluation of the NQF.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	integrated part of the comprehensive NQF.			professional qualifications at levels 4 and 5 were adopted late 2012.		out at different stages of the process	
Belgium (Wallonia)	A comprehensive eight-level framework is under development. It will include educational and professional qualifications. The NQF builds on some of the same basic principles as the Flemish framework.	Eight levels are proposed	• knowledge/ skills; • context/ autonomy/ responsibility.	A specific law on the NQF will be prepared.	Advanced development stage	Initiated by the joint government of the French region. Followed up through a working group involving relevant education and training stakeholders. Broad testing in sectors was carried out.	Referencing report is planned for 2013. The NCP was set up under the responsibility of the Service francophone des metiers et des qualifications (SFMQ).
Belgium (German-speaking community)	NQF is under development. It is informed by experiences of other two NQFs developments in Belgium and inspired by the German NQF.	eight-level structure is proposed	The level descriptors are defined in two categories of competence: • occupational competence (knowledge and skills); • personal competence (social		Design/devel opment stage	Consultation with all stakeholders on the first draft and the following process was organised in mid-2011.	

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
			competence and autonomy).				
Bulgaria	Comprehensive NQF has been developed. It includes all levels and types of qualifications from formal education and training system. A framework with transparency function and as a tool to improve validation of non-formal and informal learning.	Eight levels (with an additional preparatory level) are adopted.	All levels are defined as: • knowledge (theoretical and factual); • skills (cognitive and practical); • competences: personal and professional. They include autonomy and responsibility, but also key competences as learning competence, communicative and social competences and professional competences.	Embedded in the government programme for European development of Bulgaria (2009-13) and the programme for development of education, science and youth policies (2009-13). NQF was adopted by a Council of Ministers' decision in February 2012.	Formal adoption	Ministry of Education, Youth and Science is the competent authority. Stakeholders from Ministry of Labour and Social Policy, public and quality assurance agencies, national statistical institute, and representative in Bologna follow-up group are included.	Referencing report is planned for early 2013. The European Integration and International Cooperation Directorate at Ministry of Education acts as NCP.
Croatia	Comprehensive NQF for LLL (CROQF) has been developed It will include qualifications from all education and training	Eight levels with additional sublevels at 4, and 8 are	Comprehensive set of level descriptors spans all levels of education and	Ministry of Science, Education and Sports formed a	Advanced development stage; formal	Ministry of Science, Education and Sport is the competent	A joint referencing report to link national qualifications levels to EQF and QF -EHEA was

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	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	subsystems and provide for validation of non-formal and informal learning. It is a tool for transparency as well as reform instrument aiming at promoting the use of learning outcomes, introducing a system of recognition of prior learning and application of a comprehensive quality assurance system.	proposed	training, defined as: • knowledge (theoretical and factual); • skills (cognitive, practical and social); • responsibility and autonomy.	joint working group of experts from VET and HE in 2006. Five-year action plan was prepared (2008-12). A draft act on the CROQF has been prepared and is expected to be adopted by the end of 2012.	adoption pending.	authority. Other ministries are involved (Economy, Labour, Health, Foreign Affairs, Environmental Protection) as well as social partners and other relevant stakeholders from education and training. According to the new NQF Act, National Council for Human Resource Development – a national strategic body – will monitor and evaluate implementation and impact of the CROQF.	presented to the EQF AG in March 2012. Ministry of Science, Education and Sports acts as NCP. NCP is responsible for coordination of the referencing process. It plays a key role in the development and implementation of the CROQF and providing information to stakeholders.
Cyprus	Comprehensive NQF has been developed. It will include all types of	Eight levels are proposed	• knowledge (type, complexity, understanding)	Council of Ministers decision to develop a	Advanced development stage	Ministry of Education and Culture is the	Referencing report is scheduled for early 2013. Ministry of Education and

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	nationally recognised qualification from formal education and training as well as professional qualifications system under the Human Resource Development Authority as two separate/distinct strands.		• skills (type, complexity, communication) • competence (space for action, cooperation and responsibility, learning)	comprehensive NQF was adopted in July 2008.		competent authority. The Ministry of Labour and Social Insurance and the Human Resources Development Authority are involved.	Culture acts as NCP.
The Czech Republic	Czech republic has yet to decide whether to develop a comprehensive NQF. Discussions have started. Partial national frameworks, i.e. for vocational qualifications and for tertiary education qualifications have been developed. The core of the framework for vocational qualifications is publicly accessible national register of vocational qualification. It has regulatory function and provides the basis for validation of non-formal and informal learning. Qualifications framework for tertiary qualifications has been	Eight levels are adopted in the national framework for vocational qualifications.	Qualifications levels are differentiated by level of competence and are closely linked to the complexity of work activities. Each competence has a knowledge and skills component.	The Act on the verification and recognition of further education results, which came into force in 2007, is the legal basis for NQF development.	Advanced operational stage of the national framework for vocational qualifications.	The Act on the verification and recognition of further education results sets out the basic responsibilities, powers and rights of all stakeholders. Ministry of Education, Youth and Sport is the competent authority Other ministries act as authorising bodies Education and training providers,	Czech Republic referenced its formal qualifications (i.e. qualifications awarded in lower and upper secondary education and qualifications from higher education) and qualifications awarded in continuous education (under the Act 179/2006 to the EQF in December 2011. Higher education qualifications are linked to the EQF, but not yet self-certified against the QF-EHEA. National Institute for

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	designed within the Q-RAM project. Level descriptors have been prepared for primary and secondary education.					universities are authorised bodies Social partners participate in the qualifications development National qualification Council is an advisory body.	Education acts as NCP.
Denmark	A comprehensive NQF includes all officially validated and recognised public qualifications from all subsystems of education and training. The qualifications framework for HE was approved in 2007-08 and forms part of the comprehensive framework. Transparency function, but also reform role in VET. The level descriptors for levels 6-8 in the NQF are identical with the level descriptors in the NQF-HE. Descriptor at level 5 is broader than for the corresponding descriptor in	Eight levels have been agreed	• knowledge (different types of knowledge, complexity and understanding) • skills (different types of skills, complexity of tasks, communication) • competence (context, cooperation and responsibility, learning to learn)	The NQF was formally adopted in 2011 by shared decision of involved ministries (of education, science, innovation and higher e education, economic affairs and culture).	Formal adoption Early operational stage	Ministry of Education is coordinating the work but the proposal and its implementation is based on broad involvement of other ministries, social partners, representatives of education and training subsystems, etc.	The referencing of Danish NQF to the EQF was completed in May 2011. Its builds on the conclusions of the self-certification, carried out in 2009. NCP is hosted by the Danish Agency for Universities and Internationalisation. Its main tasks include: communication and dissemination of information, continuous development of the NQFs and maintenance of the national database on

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	the NQF -HE for short cycles. This makes it possible to include VET qualifications at level 5. Evaluation is planned in 2012						qualifications.
Estonia	Estonia is implementing an overarching and comprehensive NQF for LLL (EstQF), which includes all state recognised qualifications. It brings together four subframeworks for HE qualifications, VET qualifications, general education and occupational qualifications, with more detailed and specific descriptors and rules for designing and awarding qualifications. Transparency role and support to reforms in education, training and employment by NQF development and implementation are emphasised.	Eight levels are adopted	NQF level descriptors are identical to EQF level descriptors and defined as: • knowledge, • skills, • responsibility and autonomy.	The amended Professional Act (September 2008) is the legal basis for NQF development and implementation.	Formal adoption Early operational stage	Ministry of Education and Research is the competent authority Estonian Qualification Authority (QA) manages and administers the NQF. A permanent platform is to be set up – a Steering group – including stakeholders from different subframeworks (e.g. general education, HE, VET, professional qualifications) and labour market	Estonia referenced its NQF to the EQF and self-certified to the QF-EHEA in October 2011. Estonian Qualification Authority is the NCP. Its main tasks include: involvement in the design of the NQF, organisation of the referencing process; co-ordination of the stakeholders, communication and dissemination and monitoring of the NQF implementation.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
						actors to overlook the implementation and evaluate the impact of the EstQF.	
Finland	Comprehensive NQF has been developed. It will include all publicly recognised qualifications (by Ministry of education and other branches of the public administration) NQF is mainly a tool for transparency, but for certain aspects also a tool for reforms in e.g. recognition of prior learning, opening up the framework for other learning, etc.	Eight levels have been agreed	The following categories are used: • knowledge, • work method and application (skill), • responsibility, management and entrepre-neurship, • evaluation, • key skills for lifelong learning. Descriptors 6-8 have been adjusted to Dublin descriptors	A separate NQF Act has been prepared and presented to the Parliament. The adoption is expected by the end of 2012.	Advanced development stage Formal adoption pending	Ministry of Education is the competent authority, but other ministries, social partners and representatives of the subsystems of education are closely involved in the process. A consultation was carried out on the basis of the June 2009 proposal (90 responses received, all supportive of the NQF idea).	The referencing to EQF is scheduled for early 2013. The National Board of Education has been appointed the NCP. Its main tasks include: participation in the development of the NQF, dissemination of information to stakeholders, involvement in the referencing process and monitoring.
FYROM	A NQF is being developed. It will include qualifications from general education, VET, HE and adult sector.	Eight levels with a number of sublevels are proposed	Level descriptors are defined as knowledge, skills and competence.		Design/ development stage	Ministry of Education and Science is the competent body.	

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	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	Qualifications framework for higher education was adopted in 2010 by a decree on higher education qualifications.					The working group comprises mainly stakeholders from education. The involvement of other ministries and social partners is weak.	
France	The current NQF covers all levels and types of vocationally or professionally oriented qualifications. The framework has a regulatory function, in particular through the role played by the National Committee for Professional Certification (CNCP) The CNCP can be seen as the 'gatekeeper', regulating which qualifications are to be officially accredited. Validation of non-formal and informal learning is an integral part of the framework. The general baccalaureate (which gives access to higher education) is not part of the	Five levels exist for the moment; an eight-level structure is being considered, possibly towards the end of 2012.	The French levels are distinguished on the basis of: • skills, • knowledge, • competence	The setting up, in 2002, of the National Committee for Professional Certification (CNCP) and the national register of vocational qualifications (RNCP) signals the establishment of the French NQF. Possible revision is envisaged. The discussion on a change to a new, eight-level structure is	Advanced operational stage	The CNCP coordinates the register of qualifications. All relevant ministries, social partners, chambers and representatives of education and training subsystems are represented in the Committee.	The referencing was finalised in October 2010. The National Committee for Professional Certification (CNCP) is the NCP.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	jurisdiction of the CNCP and is not included in the NQF.			continuing.			
Germany	Germany has designed a comprehensive NQF for LLL (*Deutscher Qualifikatiosnrahmen*, DQR). Currently it includes qualifications from VET and HE. Qualifications from general education are not included. A decision has been postponed and will be reviewed after a five-year period. NQF for HE was established in 2005 and self-certified to the QF-EHEA in 2008. A five-year implementation phase with scientific evaluation is planned.	Eight levels are adopted	The level descriptors are defined in two categories of competence: • professional competence is subdivided into: knowledge (breadth and depth) and skills (instrumental and systemic skills); • personal competence is subdivided into social competence (teamwork, leadership, communication skills) and autonomy; (autonomous responsibility, reflectiveness	The DQR was formally adopted in March 2011 by working group *Arbeitskreis* DQR. In a high level meeting in January 2012, all relevant stakeholders agreed on the alignment of important qualifications from vocational education and training and higher education to the DQR levels.	Formal adoption Early operational stage	Federal Ministry of Education and Research and Standing Conference of the Ministers of Education and Cultural Affairs of *Länder* have jointly initiated the work. Broad range of stakeholders is included from HE, school education, VET, social partners, public institutions from education and labour market, researchers and practitioners.	The referencing of the DQR was carried out in December 2012. NCP is being set up in a joint initiative of the Federal government and the *Länder*. Its main role is to monitor the allocation of qualifications with a view to ensuring consistency of the overall structure of the DQR.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
			and learning competence).				
Greece	A comprehensive Hellenic QF is under development. A QF for HE has been put in place separately. A new institution – National Organisation for the Certification of Qualifications and Vocational Guidance (Eoppep) – is responsible for HQF development and implementation Preparation works started: a qualifications register is being put in place; a methodological guide for referencing learning outcomes to the HQF levels has been prepared	Eight levels are suggested with some open questions as regards levels 3, 4 and 5.	EQF level descriptors were used as starting point; Final decision on level descriptors is pending.	The Law on lifelong learning was adopted in September 2010, providing the legal framework for NQF design and implementation.	Design/ development stage	Ministry of Education and Religious Affairs, Culture and Sport is the competent authority. Stakeholders from public institutions, social partners, representatives of universities and external experts are included. Ministry of Labour has not been involved so far.	Referencing report is expected to be prepared in 2013. National Organisation for the Certification of Qualifications and Vocational Guidance is designated the NCP.
Hungary	Comprehensive NQF has been developed. It will include qualifications from all subsystems of education and training and open up to non-formal and informal learning. NQF development is carried out in three ESF projects (i.e.	Eight-level structure was adopted	Level descriptors are defined in four categories: • knowledge, • skills/abilities, • attitudes, • autonomy/ responsibility.	The government decree on the Hungarian qualifications framework was approved in July 2012.	Formal adoption	The overall responsibility for the development of the NQF is shared between the Ministry of National Resources and the Ministry of National Economy.	Referencing report is scheduled for late 2013. NCP has been established as a project unit within Educational Authority with the main task of coordinating and completing the referencing process.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	for VET, HE, Public Education).					Stakeholders from all other ministries, the National Council for Public Education, the National Institute of Vocational and Adult education, the Hungarian Rectors' conference, the Higher Education and Research Council and representatives of social partners are included.	
Iceland	Final version of level descriptors for a seven–level comprehensive NQF has been prepared. It includes qualifications from all subsystems of education and training and non-formal and informal learning QF for HE was implemented in 2007 and forms a part of the new NQF.	Seven levels were agreed.	Level descriptors are more detailed and specific than EQF level descriptors but use similar concepts: • knowledge, • skills, • competence.	The role and mandate of the NQF is explicitly stated though a series of acts and decrees introduced between 2006 and 2012 (including Act on HE, Act on pre-	Adopted Early operational stage	Ministry of Education (competent authority) is coordinating the work but bases its decisions on close involvement of other ministries, social partners and representatives of	Referencing is expected to take place in spring 2013.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
				school, compulsory and upper secondary education, adult education).		the education and training system (for example teachers).	
Ireland	Comprehensive learning outcomes-based NFQ (national framework of qualifications) has been implemented since 2003. It includes all learning from initial stages to the most advanced; from schools to further education and HE. Framework implementation and impact study was published in September 2009. 19 recommendations for further implementation were proposed.	Ten levels are adopted. Four award types are included: major, minor, special-purpose and supplemental.	Each level is based on nationally agreed standards of: • knowledge (breadth, kind), • skills (range, selectivity), • competence (context, role, learning to learn, insight).	NQF is legally based on the Qualifications (Education and Training) Act, 1999. The work was coordinated by the National Qualifications Authority of Ireland (NQAI), established in 2001.	Advanced operational stage	The new Qualifications and Quality Assurance (Education and Training) Act (2012) provides the legal basis for a new agency: Quality and Qualifications Ireland. It is created by an amalgamation of four bodies that have both awarding and quality assurance responsibilities: FETAC, HETAC, NQAI and the Irish Universities Quality Board (IUQB).	The referencing report was presented to the EQF advisory group in September 2009. It built on the conclusions of the self-certification report, completed in 2007.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Italy	Italy has carried out technical work pointing towards an NQF. Since 2003, reforms have been implemented in education and training (upper secondary – VET and general education, HE) based on learning outcomes. QF for HE and more recently defined qualifications levels in upper secondary level have been adopted.	The number of levels has not been defined yet	Level descriptors have not been defined yet. Italy uses EQF concepts, levels and level descriptors.	Since 2003, various laws and agreements between ministries, social partners and regions have been adopted (e.g. Guidelines for Training in 2010). The national law on labour market (2012) emphasises important priorities: defining national qualifications standards based on learning outcomes, developing national register of qualifications and setting up a national public certification system.	Development / design stage	Ministry of Labour and Social Policies and Ministry of Education, University and Research are the main bodies involved in implementation of the EQF supported by regions and social partners. ISFOL prepares and implements national methodologies and coordinates expert groups.	Referencing report is scheduled for early 2013. ISFOL is designated the NCP. Its main task include: management of the EQF implementation process and preparing the technical referencing report, communication with all relevant stakeholders, planning and implementation of the national qualifications database.

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	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Latvia	Comprehensive eight-level structure has been prepared. All nationally recognised education programmes from primary, secondary and higher education are linked to national qualifications levels.	Eight-level structure was introduced	Level descriptors are defined as: • knowledge (knowledge and comprehension); • skills (ability to apply knowledge, communication and general skills), and; • competence (analysis, synthesis and assessment).	The Cabinet of Ministers 'Regulations on the classification of the Latvian education' is the legal basis for introducing eight-level structure.	Formal adoption Early operational stage	Ministry of Education and Science is the competent authority.	Joint referencing report to link national qualifications levels to the EQF and QF-EHEA was presented to the EQF AG in October 2011. Second phase of the referencing is planned for 2013-15. Academic Information Centre has been appointed as the NCP. It main tasks include coordination of the referencing report, communication and dissemination of information among all relevant stakeholders.
Liechtenstein	National qualifications framework is being developed. Proposal for QF for HE was prepared in December 2010.	Not decided yet.	Not decided yet.	Government decision (February 2011).	Design/ development stage	National Agency for International Affairs (AIBA) coordinates the work.	
Lithuania	A comprehensive NQF covers all officially recognised qualifications in primary and secondary general education, VET and HE.	Eight levels are adopted	Level descriptors reflect two parameters: characteristics of activities	A government resolution on the NQF was adopted in 2010; it provides the legal	Formal adoption Early operational stage	The Ministry of Education and Science holds the main responsibility for implementing	Referencing was completed in December 2011. Qualifications and VET Development Centre acts

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	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
			(complexity, autonomy, changeability) and types of competence (functional, cognitive and general). The combination of the two parameters resulted in a very detailed level descriptors defines as: • knowledge, • skills, • competence.	and political basis for the NQF implementation. The formal basis has been further strengthened though two amendments in the law on education in 2011.		the NQF.	as NCP.
Luxembourg	Comprehensive NQF includes qualifications from all subsystems of formal education and training (i.e. qualifications from general education, VET and HE). The same qualifications are awarded in adult education sector and can be acquired though validation of experiences, apart from the 'secondary school leaving certificate'.	Eight levels have been agreed	Level descriptors are differentiated according to: • knowledge, • skills, • attitude.	NQF was adopted by the government council in September 2011. It is a non-binding framework aiming to support lifelong learning.	Formal adoption Early operational stage	Ministry of Education (competent authority) coordinates the work in cooperation with other ministries, representatives of all subsystems of education and training and social partners.	Referencing was completed in June 2012. Ministry of Education and Vocational Training was appointed the NCP.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Malta	Single comprehensive NQF for LLL (MQF) has been implemented in Malta. It encompasses qualifications and awards at all levels, provided though formal, non-formal and informal learning.	Eight levels are adopted	Each level descriptor is defined in terms of knowledge, skills, and competence and learning outcomes. Learning outcomes summarise knowledge, skills and competence and highlight specific skills such as communication skills, judgment skills and learning skills.	NQF development was based on the Legal Notice 347 (2005). Three Legal Notices were published in 2012: • on QA of further and HE institutions and programmes; • on validation of non-formal and informal learning; • on Malta QF for lifelong learning.	Advanced operational stage	The work was initiated by the Ministry of Education (competent body) in cooperation with all relevant stakeholders from education and training and labour market. According to the Education Act (2012) the National Commission for Further and Higher Education is the competent authority responsible for all aspects of the Malta QF.	A joint referencing report to link national qualifications levels to EQF and QF-EHEA was presented in November 2009 An updated report was prepared in February 2011 and May 2012. The National Commission for Further and Higher education acts as NCP.
Montenegro	A comprehensive NQF has been developed	Eight levels are adopted with sublevels at levels 1, 4 and 7	Level descriptors are defined as knowledge, skills and competence.	National qualifications framework Law was adopted in 2010.	Formal adoption	Ministry of Education and Sport has the overall responsibility for the implementation	Referencing to the EQF is planned.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
						of the NQF. Council for qualifications was appointed, including representatives from ministries, employment services, universities, employers, trade unions and institutions involved in qualifications development.	
The Netherlands	A comprehensive NQF includes all nationally recognised formal qualifications from all subsystems of education and training. It builds on and integrates the QF for higher education already developed (since 2005). NCP has developed criteria and procedures for inclusion and classification of	Eight levels and one entry level have been adopted	Level descriptors are defined as: • context, • knowledge, • skills (applying knowledge, problem-solving skills, learning and development skills, information skills, communication	Work started in January 2009 following an initiative of the Ministry of Education. The final proposal was adopted by Ministry of Education in mid-2011	Formal adoption Early operational stage	Ministry of Education, Culture and Science (competent authority) organised the process including all relevant stakeholders in education and training as well as in the labour	Referencing report was presented to the EQF AG in October 2011. NCP is hosted by the (umbrella) organisation CINOP/Knowledge Center RPL. Main tasks of the NCP are: the inclusion and classification of qualifications awarded

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	qualifications others than those regulated by ministries; i.e. offered outside the formal education system.		skills), • responsibility and independence.			market.	outside formal system; mostly in the field of adult and LLL learning; information and communications to the stakeholders and general public; monitoring and evaluation of the NLQF.
Norway	A comprehensive NQF including all publicly recognised qualifications from all subsystems of formal education and training has been designed. A study is underway to map qualifications awarded outside the formal system and to collect experiences form other countries	Seven levels, numbered from 2 to 8 were agreed on. There is no descriptor or qualification at level 1. At levels 4, 5 and 6 parallel descriptors exist, reflecting different types of qualifications at these levels.	Level descriptors are defined in terms of: • knowledge, • skills, • general competence.	The NQF was formally adopted by the Norwegian government in December 2011. A Ministerial decree on NQF (*Forskrift*) is currently being prepared and expected to become operation in 2013.	Formal adoption	Ministry of Education coordinates the work. The involvement of social partners and other key-stakeholders has been important for the rapid progress made.	Referencing to the EQF in planned spring 2013. NCP was established at Norwegian Agency of Quality Assurance in Education (NOKUT). It is responsible for writing the referencing report and communication and dissemination of information among all stakeholders.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Poland	A proposal for a comprehensive NQF covering all levels and types of Polish qualifications has been suggested. The framework will have an orientation and communication function but also emphasises a clear reform role, linked to quality assurance of qualifications. It will provide a basis for a qualifications register covering all levels of qualifications. The work builds on and integrates the work on a QF for HE started in 2006/07.	An eight-level Polish NQF is proposed	Polish NQF introduces descriptors at different level of detail for different purposes: • level descriptors for the comprehensive framework; • descriptors for subframework, e.g. VET, HE, etc.; • descriptors for sectoral frameworks or subject areas. Descriptors are defined by: • knowledge (scope, depth of understanding); • skills (communication, problem solving, using knowledge in practice);	A proposal for a comprehensive NQF was presented in December 2009. The final proposal was developed on this basis and concluded 2011.	Advanced development stage	Ministry of National Education is coordinating the work but with involvement of other ministries and the full range of subsystems of education and training.	Referencing report is expected to be submitted in early 2013. Bureau for Academic Recognition and International Exchange acts as the NCP. Its main functions are to provide access to information and advice regarding the links between the NQF and the EQF.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
			• social competences (identity, autonomy, cooperation, responsibility).				
Portugal	Comprehensive NQF is in force since October 2010 as a single reference framework for classifying all school, VET and HE qualifications. The national qualification catalogue, created in 2007, is the backbone of the NQF. Framework for HE (FHEQ, Portugal), constituting an integral part of the comprehensive national framework.	Eight levels are adopted	Level descriptors are defined in broad categories of: • knowledge, • skills, • attitude. An interpretative guide (NQF users' guide) with more detailed level descriptors was prepared.	NQF is legally based on the Decree No 782/2009 on the implementation of the NQF and in force since October 2010.	Formal adoption Early operational stage	Ministry of Labour and Social Solidarity initiated the work in cooperation with Ministry of Education and Ministry of Science, Technology and Higher Education. National Agency for Qualifications and Vocational Education and Training is the main public body in charge of implementing the NQF. it works closely with General	The referencing report to link national levels to the EQF and QF-EHEA was presented to the EQF advisory group in June 2011. National Agency for Qualifications and Vocational Education and Training acts as NCP. Its main tasks include: referencing the national qualifications levels to the EQF, coordination with the GD for HE regarding levels 5-8 of the NQF and providing information to all stakeholders.

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	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
						Directorate of Higher Education regarding levels 5-8 of the NQF. The NQF implementation is supervised by the National Council for Vocational Education.	
Romania	Comprehensive learning outcomes-based national qualifications framework has been designed. It will bring together all nationally recognised qualifications from IVET, CVET, apprenticeship, general education and HE. QF for HE, approved by the order of the Minister for Education has been implemented since 2009. It will constitute an integrated part of the comprehensive framework.	Eight levels have been proposed	Level descriptors are being developed, defined as: • knowledge (knowledge and understanding, explanation and interpretation); • abilities (application, transfer and problem-solving; critical and constructive reflection; creativity and innovation);	A draft government resolution on NQF was presented in November 2011 and is expected to be adopted late 2012/early 2013.	Advanced development stage Formal adoption is pending	The main body in charge of developing and implementing the comprehensive NQF is the National Qualification Authority, which cooperates closely with the Ministry of Education, Research and Innovation	Referencing report is expected to be submitted in early 2013. National Qualifications Authority acts as NCP.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
			• transversal competences (autonomy and responsibility; social interaction; personal and professional development).				
Serbia	A national qualifications framework is under construction. Current developments focus on designing descriptors at level 1 to 5.	The number of levels has not been defined yet	Level descriptors are currently being developed	The development started with a green paper on NQF in 2005. The Education law (2009), established the Council for Vocational and Adult Education which is now operational.	Design/ development stage	Ministry of Education has the main responsibility for developing the NQF. On a technical level work is carried out by the VET centre.	
Slovakia	A set of level descriptors for a comprehensive NQF for lifelong learning was adopted. It will include all formal qualifications from primary, secondary and tertiary education.	Eight levels were adopted	Level descriptors are defined in terms of: • knowledge, • skills, • competence.	Further developments are based on a set of level descriptors for comprehensive NQF for lifelong	Adopted Revision planned	Ministry of Education has initiated and is coordinating the developments Other ministries (labour, interior,	The referencing report is expected to be submitted by second half of 2013. National Lifelong Learning Institute acts as NCP.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	In the second phase, qualifications acquired outside formal education and training will be considered. NQF revision process will start in December 2012.			learning, which were approved by the Ministry of Education, Science, Research and Sports in March 2011.		health, economy, regional development, transport, agriculture and culture) are involved	
Slovenia	Proposal for a single comprehensive NQF has been developed. It includes qualifications from formal education and training (VET, HE, general education) and the system of national professional qualifications, which are under the remit of the Ministry of Labour. The frameworks will on a longer term open towards supplementary qualifications, awarded by chambers or sectors. A national register of qualifications is being developed.	Ten levels are proposed	The level descriptors are defined in terms of outcome criteria: • knowledge, • skills, • competences. For qualifications acquired after nationally accredited programmes additionally input criteria are used (access requirements, volume of learning expressed in credit points in HE and VET, typical length of programmes).	In 2006, government decree (No 46/2006) on the introduction and use of the classification system of education and training (Klasius) was adopted. Klasius and sectoral legislation provided the basis for NQF developments. A law on NQF is being prepared.	Advanced development stage Formal adoption is pending	Ministry of Education in close cooperation with Ministry of Labour coordinates the developments at the policy level, including wide range of stakeholders from education and labour market. Technical work is carried out by the National Institute for VET.	Referencing report is planned for early 2013. National Institute for VET acts as NCP. It runs all activities connected to the development and implementation of NQF and information and promotion activities. It is in charge of establishing a national register of qualifications.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Spain	NQF for LLL (MECU) is being developed. It will include all formal qualifications from different subsystems of education and training. QF for HE (MECES) is being put in place in parallel. NQF for LLL will have an orientation and communication function.	Eight levels are proposed The four highest levels will be compatible with the QF for HE (MECES).	Level descriptors are defined in terms of: • knowledge, • skills, • competence.	A draft Royal decree on the introduction of MECU has been prepared. It is expected to be adopted in early 2013.	Advanced development stage	Ministry of Education is coordinating the NQF development in cooperation with other ministries (e.g. labour and immigration, science, industry, tourism and commerce, health, etc.).	Referencing is planned to be presented in 2013. The Directorate General for Vocational Training has been designated the national contact point (NCP).
Sweden	A comprehensive NQF covering all existing public education and training qualifications has been designed. The long-term aim is to integrate certificates awarded outside the public system, in particular by enterprises and sectors as well as advanced vocational qualifications at levels 6-8. The first proposal on integrating certificates awarded outside the formal system suggests establishing	Eight-level structure was proposed	Level descriptors are defied as: • knowledge, • skills, • competence.	The Swedish government decided in December 2009 to develop a comprehensive NQF. A decree on the NQF is expected to be adopted in the first half of 2013.	Advanced development stage Formal adoption is pending	Ministry of Education (competent authority) coordinates the process. An interministerial group consisting of representatives of different ministries (education, labour, business and finance) has been set up.	Referencing is expected to take place in spring 2013. The Swedish National Agency for Higher Vocational Education is designated as the NCP.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	a National Council for Qualifications to acts as gatekeeper.						
Switzerland	Draft NQF for vocational and professional qualifications was presented in February 2012. QF for higher education was adopted and is being implemented.	Eight-level structure is proposed	Level descriptors are defined as : • knowledge (declarative knowledge, understanding); • skills (prodecural skills, senso-motoric skills) and competences (vocational/profe ssional competences and personal competence). Personal competence emphasises self-competence, social competence and leadership competence).	The developments were initiated in 2009-10 by *Eidgenössisches Volkswirtschaftsd epartement*	Development stage	The NQF is being designed by the Federal Office of Professional Education and Technology. The professional organisations as well as cantons were involved though a series of round tables. A public consultation was carried out from February to May 2012 and 82 formal inputs were received from different stakeholders.	Federal Office for Professional Education and Technology participates in the NCP meetings as observer.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
Turkey	Comprehensive NQF is under development It will bring together: • national vocational qualification system, led by the Vocational Qualifications Authority (NVQS); • QF for HE, developed in the Bologna process; • integrate them with the qualifications, awarded by Ministry of National Education.	Eight levels are proposed	Level descriptors are defined as: • knowledge (theoretical and practical); • skills (utilisation of knowledge, problem-solving, transferring knowledge and skills to others); • competence (utilisation of knowledge and skills by taking responsibility, displaying autonomy and determination).	The work of the NVQ system is legally embedded in the Vocational Qualification Authority Law (No 5544/2006). By an amendment in November 2011, a comprehensive NQF was introduced.	Development stage	Ministry of National Education (competent authority) initiated the work. Since 2007, the Vocational Qualifications Authority (VQA) has been coordinating the process in close cooperation with the National Ministry of Education and Council of Higher Education.	Referencing is planned for second half of 2013. Vocational Qualifications Authority (VQA) acts as the NCP.
The United Kingdom **(England and Northern Ireland)**	Three frameworks operate in England/Northern Ireland: • A qualifications and credit framework (QCF) was formally introduced in 2008 and includes vocational qualifications. This framework has regulatory	QCF has a nine-level structure (including entry levels)	For England and Northern Ireland, each level is divided into: • knowledge and understanding; • application and action; • autonomy and accountability.	Responsibilities for regulating the QCF lie with the following regulators: • in England, the Office of Qualifications and	Advanced operational stage and reflects development of frameworks starting late 1980s		The QCF has been referenced to the EQF in February 2010. The framework for higher education has not been referenced to the EQF, only to QF-EHEA. Office of Qualifications & Examinations Regulation

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	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
	functions; • General education qualifications (the general certificate of secondary education (GCSE) and general certificate of education at advanced level (A level) continue to be located in the NQF; • A separate framework for higher education, FHEQ, exists for England, Northern Ireland and Wales.			Examinations regulator (OfQual); • in Northern Ireland the Council for Curriculum, Examinations and Assessment (CCEA).			(Ofqual) acts as NCP for England and the Council for the Curriculum Examinations and Assessment in Northern Ireland.
(Scotland)	Scotland has implemented a comprehensive framework, the SCQF, with orientation and communication functions; In 2012, level descriptors were revised following an extensive review process and broad consultation.	A 12-level structure (including entry levels) has been adopted	For Scotland, each level is defined in terms of five broad categories: • knowledge and understanding; • practice (applied knowledge, skills and understanding); • generic cognitive skills (e.g. evaluation, critical analysis);		Advanced operational stage, reflects development of frameworks starting late 1980s	Framework is maintained by the Scottish Credit and Qualifications Framework Partnership made up of the Scottish Qualifications Authority, Universities of Scotland, Quality Assurance Agency, Association of Scotland	The Scottish comprehensive framework was referenced to the EQF in February 2010. Scottish Credit and Qualifications Framework Partnership acts as NCP for Scotland.

	Scope and purpose of the framework	Number of levels	Level descriptors	Political and legal basis for the NQF	Stage of work	Involvement of stakeholders and consultation	Referencing to the EQF
			• communication numeracy and ICT skills; • autonomy, accountability and working with others.			Colleagues and Scottish Ministers.	
(Wales)	Wales has implemented an overarching framework, the CQFW, with orientation and communication functions. A separate framework for HE exists, the FHEQ.	A nine-level structure (including entry levels) has been adopted.	For Wales, each level is divided into: • knowledge and understanding; • application and action; • autonomy and accountability.		Advanced operational stage, reflects development of frameworks starting late 1980s		Referenced to the EQF in February 2010. The framework for higher education has not been referenced to the EQF, only to QF-EHEA. Welsh assembly government acts as NCP.

Annex 3
Examples of level descriptors in EQF and NQFs

This annex gives an overview over the level descriptors now developed nationally. We have selected to focus on level 5 (or rather the national levels corresponding to EQF level 5). Descriptors at this level have been considered a particular challenge in many countries as they need to reflect the learning outcomes of general, vocational as well as academic education and training. Descriptors defining levels in the EQF:

Level descriptor elements		
Knowledge	**Skills**	**Competence**
• factual and/or • theoretical	• cognitive • practical	• autonomy and • responsibility

The learning outcomes relevant to level 5 ([213]) are (European Parliament; Council of the European Union, 2008) ([214]):

Knowledge	**Skills**	**Competence**
comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	exercise management and supervision in contexts of work or study activities where there is unpredictable change review and develop performance of self and others

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([213]) The descriptor for level 5 is compatible with the descriptor for the higher education short cycle (within or linked to the first cycle).

([214]) Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European qualifications frameworks for lifelong learning. *Official Journal of the European Union,* C 111, 6.5.2011, p. 1-7. http://eur-lex. europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF [accessed 7.10.2012].

Austria

Three main level descriptor domains are used for levels 1-8 in Austria:

Level descriptor elements		
Knowledge	**Skills**	**Competence**
• factual and/or • theoretical	• cognitive • practical	• autonomy and • responsibility

Example of level descriptor 5 ([215]):

Knowledge	Skills	Competence
He/she has • extensive theoretical knowledge in his/her field of work or study (e.g. about facts and circumstances, principles, materials, processes, methods, connections, regulations and norms, etc.) to deal independently with tasks and challenges, including in unpredictable situations • awareness of what effects using this knowledge has on the field of work or study • in-depth company-related business and legal knowledge for taking on managerial tasks and/or heading a company • knowledge needed to exercise directly a high-level profession	In his/her field of work or study he/she is able to • cope independently with tasks including in unpredictable contexts • assess the implications of such tasks and draw conclusions here for how to proceed subsequently • analyse challenging and multilayered problems using logical, abstract and networked thinking and solve these autonomously while complying with the respective applicable norms, regulations and rules • use his/her own creative contributions to solve problems • understand connections between ecological, economic and social mechanisms, establish interconnections and use the knowledge gained here in common and also unpredictable situations • form an opinion on new facts and circumstances,	In his/her field of work or study he/she is able to • coordinate and manage projects independently • act independently and flexibly in different situations, including unpredictable ones • reflect on his/her own behaviour and draw conclusions on how to act in the future • deal critically and responsibly with the actions of other people, give feedback and contribute to the development of their potential

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([215]) Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research. 2012. *Austrian EQF referencing report*, p. 59.

Knowledge	Skills	Competence
	explain his/her own viewpoint and present this using the standard specialist terminology in a way which is suitable for the target audience and the particular situation • independently research information from different sources and disciplines, gather the essential content, critically assess, select and present this in a manner suitable for the target audience	

Belgium Flanders

Two main elements of level descriptor defining levels 1-8 in Belgium Flanders:

Level descriptor elements	
Knowledge Skills	Context Autonomy Responsibility

Example of level descriptor 5 ([216]):

● expanding the information in a specific area with concrete and abstract data, or completing it with missing data; using conceptual frameworks; being aware of the scope of subject-specific knowledge ● applying integrated cognitive and motor skills ● transferring knowledge and applying procedures flexibly and inventively for the performance of tasks and for the strategic solution of concrete and abstract problems	● acting in a range of new, complex contexts ● functioning autonomously with initiative ● taking responsibility for the achievement of personal outcomes and the stimulation of collective results

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([216]) Flemish Act on the qualification structure.
http://www.evcvlaanderen.be/files/DecreetVKS_ENG.pdf [accessed 10.10.2012].

Bulgaria

Three main level descriptor elements defining levels 1-8 in Bulgaria:

Level descriptor elements				
Knowledge: • theoretical and/or • factual	**Skills:** • **cognitive** (involving the use of logical, intuitive and creative thinking) and • **practical** (involving manual dexterity and the use of methods, materials, tools and instruments)	**COMPETENCES – PERSONAL AND PROFESSIONAL** Competence is described in terms of responsibility and autonomy		
		autonomy and responsibility	learning competences	
			communicative and social competences	professional competences

Example of the descriptor for level 5 (217):

KNOWLEDGE	SKILLS	COMPETENCES			
		Autonomy and responsibility	Learning competences	Communicative and social competences	Professional competences
• has in-depth factual and theoretical knowledge in broad contexts within a field of work or study • knows how to process, use and analyse complex information • is familiar with the principles of planning, organisation and control of processes in a particular field • develops assessment criteria	• plans, organises and controls activities, including an industrial process • makes a motivated evaluation of the quality of performance • makes proposals for performance optimisation • possesses business communication skills • carries out complex operations by means of various instruments, machines, apparatuses, measurement devices • controls and helps staff, providing explanations or showing how to do a particular activity • evaluates product quality and the performance of the team members • develops an action plan, using the available resources • makes proposals for improving the equipment, staff and the activities of the organisation	• works independently under changing conditions, taking responsibility to carry out both individual and collective tasks entrusted to the team one is supervising • bears responsibility for the performance of the team one is supervising • makes a motivated evaluation of team and the quality of performance • takes responsibility for the appropriate use of the equipment • feels a strong sense of responsibility and participates actively in public life	• recognises the gaps in one's own knowledge, skills and competences and takes the necessary actions to obtain further qualifications by self-teaching and participation in seminars, trainings, etc. • uses various ways of updating and acquiring further professional qualifications • recognises the need for staff training and offers them suitable opportunities	• communicates effectively at different levels • manages the performance of working groups/teams • presents publicly different types of information • makes analyses, oral and written presentations, formulates instructions, tasks, and explanations, using the corresponding terminology both in Bulgarian and in a foreign language	• carries out comprehensive tasks under changing circumstances, takes managerial responsibility for the performance of others and allocation of resources

(217) Adopted by Council of Ministers' decision, 2 February 2012.

Croatia

Three main level descriptor elements defining levels 1-8 in Croatia:

Level descriptor elements		
Knowledge	**Skills**	**Autonomy and responsibility**
● factual ● theoretical	● cognitive ● practical ● social	

Example of the descriptor for level 5 ([218]):

Knowledge	Skills	Autonomy and responsibility
Analysing, synthesising and evaluating specialised facts, concepts, procedures, principles and theories in a field of work and/or learning, giving rise to an awareness of the frontier of knowledge;	● **cognitive skills:** Interpreting, estimating, selecting and creatively using different relevant facts, concepts and procedures required to generate solutions and for solving complex tasks or problems within a specific field of work and/or learning in partially unpredictable conditions, as well as an ability to transfer a knowledge to other areas and problems; ● **practical skills:** Performing complex movements and utilising advanced methods, instruments, tools and materials in partially unpredictable conditions, as well as developing instruments, tools and materials and adjusting simple methods;	● **autonomy:** Taking part in the management of activities in partially unpredictable conditions ● **responsibility:** Taking responsibility for managing evaluation and for developing activities in partially unpredictable conditions

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([218]) Information available from the draft act on CROQF on the website of the government of the Republic of Croatia (17 October 2012).
http://www.vlada.hr/hr/naslovnica/sjednice_i_odluke_vlade_rh/2012/57_sjednica_vla de_republike_hrvatske/57_3/(view_online)/1#document-preview [accessed].

Knowledge	Skills	Autonomy and responsibility
	• **social:** Partial management of complex communication in interactions with others and establishing cooperation in a group in partially unpredictable social situations;	

Cyprus

Three main level descriptor elements defining levels 1-8 in Cyprus:

Level descriptor elements		
Knowledge	**Skills**	**Competence**
• The type of knowledge involved: knowledge about theory or knowledge about practice, knowledge of a subject or a field within a profession • The complexity of this knowledge: the degree of complexity and how predictable or unpredictable the situation is in which this knowledge is mastered • Understanding: the ability to place one's knowledge in a context – understanding is expected when one explains something to others	• The type of skill involved: practical, cognitive or communicative • The complexity of the problem-solving: the problem-solving skill is to be applied to and the complexity of the task • Communication: the communication that is required; the complexity of the message; to which target groups and with which instruments	• Space for action: the type of work or study related contexts in which the knowledge and skills are brought into play, and the degree of unpredictability and changeability in these contexts • Cooperation and responsibility: the ability to take responsibility for ones own work and the work of others, and the complexity of the cooperative situations in which one can engage • Learning: the ability to take responsibility for ones own learning and that of others

The learning outcomes relevant to level 5 are ([219]):

Knowledge	Skills	Competence
• Have understanding of practice and the most important theories and methodologies and confirm that he/she is able to understand the utilisation of this within a field of work • Develops strategic and creative responses in researching solutions to well defined problems • Judgemental on knowledge of relevant social and ethical issues • Have knowledge of practice and application of methodology and theory in field of work or study	• Evaluates own learning and identifies learning needs to undertake further learning • Able to evaluate practice related problems and adjust work procedures • Communicate solutions to practice related problems to co-workers • Able to convey ideas to peers, supervisors using qualitative and quantitative information • Able to utilise set of skills connected with the practice on processes of field of work or study • Able to identify the use of data to formulate responses to well-defined concrete and abstract problems	• Able to identify possibilities for further education in different learning environments • Manage projects independently that require problem-solving techniques • Able to undertake defined management and planning functions in relation to the field of work or study • Able to manage people and review their performance, team builder, team trainer • Able to enter into development oriented interdisciplinary work processes

Level 5 introduces aspects as the further learning and basic research, personal academic development, judgments on social and ethical issues, personal responsibility and the effective management of projects. There is a developed degree of autonomy and responsibility and the learner shifts from a supervisory to a management role. The new role involves team-building and training and mastering of unpredictable problems if field of work. The skills are rather described as the ability to utilise and combine a comprehensive set of skills connected with the practice and work processes of an occupation or field of study.

([219]) Draft level descriptors.

The Czech Republic

Integrated description of competence characteristics (the notion of competence encompasses knowledge and skills and the capacity to combine them); used for defining levels 1-8 in the Czech Republic qualifications framework for vocational qualifications. The level descriptors are closely linked to the complexity of working activities.

Example of level 5 descriptor ([220]):

Description of competences

- Be familiar with documentation, norms, standards and regulations in use in the field to the extent that he or she can explain them to others in standard situations.
- Select appropriate procedures, methods, tools, raw materials, etc. from various options, according to conditions and requirements.
- Evaluate the quality of his or her products or services, and those of others.
- Carry out quality control, determine the causes of deficiencies and their consequences and decide how to eliminate them.
- Identify problems which occur while following the selected procedures, determine their causes and implement the required changes to the procedure.
- Identify social, economic and environmental aspects of any problems which arise.
- Distinguish between usual and unusual behaviour from individuals and objects in the workplace, determine causes and context of unusual behaviour, and draw conclusions and formulate proposals.
- Analyse moderately complex systems, phenomena and processes.
- Evaluate the relevance of technical information to resolving standard problems.
- Evaluate the methods of others from the point of view of using them in his or her own work.
- Carry out selected procedures, with modifications depending on conditions and requirements including taking into account social, economic, and ecological considerations.
- Independently carry out common technical tasks by standard methods.
- Solve problems requiring abstraction and employ simple research methods.
- Use technical information from a variety of sources in problem-solving.
- Integrate several components into complex solutions.
- Formulate proposals for improvements including proposals for new processes.
- Design moderately complex procedures and products.
- Present his or her work, products or services, discuss problems and find solutions, communicate effectively and present convincing arguments.
- Direct a group carrying out moderately complex technical tasks depending on unforeseen conditions and requirements.

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[220] Memorandum qualification levels in the national qualifications system: description of the levels and how they relate to the EQF, MŠMT, Executive Committee No 1, 5 January 2010.

Denmark

Three main level descriptor elements defining levels 1-8 in Denmark:

Knowledge	Skills	Competence
• type of knowledge (about theory or about practice, of a subject or a field or within a profession) • complexity of knowledge (the degree of complexity and predictability) • understanding (the ability to place one's knowledge in a context)	• types of skills (practical, cognitive, creative or communicative) • complexity of the problem-solving • communication	• space for action (the type of work and/or study-related contexts, the degree of unpredictability and changeability of these contexts) • cooperation and responsibility • learning

Example of level 5 descriptor ([221]):

Knowledge	Skills	Competence
Must have knowledge of practice, and application of methodology and theory in an occupational area or field of study. Must have understanding of practice and/or the most important theories and methodology and be able to understand the utilisation of these within an occupation.	Must be able to utilise and combine a comprehensive set of skills connected with the practice and work processes of an occupation or field of study. Must be able to assess practice-related problems and adjust work procedures and processes. Must be able to communicate practice-related problems and possible solutions to collaboration partners and users.	Must be able to enter into development oriented and/or interdisciplinary work processes. Must be able to undertake defined management and planning functions in relation to the practice of an occupation or the field of study. Must be able to identify and develop own possibilities for continued further education and training in different learning environments.

([221]) For more information see *Level descriptors in the Danish framework*.
http://en.iu.dk/transparency/qualifications-frameworks/levels [accessed 3.11.2012].

Estonia

EQF level descriptors are adopted as national level descriptors in Estonia, defined as knowledge, skills and scope of responsibility and autonomy.

Level descriptor elements		
Knowledge	**Skills**	**Scope of responsibility and autonomy**
• factual and/or • theoretical	• cognitive • practical	

The learning outcomes relevant to level 5 are ([222]):

Knowledge	**Skills**	**Scope of responsibility and autonomy**
comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	exercise management and supervision in contexts of work or study activities where there is unpredictable change review and develop performance of self and others

More detailed level descriptors are developed for the four subframeworks: for general education, initial vocational education, higher education and professional qualifications.

Example of the level 5 descriptors of occupational qualifications ([223]):

• Analyses information and approaches. • Uses knowledge for creative solving of abstract tasks within limits of interconnected areas.	• Performs diverse tasks, plans appropriate changes and organises application thereof. • Selects and applies technologies, methods and tools for obtaining new solutions and adjusts his or her behaviour according to the situation.	• Works independently in unpredictable situations. • Takes responsibility for a small workgroup.

([222]) Estonian Minister for Education and Research (2008). *Amended professions act*.
http://www.hm.ee/index.php?popup=download&id=9030 [accessed 7.7.2012] or
http://www.kutsekoda.ee/en/kutsesysteem/oigusaktidkutseseadus [accessed 7.7.2011].

([223]) *Referencing of the Estonian qualifications framework to the European qualifications framework*, 2011, p. 56.
http://www.kutsekoda.ee/fwk/contenthelper/10447220/10447221 9citd (13.11. 2012).

Finland

Five dimensions of level descriptors defining levels 1-8 in Finland. The level descriptors are linked to qualifications and syllabuses (added below the description).

• Knowledge	
• Work method and application (skills)	
• Responsibility, management and entrepreneurship	Levels 1-8
• Evaluation	
• Key skills for lifelong learning	

Example of a draft level 5 descriptor ([224]):
- Possesses comprehensive and/or specialised knowledge in his/her field and cognitive and practical skills and expression skills and is capable of making use of such knowledge and skills when solving abstract problems creatively and performing tasks in the field.
- Understands the interfaces between vocational functions and within the field and between different fields.
- Is capable of managing and supervising operating environments that change unpredictably. Is capable of supervising tasks performed by others.
- Possesses good capability to work as an independent entrepreneur in the field.
- Assesses and develops his/her own as well as others' performance and work. Possesses the capacity for continuous learning.
- Knows how to communicate verbally and in writing in his/her mother tongue both to audiences in the field and outside it.
- Is able to deal with different people in learning and working communities and other groups and networks, complying with ethical principles.
- Is capable of communicating at an international level and interacting in his/her field in both national languages and at least one foreign language.
- Complies with sustainable working and operating practices.

The following qualifications are linked to level 5:
The administrative sector of the Ministry of Education and Culture:
- specialist vocational qualifications, vocational qualification in air traffic control, further qualification in the construction industry.

Other qualifications outside the Ministry of Education and Culture sector:
- Finnish police sergeant examination (Ministry of Interior), subofficer qualification (rescue services) (Ministry of Interior).

([224]) Draft level descriptor to be approved by the Finnish Parliament.

France ([225])

Level	Level definition	Learning outcomes
V	Personnel holding jobs normally requiring a level of training equivalent to that of the vocational studies certificate (BEP) or the certificate of vocational ability (CAP), and by assimilation, the level 1 certificate of vocational training for adults (CFPA).	This level corresponds to full qualification for carrying out a specific activity with the ability to use the corresponding instruments and techniques. This activity mainly concerns carrying out work, which can be autonomous within the limits of the techniques involved.
IV	Personnel holding jobs at a supervisory highly skilled worker level and able to provide proof of a level of training equivalent to that of the vocational certificate (BP), technical certificate (BT), vocational baccalaureate or technological baccalaureate.	A level IV qualification involves a higher level of theoretical knowledge than the previous level. This activity concerns mainly technical work that can be executed autonomously and/or involve supervisory and coordination responsibilities.
III	Personnel holding jobs normally requiring a level of training equivalent to that of a diploma from a University Institute of Technology (DUT) or a technology certificate (BTS) or a certificate corresponding to the end of the first higher education cycle.	A level III qualification corresponds to higher levels of knowledge and abilities, but without involving mastery of the fundamental scientific principles for the fields concerned. The knowledge and abilities required enable the person condition to assume, autonomously or independently, responsibilities concerning design and/or supervision and/or management.
II	Personnel holding jobs normally requiring a level of training comparable to that of a bachelor's or master's degree.	At this level, exercise of a salaried or independent vocational activity involves mastery of the fundamental scientific principles for the profession, generally leading to autonomy in exercising that activity.
I	Personnel holding jobs normally requiring a level of training above that of a master's degree.	As well as confirmed knowledge of the fundamental scientific principles for a vocational activity, a level I qualification requires mastery of design or research processes.

([225])   *Nomenclature des niveaux de formation* (approuvée par décision du groupe permanent de la formation professionnelle et de la promotion sociale, le 21 mars 1969).

Germany

An overarching competence descriptor for levels 1-8 and four main characteristics defining levels in German qualifications framework:

Level indicator			
Structure of requirements			
Professional competence		**Personal competence**	
Knowledge	**Skills**	**Social competence**	**Autonomy**
Depth and breadth	Instrumental and systemic skills, judgment	Team/leadership skills, involvement and communication	Autonomous responsibility/responsibility, reflectiveness and learning competence

Example of level descriptor 5 (Bundesministerium für Bildung und Forschung und Kultusministerkonferenz, 2011) ([226]):

Be in possession of competences for the autonomous planning and processing of comprehensive technical tasks assigned within a complex and specialised field of study or field of occupational activity subject to change.

Professional competence		Personal competence	
Knowledge	**Skills**	**Social competence**	**Autonomy**
Be in possession of integrated professional knowledge within a learning area or integrated occupational knowledge within a field of activity. This also includes deeper, theoretical professional knowledge. Be familiar with the scope and limitations of the field of study or field of occupational activity.	Be in possession of an extremely broad spectrum of specialised, cognitive and practical skills. Plan work processes across work areas and evaluate such processes accordingly, giving comprehensive consideration to alternative courses of action and reciprocal effects with neighbouring areas. Provide comprehensive transfers of methods and solutions.	Plan and structure work processes in a cooperative manner, including within heterogeneous groups, instruct others and provide well-founded learning guidance. Present complex facts and circumstances extending across professional areas in a targeted manner to the appropriate recipients of such information. Act in an anticipatory manner in considering the interests and requirements of recipients.	Reflect on and assess own learning objectives and learning objectives set externally, undertake self-directed pursuit of and assume responsibility for such objectives, draw consequences for work processes within the team.

Greece

Three main level descriptor elements defining levels 1-8 in Greece:

Level descriptor elements		
Knowledge	**Skills**	**Competence**
• factual and/or • theoretical	• cognitive • practical	• autonomy and • responsibility

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([226]) *The German qualifications framework for lifelong learning adopted by the 'German qualifications framework working group' (AK DQR)*, 22 March 2011. http://www.deutscherqualifikationsrahmen.de/de?t=/documentManager/sfdoc.file.supply&s=Ps4JMwXnVSyFI11k70&fileID=1306419029291 [accessed 20.10.2012].

Example of level 5 descriptor ([227]):

Knowledge	Skills	Competence
Has comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundary of that knowledge	Has a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	Can manage and supervise in the context of a work or study activity where there is unpredictable change. Can review and develop performance of self and others

Additionally, a description of level is provided:

The holder of a qualification of this level can be employed in jobs that require high specialisation and can enhance his/her personal development by having access to higher education studies. This can be achieved through the recognition of part of his/her formal qualifications or/and work experience. The terms and conditions of this vertical mobility are defined at national level. Level 5 qualifications are formally related to the accomplishment of an education and training programme after upper secondary education. These qualifications link non-tertiary upper secondary education with higher education and are referenced to the Bologna process short cycle.

Hungary

Four main level descriptor elements defining levels 1-8 in Hungary:

Level descriptor elements			
Knowledge	Skills and abilities	Attitudes	Autonomy and responsibility

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([227]) Non-official translation. For more information see http://www.opengov.gr/ypepth/wp-content/uploads/downloads/2010/05/NQF_KEIMENO-DIABOYLEYSHS.pdf

Example of level 5 descriptor ([228]):

Knowledge	Skills and abilities	Attitudes	Autonomy and responsibility
Has a fundamental general and specialised, theoretical and practical knowledge, related to a particular field of study/work. His theoretical and practical knowledge is systematic. His/her sound knowledge regarding the application of methods and tools ensures lasting exercise of the given profession at a high level Knows the specific terminology of the given field (in the mother tongue and in at least one foreign language).	Able to solve the tasks related to a given profession: to design and carry them out, to choose the appropriate methods and tools, to apply them in an individual and complex manner. His/her capacities to communicate in his mother tongue and in a foreign language enable him/her to carry out professional cooperation with speakers of other languages. Able to improve his/her knowledge, and apply different methods of knowledge acquisition, self-improvement and current information and communication technologies for that purpose. Able to make accountable decisions related to employment and entrepreneurship	Open to new achievements and innovations in a given field of work/study. Endeavours to be acquainted with, to understand, and to use them. Aims for continuous self-education. Committed to high quality professional work. Self-critical concerning his/her own work. Accepts and genuinely stands for the social role and the values of his/her profession.	Works autonomously under continuous self-monitoring Takes responsibility for his or her own work as well as for the work, achievements or failures of the team under his/her supervision. In decision-making, takes into consideration the ethical and legal rules of his field of work.

([228]) *The government decree on the Hungarian qualifications framework*, July 2012. Non-official translation.

Iceland

Three main level descriptor elements defining levels 1-7 in Iceland:

Level descriptor elements		
Knowledge	**Skill**	**Competence**
It is a collection of facts, principles, theories and methods. It is both theoretical and practical. Knowledge is acquired by looking, reading, listening, discussing, or through other forms of communication. Knowledge is analysed by discussing, categorising and comparing. Knowledge is communicated through various forms of expression, for example, orally, in writing, or through work.	Is both cognitive and practical. Skill involves the ability to apply methods and practices. Skill is acquired through training, methods, and practices. Skill involves analysis by choosing between methods, and the organisation of procedures. Skill is communicated by applying working methods, tools, and the methods of the various forms of expression.	Involves broadmindedness and the ability to use knowledge and skill. Competence is based on responsibility, broadmindedness, creativity, moral values, tolerance, and the students' appreciation of their own abilities. Additionally, their self-confidence and autonomous working methods. Competence involves the students' analysis of their own knowledge and skill by comparing, finding connections, simplifying, drawing conclusions, reflecting, and reasoning. Analytical competence involves critical thinking and professional criticism. Communicating competence involves various forms of expression where cognitive, artistic, and practical knowledge and skill is interrelated with the moral and social attitudes of the individual.

Example of the draft level 4 descriptor ([229]):

Knowledge	Skill	Competence
Students have acquired: specialised knowledge useful for professional advancement and/or as preparation for further studies specialised vocabulary in a foreign language useful for professional advancement and/or as preparation for further studies	**Students have acquired skill to:** guide and communicate their knowledge in a simple and creative manner organise a procedure, employ appropriate techniques and develop the methods of a profession and/or specialised knowledge in a responsible manner show initiative and autonomy in working methods at analysing circumstances and reacting in an appropriate, realistic and creative manner	**Students** have acquired competence to express their specialised knowledge in Icelandic and a foreign language, if necessary in work or for further studies are able to take part in a conversation based on specialised knowledge and skills in a critical and clear manner have moral responsibility for the utilisation and development of their specialised knowledge with regard to the working conditions have acquired competence to be an active and responsible citizen in a society of a speciality and/or a profession have acquired competence to evaluate their own work effort and that of others in connection with the working conditions and/or specialised knowledge in a critical and constructive manner have acquired competence to connect their knowledge with the global environment

Ireland

The learning outcomes descriptors are broken down into eight knowledge-, skills- and competence substrands in a 10-level framework in Ireland:

Level descriptor elements		
Knowledge	**Know-how and skills**	**Competence**
● breadth ● kind	● range ● selectivity	● context ● role ● learning to learn ● insight

([229]) *Report on referencing of the Icelandic NQF to the EQF,* September 2012 [draft].

Even though not a part of a formal framework, a synoptic learning outcomes descriptor is used to explain and understand the nature of learning outcomes at a given level.

For level 6 the following summary descriptor is provided:

Learning outcomes at this level include a comprehensive range of skills which may be vocationally-specific and/or of a general supervisory nature, and require detailed theoretical understanding. The outcomes also provide for a particular focus on learning skills. The outcomes relate to working in a generally autonomous way to assume design and/or management and/or administrative responsibilities. Occupations at this level would include higher craft, junior technician and supervisor.

Example of the level descriptor with eight substrands for level 6 (National Qualifications Authority of Ireland, 2003a) ([230]):

Level descriptor elements		
Knowledge	**Know-how and skills**	**Competence**
• **Breadth** Specialised knowledge of a broad area. • **Depth** Some theoretical concepts and abstract thinking, with significant underpinning theory.	• **Range** Demonstrate comprehensive range of specialised skills and tools. • **Selectivity** Formulate responses to well defined abstract problems.	• **Context** Act in a range of varied and specific contexts involving creative and non-routine activities; transfer and apply theoretical concepts and/or technical or creative skills to a range of contexts. • **Role** Exercise substantial personal autonomy and often take responsibility for the work of others and/or for allocation of resources; form, and function within, multiple complex and heterogeneous groups. • **Learning to learn** Learn to evaluate own learning and identify needs within a structured learning environment; assist others in identifying learning needs. • **Insight** Express an internalised, personal world view, reflecting engagement with others.

([230]) *Outline national framework of qualifications: determinations made by National Qualifications Authority of Ireland.* http://www.nqai.ie/docs/publications/12.pdf [accessed 26.11.2012]. Level 6 was referenced to the EQF level 5.

Latvia

Three main level descriptor domains are used for levels 1-8 in Latvia:

Level descriptor elements		
Knowledge	**Skills**	**Competence**
• knowledge • comprehension	ability to apply: • knowledge, • communication • general skills	• analysis, • synthesis • assessment

Example of level descriptors for level 5 (Academic Information Centre; Ministry of Education and Science of the Republic of Latvia., 2011) ([231]):

Level descriptor elements		
Knowledge	**Know-how and skills**	**Competence**
Able to demonstrate comprehensive and specialised knowledge and understanding of facts, theories, causalities and technologies of the concrete professional field	Able, on the basis of analytical approach, to perform practical tasks in the profession, demonstrate skills, allowing to find creative solutions to professional problems, to discuss and provide arguments regarding practical issues and solutions in the profession with colleagues, clients and management, able, with an appropriate degree of independence, to engage in further learning, improving one's competences Able to assess and improve one's own actions and those of other people, to work in cooperation with others, to plan and to organise work to perform tasks in one's profession or to supervise such work activities, in which unpredictable changes are possible	Able to define, describe and analyse practical problems in one's profession, select the necessary information and use it for solving clearly defined problems, to participate in the development of the professional field, demonstrate understanding of the place of the concrete profession in a broader social context

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([231]) *Referencing of the Latvian education system to the European qualifications framework for lifelong learning and the qualifications framework for the European higher education area: self-assessment report.* http://www.nki-latvija.lv/?p=783?lang=en [accessed 25.8.2011].

Lithuania

Concise and detailed descriptors for levels 1-8 in Lithuania:

The detailed level descriptors are defined according to two parameters: characteristics of activities and types of competence:

Parameters		
Characteristics of activities	**Types of competences**	
Criteria	• complexity of activities • autonomy of activities • variability of activities	• functional competences • cognitive competences • general competences

Brief indicator of qualification level 5 ([232]):

The qualification is intended for activities distinguished by integrated coordination of tasks in different areas. Activities include evaluating the competences of lower-qualification employees and training accordingly. This requires coordination of comprehensive knowledge of the activity area with general knowledge in dealing with various specialised activity tasks in several different areas.

The employee performs the activities independently and is supervised only by evaluation of results. The activity tasks are set by an employee of a higher qualification, who frequently grants the employee discretion as to the choice of methods and measures to complete the tasks. The employee supervises the lower-qualification staff, plans and assigns activity tasks, oversees their performance, provides consulting and verifies the performance quality.

The technological and organisational requirements of the activities as well as their environment are constantly changing; the changes are often unforeseeable and may be related to new areas of activity.

Original indicator of qualification level 5 is furthered divided into three categories: knowledge, skills and competence (Qualifications and VET Development Center, 2012) ([233]).

([232]) Government of the Republic of Lithuania resolution No 535 of 4 May 2010. *Description of the Lithuanian qualifications framework*.
http://www.kpmpc.lt/LTKS_EKS/LTQF_official_translation.pdf
[accessed 10.10.2012].
([233]) *National report 2012: referencing the Lithuanian qualifications framework to the European qualifications framework for lifelong learning and the qualifications framework for the European higher education area*.
http://ec.europa.eu/eqf/documentation_en.htm [accessed 26.11.2012].

Level descriptor elements		
Knowledge	**Skill**	**Competence**
Comprehensive factual and theoretical knowledge within different activity areas. Knowledge required in dealing with various specialised activity tasks in several different activity areas.	Cognitive skills cover not only the application of knowledge in a particular area of activity but also coordinating knowledge of the activity area with general knowledge. Practical skills are used to solve specialised tasks in several different areas. The individual learns to coordinate task solutions across different activity areas. A person of this qualification chooses task solution methods and measures.	Independently perform activity under conditions of constantly changing technological and organisational requirements; changes are often unforeseeable. The individual acquires competence to supervise the activities of lower-qualification staff, to verify their performance, quality, train them and evaluate competences acquired. The tasks are set by an employee of a higher qualification, who frequently grants the employee discretion as to the choice of methods and measures to complete the tasks.

Luxembourg

Level descriptor elements		
Knowledge/connaissances	**Aptitudes**	**Attitudes**
Connaissances refers to a group of facts, principles, theories and practices connected with a particular area of study or work;	Aptitudes should be understood as referring to the ability to apply knowledge to the completion of tasks and the resolution of problems.	Attitudes should be understood as referring to personal and social dispositions in work or study situations and for professional or personal development

Example of level descriptors for level 5:

(Ministry of Education and Vocational Training and Ministry of Higher Education and Research, 2012) ([234])

Level descriptor elements		
Knowledge/connaissances	**Aptitudes**	**Attitudes**
Acquisition of diverse procedural and declarative knowledge, often specific to a given field of work or study. Analysis, interpretation and evaluation of information, concepts and ideas. Understanding of different perspectives and approaches, and the underlying reasoning.	Mastery of skills allowing the transfer of procedural and declarative knowledge in order to resolve new problems. Ability to develop appropriate creative technical responses in seeking solutions to well-defined concrete and abstract problems.	Take responsibility for management of work or study projects requiring problem-solving involving many factors, some of which interact and generate unpredictable changes. Develop projects by proposing appropriate solutions. Exercise autonomy of judgment within broad parameters. Evaluate and develop own competences through work- or study-related learning. Manage and train subordinates. Ensure performance development for subordinates and team.

Malta

Three main types of level descriptor and detailed learning outcomes specified for levels 1-8 in Malta:

Each level descriptor is defined in terms of knowledge, skills and competences and summarises learning outcomes for a specific level in terms of:

- knowledge and understanding,
- applying knowledge and understanding,
- communication skills,
- judgemental skills,
- learning skills,
- autonomy and responsibility.

([234]) *Report on referencing the Luxembourg qualifications framework to the European qualifications framework for lifelong learning and to the qualifications framework in the European higher education area.* 2012, p. 21.

Example of level 5 descriptors ([235]):

Knowledge:

1. understands knowledge in a field of study that builds on advanced general secondary education and is typically at a level supported by advanced textbooks leading to further studies to complete the first cycle;
2. develops strategic and creative responses in researching solutions to well-defined concrete and abstract problems;
3. makes judgements based on knowledge of relevant social and ethical issues.

Skills:

1. demonstrates transfer of theoretical and practical knowledge, in creating solutions to problems;
2. conveys ideas in a well structured and coherent way to peers, supervisors and clients using qualitative and quantitative information;
3. has the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;
4. evaluates own learning and identifies learning needs necessary to undertake further learning;

Competences:

1. manages projects independently that require problem-solving techniques where there are many factors, some of which interact and lead to unpredictable outcomes;
2. shows creativity in managing projects, manages people and reviews performance of self and others; train others and develops team performance;
3. expresses a comprehensive internalised personal world view reflecting engagement of solidarity with others;
4. has the learning skills to undertake further studies with some autonomy.

([235]) *Malta qualifications framework for lifelong learning regulations*.
http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11927&l=1 [accessed 13.11.2012].

Learning outcome

MQF learning outcomes	
1. Knowledge and understanding	understands advanced textbooks which may lead to further academic or vocational learning and researches solutions to abstract problems;
2. Applying knowledge and understanding	demonstrates operational capacity and management skills using creativity;
3. Communication skills	interacts with others to convey abstract and concrete solutions to problems in a field of work or study;
4. Judgmental skills	formulates practical and theoretical responses to abstract and concrete problems and makes judgements on social and ethical issues;
5. Learning skills	evaluates own learning and can improve key competences for further learning, and promotes team training;
6. Autonomy and responsibility	is responsible for the effective and efficient management of projects and people within agreed timeframes;

The Netherlands

Four main level descriptor domains as defined in the NLQF for levels 1-8 (plus an entry level) in the Netherlands:

Context	The descriptions of the contexts, together with the described knowledge, determine the level of difficulty of the skills
Knowledge	Knowledge is the totality of facts, principles, theories and ways of practice, related to an occupation or a knowledge domain
Skills	Cognitive capabilities (logic, intuitive and creative thinking) and practical capabilities (psychomotor skills in the use of methods, materials, aids and instruments) applied within a given context:
Applying knowledge	• reproduce, analyse, integrate, evaluate, combine and apply knowledge in an occupation or a knowledge domain
Problem-solving skills	• comprehend, recognise or identify and solve problems
Learning and development skills	• personal development, autonomously or under supervision
Information skills	• obtain, collect, process, combine, analyse and assess information
Communication skills	• communicate based on context-relevant conventions
Responsibility and independence	The proven capability to collaborate with others and being responsible for own work or study results or of others

Example of level 5 (Dutch Ministry of Education, 2012) ([236]):

Context	An unknown and changeable living or working environment, and in an international environment
Knowledge	Possess broad and in-depth knowledge of a knowledge domain
	Possess detailed knowledge of some knowledge domains and understanding of a limited range of basic theories, principles and concepts
	Possess limited knowledge and understanding of some important current subjects and specialties
Skills *Applying knowledge*	Reproduce, analyse and apply the knowledge in a range of contexts in order to answer problems related to a knowledge domain
	Use procedures in a flexible and inventive way
	Recognise the limitations of existing knowledge in the knowledge domain and take action to address this
	Analyse and carry out complex tasks
Problem-solving skills	Identify, analyse and solve complex problems in the knowledge domain in a creative way by selecting and using relevant data
Learning and development skills	Undertake personal development by reflecting on and evaluating personal (learning) results
Information skills	Obtain, process and combine broad, in-depth and detailed information on a limited range of basic theories, principles and concepts of a knowledge domain as well as limited information on some important current subjects and specialties and present this information
Communication skills	Communicate with peers, supervisors and clients, appropriately to the context, using conventions which are relevant to professional practice
Responsibility and independence	Work with peers and supervisors
	Take responsibility for the results of own activities or study
	Take shared responsibility for the results of the activities of others

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([236]) *The referencing document of the Dutch national qualifications framework to the European qualifications framework, February, 2012.*
http://ec.europa.eu/eqf/documentation_en.htm. [accessed 08.04.2013].

Norway

Three main level descriptor elements defining levels 2-8 in Norway:

Level descriptor elements		
Knowledge	**Skills**	**General competence**
Types and complexity: Is it theoretical or practical knowledge, within a subject or a profession? How complex and comprehensive?	**Types:** Is it cognitive, practical, creative or communicative?	**Challenges regarding change:** In which areas of education and work? How predictable and changeable situations
Understanding: Ability to contextualise knowledge	**Problem-solving:** How complex are the tasks to be addressed at a particular level?	**Cooperation and responsibility:** Extent to which candidate takes responsibility for own and others' work.
	Communication: With whom, at what level of complexity, by which means?	**Learning:** Extent to which candidate takes responsibility for own learning and competence development?

Example of parallel level descriptors at the level 5 ([237]):
a)   Norwegian level 5: Tertiary vocational training 1

Level descriptors		
Knowledge	**Skills**	**General competence**
The candidate… - has knowledge of concepts, processes and tools that are used in a specialised field of work - has insight into relevant regulations, standards, agreements and quality requirements - has a knowledge of the industry and is familiar with the field of work - can update his/her vocational knowledge - understands the importance of his/her own trade/discipline in a societal and value-creation perspective	*The candidate…* - can apply vocational knowledge to practical and theoretical problems - masters relevant vocational tools, materials, techniques and styles - can find information and material that is relevant to a vocational problem - can study a situation and identify subject-related issues and what measures need to be implemented	*The candidate…* - understands the ethical principles that apply in the trade/ field of work - has developed an ethical attitude in relation to the practising of his/her discipline - can carry out work based on the needs of selected target groups - can build relations with his/her peers, also across discipline boundaries, and with external target groups - can develop work methods, products and/or services of relevance to practising the discipline

b)   Norwegian level 5: Tertiary vocational training 2

Level descriptors		
Knowledge	**Skills**	**General competence**
The candidate… - has knowledge of concepts, theories, models processes and tools that are used in a specialised field of work - can assess his/her own work in relation to the applicable norms and requirements - is familiar with the history, traditions, distinctive nature and place in society of the trade/discipline - has insight into his/her own opportunities for development	*The candidate…* - can explain his/her vocational choices - can reflect over his/her own vocational practice and adjust it under supervision - can find and refer to information and vocational material and assess its relevance to a vocational issue	*The candidate…* - can plan and carry out vocational tasks and projects alone or as part of a group and in accordance with ethical requirements and principles - can exchange points of view with others with a background in the trade/discipline and participate in discussions about the development of good practice - can contribute to organisational development

([237]) http://www.regjeringen.no/upload/KD/Vedlegg/Internasjonalt/engelskoversettelse.pdf
[accessed 17.12.2012].

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Poland

Three main level descriptor domains in for levels 1-8 in Poland:

Level descriptor elements		
Knowledge	**Skills**	**Social competence**
• Scope • Depth of understanding	• Problem-solving and practical use of knowledge (complexity, typicality, controlling, conditions) • Skills – learning (control, form) • Skills – communicating (complexity and scope of expression in native and foreign languages)	• Identity (participation, responsibility, models of conduct) • Cooperation (team work, leadership, conditions) • Responsibility (individual and team actions, consequences, evaluation)

Example of level 5 descriptor ([238]):

Level descriptor elements		
Knowledge	**Skills**	**Social competence**
a broad range of facts, theories, methods and the dependencies between them the diverse conditions of conducted activities	complete tasks without instruction under variable, predictable conditions solve moderately complex and non-routine problems under variable, predictable conditions learn autonomously understand moderately complex statements, formulate moderately complex statements using specialised terminology understand and formulate very simple statements in a foreign language using specialised terminology	assume basic professional and social responsibilities, evaluate and interpret them independently act and cooperate with others under structured conditions, direct a small team under structured conditions evaluate one's own actions and those of others and the teams one directs; assume responsibility for the results of those actions

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[238] *Draft level descriptors proposed for the Polish qualifications framework (PQF).* August 2012.

Portugal

Three main level descriptor domains as defined in the EQF used for levels 1-8 in Portugal:

Level descriptor elements		
Knowledge	**Skills**	**Attitudes**
• Facts, principles, theories and practices	• Cognitive skills (logical, intuitive and creative thinking) • Practical skills (manual dexterity and the use of methods, materials, tools and instruments)	• Autonomy • Responsibility

More detailed level descriptor interpretation

Knowledge	Know-how and skills	Attitudes	Context
• **Depth** Depth of knowledge is considered to increase progressively from the lowest to the highest level as is the complexity and variety of knowledge. • **Understanding** At the lower level, it is understood as interpretation of information and application in the context; at the highest critical awareness of knowledge-related issues in the field and at the interface with other fields.	• **Depth and breath** Progressive broadening and specialisation of the range of cognitive and practical skills, from the range of restricted breath and basis depth at qualification level 1, to an advanced range of skills at the forefront of a field of work or study at the highest level of qualification; • **Purpose** At the lowest level the individuals should be capable of performing tasks and solving simple problems by interpreting basic information (task of execution); at higher level of qualification it is expected to be	• **Responsibility** This subdomain includes responsibility for one's own work and responsibility for others. A gradation was adopted from work under instruction with shared responsibility (level 1) to work taking responsibility and with a sustained commitment to the development of new ideas and new processes at the forefront of a field of work or study (level 8). As for the level of responsibility for others, there is considered to be progression from no responsibility (level 1) to responsibility for others, demonstrating	• **Context of application** Ranging from everyday activities at a lower level to a specialised field of work or study and the interface between different areas at higher level; • **Predictability and complexity** Developing from a stable structure context at level 1 to an unpredictable and highly complex context at qualifications level 8.

	capable of research and innovation to solve critical problems and perform complex tasks to redefine existing knowledge and professional practices (research and development tasks, innovation).	authority, innovation and scientific and professional integrity. • **Autonomy** This subdomain is structured from no autonomy/low level of autonomy (levels1/2) to maximum autonomy, understood as a sliding scale.	

Example of level 5 descriptor: (National Agency for Qualifications, 2011, Portugal) ([239])

Knowledge	Know-how and skills	Attitudes	Context
• **Depth** Fundamental and specialised knowledge of facts, concepts and principles • **Understanding** Interpret, select, relate and adapt information and apply in context; demonstrate awareness of the boundaries of the knowledge	• **Depth and breath** Range of specialised skills • **Purpose** Generate creative solutions to accomplish specific tasks and solve specific problems, some of an abstract nature, and requiring tailored solutions (design, planning, execution and control, evaluation and improvement task)	• **Responsibility** Review and develop self-performance Manage and supervise the individual performance of others • **Autonomy** On a sliding scale from less to more	• **Context of application** In a specialised field of work or study • **Predictability and complexity** Subject to unpredictable changes of variable complexity

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([239]) *Report on the referencing of the national qualifications framework to the European qualifications framework*, June 2011. http://ec.europa.eu/eqf/documentation_en.htm [accessed 26.11.2012].

Romania

Three main level descriptor elements defining levels 1-8 in Romania:

Level descriptor elements		
Knowledge	**Abilities**	**Transversal competences**
• Knowledge, understanding and usage of the specific language • Explanation and interpretation	• Application, transfer and problem-solving • Critical and constructive reflection • Creativity and innovation	• Autonomy and responsibility • Social interaction • Personal and professional development

Example of level 5 descriptor ([240])

Knowledge	**Abilities**	**Transversal competences**
Knowledge, understanding and usage of the specific language Detailed knowledge and understanding of the specific concepts, principles and processes within a specialised work or study domain **Explanation and interpretation** The identification and explanation of the specific processes within a work or study domain, using adequate concepts	**Application, transfer and problem-solving** Executing some complex tasks, within a specialised domain of work of study **Critical and constructive reflection** Selecting solutions to solve work or study problems, within a domain, by applying and combining various methods, instruments, materials and information **Creativity and innovation** Developing creative solutions for work or study problems, including for abstract problems within a specialised domain	**Autonomy and responsibility** Self-organising of work or study, with responsibility assumption **Social interaction** Coordination and supervision of work or study tasks achievement within a specialised domain, also of the performances of the ones being under the ferule, inclusively within unpredictable change conditions **Personal and professional development** Performance self-evaluation and the identification of personal and professional development requirements

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([240]) *Draft government resolution on the national qualifications framework*, 12. 9.2011.

Slovakia

Three main level descriptor elements defining levels 1-8 in Slovakia:

Level descriptor elements		
Knowledge	**Skills**	**Competences**

Example of level 5 descriptor ([241]):

Knowledge	Skills	Competences
Must be able to analyse and synthesise extensive and specialised, factual knowledge, principles and processes, general concepts in broadly defined contexts within an occupational area or field of study and must have an awareness of boundaries of that knowledge Must be able to analyse and synthesise theoretical knowledge in performing complex tasks in broadly defined contexts within an occupational area or field of study and must have an awareness of boundaries of that knowledge	Must be able to orientate oneself in a broad range of technical and non-technical documentation, norms and standards used within a field of study Must be able to apply abstract logical thinking required to generate and develop creative solutions of specific information, abstract work procedures and problems under unpredictable conditions Must be able to perform complex specific activities and, progressively, use methods, tools, equipment and materials in partly unpredictable conditions and propose simple methods and procedures	Must be able to complete and manage complex tasks, including supervision in contexts of work or study activities where there is unpredictable change Must be able to take and assume full responsibility for the management, limited responsibility for the evaluation and development of activities, evaluate and develop one's own performance and that of others in unpredictable work or study contexts

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([241]) Ministry of Education, Science, Research and Sports. March 2011. *The national qualifications framework of the Slovak Republic and the referencing of the levels to the levels of the EQF*.

Slovenia

Three main level descriptor elements defining levels 1-10 in Slovenia:

Level descriptor elements		
Knowledge	**Skills**	**Competence**
Is the result of learning and acquisition of concepts, principles, theories and practices. It is obtained in different settings: in education, at work and in the context of private and social life.	In the context of the Slovenian qualifications framework, skills are described as cognitive (e.g. use of logical, intuitive and creative thinking) and/or practical (e.g. manual skills, creative skills, the use of materials, tools and instruments).	Pertains to the ability to use and integrate knowledge and skills in educational, work, personal and/or professional situations. Competences vary in the light of their complexity, independence and responsibility for action. We distinguish between generic and vocationally specific competences.

Example of level 6 descriptor: (Institute of the Republic of Slovenia for vocational education and training, 2011, p. 12) ([242]):

Knowledge	**Skills**	**Competence**
Professional and theoretical knowledge in the specific field as well as practical knowledge for resolving specific professional tasks. Knowledge enables the resolution of more complex tasks in a specific field of the discipline	Performing complex operative and professional tasks linked to works in the pipeline and control of work processes, particularly when it comes to organisation and management of the work process. Tasks are complex in terms of the scope of action, normally specialised, and involve abstract thinking and the use of appropriate tools, methods, different technology procedures, materials and theories.	Ability to operate in different and specific settings with elements of creativity. Independent activity characterised by taking on responsibility for the work of individuals, groups, material sources and information. Performing in numerous, complex and heterogeneous situations. In addition, it is required to have the ability to make basic connections and place issues in a general social context. Identifying one's own learning needs and providing for knowledge transfer in a work setting.

([242]) *Slovenian qualifications framework: proposal by the steering committee group on the preparation of the national qualifications framework.*
http://www.nok.si/data/files/68_file_path.pdf [accessed 7.10.2012].

Spain

Three main level descriptor elements defining levels 1-8 in Spanish QF (MECU):

Knowledge described as theoretical and/or practical:	**Skills and abilities** described as cognitive and practical:	**Competence** described as autonomy and responsibility:
• to have or understand knowledge	• to apply knowledge • ability to communicate in various languages • analysis ability	• learning ability • attitudes

Example of level 5 descriptor ([243]):

Knowledge	**Skills and abilities**	**Competence**
• Specialised knowledge in a study or professional field, with a critical comprehension for transferring, integrating and innovating knowledge	• Advanced technological knowledge application and integration when defining and developing both predictable and unpredictable working procedures. • Management and supervision of the work techniques and outcomes, carried out by oneself and other people. • To communicate knowledge, abilities, feelings and activities properly in predictable and not predictable contexts. • Correct management of technological resources in a work or study field. • Analysis of the consequences of one's and other's actions in predictable and not predictable contexts. • Analysis of varied and wide information, necessary for evaluating and solving problems within its study or professional field. • Search for creative and innovative solutions when solving problems in a study or professional field.	• Self-management of education in a study or professional field with the aim of making progress to higher training levels or of improving the application of new knowledge. • Autonomy and responsibility for carrying out predictable and unpredictable activities in a professional field, and in charge of supervising the activities of subordinates. • Responsibility and autonomy to implement and supervise the workplace risk prevention, people safety, work quality and protection of the environment where the professional activity is carried out.

[243] Draft level descriptor. October 2012.

Sweden

Three main level descriptor elements defining levels 1-8 in Swedish QF:

Knowledge (experience-based and/or theoretical)	Skills (performs tasks and solve problems)	Competence (ability to take responsibility, to evaluate, and to act autonomously and to cooperate with others)

Example of level 5 descriptor ([244]):

Knowledge	Skills and abilities	Competence
Can demonstrate: specialised knowledge in a field of work or study, knowledge of and an overview of fields touching on the person's own field of work or study, knowledge of work processes and quality criteria within a field of work or study.	**Knows how:** to plan, perform and identify resources for carrying out specialised assignments, to resolve complex problems within a field of work or study, to communicate undertakings and solutions in a field of work or study in at least one foreign language.	**Knows how:** to handle autonomously content in a field of work or study that leads to further learning and professional development, to supervise work or study activities and complete assigned projects.

Turkey

Three main level descriptor domains are used for levels 1-8 in Turkey:

Knowledge	Skills	Competence
Under the scope of TQF knowledge is defined in general as theoretical and/or practical knowledge involving the comprehension of facts, principles, theories and practices related to an area of work or learning.	Under the scope of TQF skill is defined in general as utilisation of knowledge, problem-solving, transferring knowledge and skills to others which requires the ability to use logical, intuitive and creative thinking and dexterity, method, material, tools and instruments acquired in an area of work or learning.	Under the scope of TQF competence is defined as utilisation of knowledge and skills in an area of work and/or learning by taking responsibility and/or displaying autonomy, determination and satisfaction of learning requirements.

([244]) Draft level descriptors, 2011.

Example of level 5 descriptor ([245]):

Knowledge	Skills	Competence
Possess theoretical and practical knowledge required for expertise in an area of work or learning.	Analyse data that belong to complicated and interrelated activities in an area or work or learning, evaluate results with an interrogative approach, draw conclusions, define appropriate tasks and methods and apply them or have them applied systematically; develop evidence based solutions to unique and/or unforeseen problems encountered for the first time; transfer knowledge and skills to others.	Take limited responsibility in performing complicated activities in environments where unforeseen changes take place; undertake supervision and audit over activities which are performed by others under one's responsibility; satisfy learning needs in line with learning goals, guide people under one's responsbility related to the determination of their learning needs and development of their performance.

The United Kingdom

England and Northern Ireland: qualifications and credit framework

Summary	Knowledge and understanding	Application and action	Autonomy and accountability

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([245]) Draft level descriptors of TQF, October 2012.

Example of level 5 descriptor (Ofqual, 2008) ([246]):

Summary	Knowledge and understanding	Application and action	Autonomy and accountability
Achievement at level 5 reflects the ability to identify and use relevant understanding, methods and skills to address broadly-defined, complex problems. It includes taking responsibility for planning and developing courses of action as well as exercising autonomy and judgement within broad parameters. It also reflects understanding of different perspectives, approaches or schools of thought and the reasoning behind them.	Use practical, theoretical or technological understanding to find ways forward in broadly-defined, complex contexts Analyse, interpret and evaluate relevant information, concepts and ideas Be aware of the nature and scope of the area of study or work Understand different perspectives, approaches or schools of thought and the reasoning behind them	Address broadly-defined, complex problems Determine, adapt and use appropriate methods and skills Use relevant research or development to inform actions Evaluate actions, methods and results	Take responsibility for planning and developing courses of action, including where relevant responsibility for the work of others Exercise autonomy and judgement within broad parameters

Scotland

Five main characteristics used for defining level descriptors at levels 1-12 in SCQF in Scotland:

- knowledge and understanding;
- practice: applied knowledge and understanding;
- generic cognitive skills;
- communication, ICT and numeracy skills;
- autonomy, accountability and working with others.

([246]) *Regulatory arrangements for qualifications and credit framework* (QCQ). Coventry: Office of the qualifications and examinations regulator.
http://www.ofqual.gov.uk/files/Regulatory_arrangemen\ts_QCF_August08.pdf
[accessd 8.11.2012].

Examples of level descriptors for levels 7 and 8 ([247]):

Knowledge and understanding	
Level 7	Level 8
Demonstrate and/or work with: • overall appreciation of the body of knowledge that constitutes a subject/discipline/sector. • knowledge that is embedded in the main theories, concepts and principles of the subject/discipline/sector. • awareness of the dynamic nature of knowledge and understanding. • understanding of the difference between explanations based on evidence and/or research and other sources, and of the importance of this difference.	Demonstrate and/or work with: • knowledge of the scope, defining features, and main areas of the subject/discipline/sector. • specialist knowledge in some areas. • discerning understanding of a defined range of core theories, concepts, principles and terminology. • awareness and understanding of some major current issues and specialisms. • awareness and understanding of research and equivalent scholarly/academic processes

Practice: applied knowledge and understanding	
Level 7	Level 8
Apply knowledge, skills and understanding: • in practical contexts. • in using some of the basic and routine professional skills, techniques, practices and/or materials associated with the subject/discipline/sector. • to practise these in both routine and non-routine contexts.	Apply knowledge, skills and understanding: • in using a range of professional skills, techniques, practices and/or materials associated with the subject/discipline/sector, a few of which are advanced and/or complex. • in carrying out routine lines of enquiry, development or investigation into professional level problems and issues. • to adapt routine practices within accepted standards.

Generic cognitive skills	
Level 7	Level 8
• Present and evaluate arguments, information and ideas which are routine to the subject/discipline/sector. • Use a range of approaches to address defined and/or routine problems and issues within familiar contexts.	• Undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues that are within the common understandings of the subject/discipline/sector. • Use a range of approaches to formulate evidence-based solutions/responses to defined and/or routine problems/issues.

([247]) *SCQF level descriptors were revised in 2012.*
http://www.scqf.org.uk/content/files/SCQF%20Revised%20Level%20Descriptors%20
-%20Aug%202012%20-%20FINAL%20-%20web%20version.pdf. Levels 7 and 8
were referenced to the EQF level 5.

Communication, ICT and numeracy skills

Level 7	Level 8
Use a wide range of routine skills and some advanced skills associated with the subject/discipline, for example: • convey complex ideas in well-structured and coherent form. • use a range of forms of communication effectively in both familiar and unfamiliar contexts. • select and use standard ICT applications to process and obtain a variety of information and data. • use a range of numerical and graphical skills in combination. • use numerical and graphical data to measure progress and achieve goals/targets.	Use a range of routine skills and some advanced and specialised skills associated with a subject/discipline, for example: • convey complex information to a range of audiences and for a range of purposes; • use a range of standard applications to process and obtain data; • use and evaluate numerical and graphical data to measure progress and achieve goals/targets.

Autonomy, accountability and working with others

Level 7	Level 8
• Exercise some initiative and independence in carrying out defined activities at a professional level in practice or in a subject/discipline/sector. • Accept supervision in less familiar areas of work. • Exercise some managerial or supervisory responsibility for the work of others within a defined and supervised structure. • Manage limited resources within defined areas of work. • Take the lead in implementing agreed plans in familiar or defined contexts. • Take account of own and others' roles and responsibilities when carrying out and evaluating tasks. • Work, under guidance, with others to acquire an understanding of current professional practice.	• Exercise autonomy and initiative in some activities at a professional level in practice or in a subject/discipline/sector. • Exercise managerial responsibility for the work of others within a defined structure. • Manage resources within defined areas of work. • Take the lead on planning in familiar or defined contexts. • Practise in ways that show awareness of own and others' roles, responsibilities and contributions when carrying out and evaluating tasks. • Work, under guidance, with others to acquire an understanding of current professional practice. • Manage, under guidance, ethical and professional issues in accordance with current professional and/or ethical codes or practices.

European Centre for the Development
of Vocational Training

Analysis and overview of NQF developments in European countries

Annual report 2012

Analysis and overview of NQF developments in European countries

Annual report 2012

In 2012, countries across Europe confirmed their commitment to developing and implementing national qualifications frameworks. Most of the 36 countries working together on the European qualifications framework (the 27 EU member states as well as Croatia, the former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey) have now agreed on the overall structure of their frameworks. In addition to the fully operational frameworks in France, Ireland, Malta and the UK, 10 more are now entering an early operational phase.

Cedefop's fourth annual report on European NQF developments confirms that qualifications frameworks are seen as a key tool for improving transparency and comparability of qualifications at national and international levels. Frameworks are increasingly used to support incremental change in education and training. A significant development during 2012 is the opening up of NQFs to qualifications outside the formal, public system of qualifications, for example awarded by non-formal and private institutions and bodies. The 2012 overview shows that NQFs increasingly interact with and link to arrangements for validating non-formal and informal learning. The recent (December) agreement on the Council recommendation on validation of non-formal learning reflects the priority given to this area, inviting member states to put in place validation arrangements – linked to NQFs and in line with the EQF – by 2018.

The progress made on NQFs has made it possible for more countries to complete their link to the EQF; 16 countries had linked their national qualifications levels to EQF levels by December 2012.