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Foreword

This Cedefop publication covers the development of national qualifications frameworks (NQFs) in 34 countries: the 27 members of the European Union, two EEA countries (Lichtenstein and Norway) and five EU candidate countries (Croatia, FYROM, Iceland, Montenegro and Turkey).

The 2011 overview shows (Cedefop, 2009a; Cedefop, 2010b) ⁽¹⁾ rapid progress towards establishing and implementing NQFs and linking national qualifications to EQF levels. Twenty-eight countries have developed or are developing comprehensive NQFs covering all types and levels of qualification.

This analysis shows that countries have largely completed the conceptualisation/design and consultation/testing stages and are moving into early implementation. Alongside Ireland, France, Malta and the UK – considered as implemented frameworks – ten other countries are now at an early stage. Involvement of stakeholders in all stages is seen as crucial but our analysis shows that the complexity and degree of involvement differs considerably between countries. While some countries have included a broad range of stakeholders, both from education and training and from employment, others have adopted a more technical approach, relying on the internal expertise of education and training ministries and agencies.

Fourteen frameworks have been formally adopted (mainly ministerial decisions, amendments to existing laws or separate law on NQFs), varying according to national systems and traditions.

The report shows that the two European framework initiatives, the EQF and the Qualifications framework for the European higher education area (QF-EHEA), are working well together. Increasingly countries see the qualifications framework for higher education as an integrated part of their comprehensive NQFs and have decided to carry out the referencing to the EQF and the self-certification to the qualifications framework for higher education in one go.

This report pays particular attention to the links between NQFs and validation of non-formal and informal learning, a link which is becoming stronger in most countries. Many quote the development of professional standards based

⁽¹⁾ *Development of national qualifications framework* (August 2010). Available from Internet: http://www.cedefop.europa.eu/EN/Files/6108_en.pdf; and *Development of national qualifications frameworks in Europe* (September 2009). Available from Internet: http://cedefop.europa.eu/en/files/6104_en.pdf [cited 20.9.2011].

on learning outcomes as a precondition for validating non-formal and informal learning.

Although evidence on the added value of NQFs to end-users (individual learners and employers) is still scarce, the impact can be observed at European and national levels. Processes so far have been characterised by debate on the conceptual and terminological challenges involved in increasing European cooperation in education and training. National level descriptors, while mirroring national systems and traditions, also are reflecting the EQF descriptors. In this way they stand out as useful and relevant instruments, both for European cooperation and for national reforms.

There is considerable national momentum in developing and putting NQFs into practice and linking national qualifications to the EQF. By the end of 2011, Belgium (Flanders), the Czech Republic, Denmark, Estonia, Ireland, France, Latvia, Lithuania, Malta, the Netherlands, Portugal and the UK will have finalised the process. Most other countries will follow in 2012 and the beginning of 2013.

We hope that this third report will contribute to better understanding of the strengths and weaknesses of NQFs as tools for European cooperation, now increasingly influencing national education, training and qualifications systems and reforms.

The conclusions drawn in this report are based on analysis and interpretation by Cedefop and do not reflect the points of view of those who have generously shared their knowledge and expertise with us.

As developments in this field are constant and rapid, Cedefop will continue to publish regular overviews of NQF developments in the coming period.

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Acting Director of Cedefop

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Overview and main tendencies

National qualifications frameworks (NQFs) have, over a short period of time, developed into key instruments influencing national education, training and qualifications systems. While this can be observed world-wide ⁽²⁾, European developments ⁽³⁾ are now particularly consistent and strong. This executive summary aims to draw together the main findings and observations from the national chapters and identify some of the main challenges and opportunities ahead of us.

NQFs: overall progress

Covering developments in 34 countries ⁽⁴⁾ and 38 NQFs ⁽⁵⁾ this report shows that European countries are making rapid progress in developing, adopting and implementing national qualifications frameworks. Most countries have agreed on the objectives, the scope and the architecture of their frameworks. The following figures – reflecting the situation in mid-2011 – capture these developments:

- 28 countries are developing or have developed comprehensive NQFs covering all types and levels of qualifications;
- 4 countries have still to decide the overall scope and architecture of the framework (Czech Republic, FYROM, Italy, Liechtenstein);
- In four countries (Czech Republic, France, Italy, UK-England/Northern Ireland) NQFs cover a limited range of qualification types and levels or have diverse sub-system frameworks without clearly defined links;
- 26 countries have proposed or decided on an 8-level framework, the remaining covering frameworks with 5, 7, 9, 10 and 12 levels;
- All countries use a learning outcomes based approach level descriptors;

⁽²⁾ The European Training Foundation (ETF) lists 120 countries where NQF developments currently are under way.

⁽³⁾ Unlike certain other countries, development in Europe focuses on comprehensive NQFs, including qualifications awarded in general education, VET, HE and adult learning.

⁽⁴⁾ 27 EU Member States, EEA countries (Liechtenstein and Norway) and candidate countries (Croatia, Former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey)

⁽⁵⁾ This reflects that the UK has separate NQFs for England/Northern Ireland, Wales and Scotland and that Belgium is developing separate frameworks for Flanders as well as the French- and German-speaking communities respectively.

- 14 frameworks have been formally adopted (mainly through ministerial decisions, amendments to existing education and training laws or separate NQF laws, varying according to national systems and traditions);
- Only Ireland, France, Malta and the UK can be described as implemented frameworks, though 10 countries are now entering an early implementation stage.

Substantial progress has been made compared to the situation in 2010. We can now see and compare the new generation of NQFs developing in Europe. While differences exist between countries, we can also observe convergence of basic principles and solutions. Since progress has largely been triggered by European developments, and thus responded to a shared set of objectives and a strict timetable, there has been a strong element of mutual learning between the countries involved. It is too early to say how this will influence the quality and future impact of the frameworks; this is something to be followed closely in the coming years.

NQFs: the European context

The formal adoption (in 2008) of the European qualifications framework for lifelong learning (EQF) can be seen as one of the main factors triggering the development of comprehensive national qualifications frameworks in Europe. The Recommendation invites Member States to

‘... relate their national qualifications systems to the EQF by 2010, in particular by referencing, in a transparent manner, their qualifications levels to the levels set out in Annex II, and where appropriate, by developing national qualifications frameworks in accordance with national legislation and practice.’ (European Parliament; Council of the European Union, 2008) ⁽⁶⁾

While countries can, in principle, link their qualifications levels to the EQF without a NQF, almost all involved countries ⁽⁷⁾ now see the introduction of a

⁽⁶⁾ Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European qualifications frameworks for lifelong learning. Available from Internet: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF> [cited 7.10.2011]

⁽⁷⁾ The only exceptions are Italy and the Czech Republic, which intend to reference their qualifications levels to the EQF without an established NQF. However, the Czech Republic has developed a NQF for vocational qualifications and a QF for higher education and will reference on the basis of these.

national framework as the best way to meet the objectives of the Recommendation. There is broad agreement that NQF supports the introduction of explicit, learning outcomes based qualifications levels. Without these, the process of linking national qualifications levels becomes complicated. Some countries originally sceptical of the value of NQFs, for example Finland and Norway, have embraced the concept and are now actively involved in their development and implementation. Agreement on the crucial role to be played by NQFs in implementing the EQF is demonstrated by the increasing number of countries now finalising the formal referencing to the EQF. By the end of 2011 Belgium (FL), the Czech Republic, Denmark, Estonia, Ireland, France, Latvia, Lithuania, Malta, the Netherlands, Portugal and the UK⁽⁸⁾ will have finalised the process. The remaining countries have indicated that they will follow during 2012 and the beginning of 2013. While the original 2010-deadline for referencing to the EQF has been missed, this is largely because most countries (apart from France, Ireland and the UK) had to develop national qualifications frameworks from scratch. While countries have found this parallel process time and resource-demanding, the 2011 overview shows that much progress has been made, directly aiding referencing to the European framework. It also seems clear that the strict deadlines set by the EQF recommendation – while seen as unrealistically ambitious by some – have introduced a sense of urgency to the task and contributed to a ‘focusing of minds’, largely explaining why we now see such coherent development across Europe.

The development of national qualifications frameworks in Europe is also a reflection of the Bologna-process and the 2005-agreement to promote a qualifications framework for the European higher education area (QF-EHEA)⁽⁹⁾. All countries covered by this report have responded and more than 10 are now formally linked (self-certified) to the QF-EHEA; the rest are expected to follow in the near future. While some countries have approached the EHEA and EQF as separate processes, an increasing number of countries now see the qualifications framework for higher education as an integrated part of their comprehensive national frameworks, choosing to carry out the referencing to the EQF and the self-certification to the QF-EHEA in one go (Malta and Finland exemplify this approach).

The launching of two separate European framework initiatives was by many seen as a recipe for confusion and failure: developments during the last couple of

⁽⁸⁾ Czech Republic and Lithuania presented their referencing reports in EQF AG in December 2011.

⁽⁹⁾ Available from Internet:
<http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/overarching.asp> [cited 10.10.2011]

years have proved the sceptics wrong. As illustrated in the following chapters, the work carried out in the context of the QF-EHEA has provided an important input to the design of the comprehensive NQFs. While we can observe much debate (and controversy) on how to link higher education frameworks into the wider context of qualifications, most countries now agree that two framework initiatives can create synergies and support dialogue on how to increase permeability and progression. The 'growing together' of the two framework initiatives is also reflected in European level coordination, for example between the Council of Europe and the European Commission (supported by Cedefop).

NQFs: stages of development

As outlined in the 2009 and 2010 reports, NQF developments can be distinguished according to the following broad stages (Cedefop, 2010c) ⁽¹⁰⁾:

- Conceptualisation and design; during this stage countries analyse and define the rationale and main policy objectives of the future NQF.
- Consultation and testing; during this stage the NQF proposal is presented to, and discussed within, a broader group of stakeholders, normally as part of a public consultation process.
- Official establishment/adoption; at this stage the NQF is adopted and established, normally taking the form of a decree/law or in a formal agreement between stakeholders.
- Practical implementation; this stage moves the framework towards full scale applied practice and requires that institutions comply with the new structures and methods and that potential end-users are fully informed about the purposes and benefits of the framework. Eventually the NQFs must deliver benefits to end users, individuals and employers.

⁽¹⁰⁾ The Cedefop study *Changing qualifications – a review of qualifications policies and practices* (2010), identified the following policy development stages which have informed the stages presented and applied above:

- Policy discussions: no concrete implementation, for example discussions about the best approach to recognising the qualifications of immigrants.
- Policy: the direction is set but there is no concrete implementation yet, for example a law is passed to develop an NQF.
- Implementation: the infrastructure for change is put in place such as funding, management and a communications strategy.
- Practice through pilot schemes: people use the new arrangements, for example a learner is taught and assessed according to a new modular programme and qualification.
- Full scale applied practice: all old methods are adapted to the new methods.
- Effect: the new system delivers benefits to individuals, organisations and society.

Countries have now largely completed the conceptualisation/design and the consultation/testing stages. The exchange of experiences between countries in conceptualisation/design has been extensive. While this mutual learning has been partly supported at European level (EQF test and pilot projects, EQF guidance notes, peer learning activities), extensive networking has also taken place directly between countries. A good example of this is the NQF networking between the five Nordic countries where development issues and ideas have been exchanged systematically over a two-year period.

The consultation/testing is a critical stage for involving stakeholders, for creating ownership and commitment and for building credibility. There is a considerable difference between countries in terms of complexity and depth of these processes. The German approach, with extensive involvement of stakeholders and systematic testing in four economic sectors, stands out as particularly thorough. The same can be said about the Croatian approach, with more than 200 meetings involving stakeholders from all areas of society. Some other countries, for example the Netherlands, have focused on technical developments with relatively limited direct and active stakeholder involvement. In the Dutch case this has been balanced by the repeated use of open consultations, allowing everybody to react in writing on the proposal put forward. What is clear is that countries have to choose their own strategy for involving stakeholders: only future implementation will show whether the chosen approaches are sufficient to secure ownership and commitment to the frameworks.

While most countries have agreed on the framework-architecture, many are still working on their formal adoption. Due to differences in legal and administrative systems and traditions, the formal basis of the frameworks differs considerably. Countries can be divided into three main groups. The first have given their frameworks a specific legal basis adopted by their national parliaments: NQF-related laws have already been adopted in Belgium (FL), the Czech Republic, France, Greece, Ireland, Lithuania, Montenegro and the UK. Austria and Finland are also using this approach, but have yet to complete the process. A second group have introduced or are seeking to introduce amendments to existing laws on education and training to reflect the role and responsibilities of the NQF. Examples of this are Estonia, Iceland, Italy, Luxembourg, Spain and Turkey. A third group of countries have based, or seek to base, their framework on ministerial decisions and administrative decrees. Such decisions and decrees are normally linked to the existing legal basis of the national education and training system, but clarify the scope and the roles and functions of the framework. This approach can be found in Cyprus, Denmark,

Germany, Latvia, Norway, Portugal and Sweden. Just under half the countries have completed the adoption stage. Existing road-maps indicate that the formal part of this stage will be mostly completed in 2012, leading on to actual implementation. Formal adoption is far from the end of the story, as illustrated in Belgium (FL) where a Parliamentary decision was made in the spring of 2009 but where actual implementation was halted for almost two years due to lack of agreement with the social partners.

A growing number of countries are now moving into the practical implementation stage. For those developing a NQF from scratch it is worth looking at the experiences of the few which already have a framework in place. The evaluation of the Irish framework is of particular interest as it systematically sums up a decade of development and implementation (National Qualifications Authority of Ireland, 2009) ⁽¹⁾:

- the implementation of an NQF requires time to develop understanding of key concepts and to promote cultural change;
- the importance of stakeholder involvement in all phases of development and implementation to ensure ownership;
- the NQF development is an iterative process, in which the existing education and training and the framework are progressively aligned with each other;
- it is important to find balance between implementation within subsystems (e.g. VET, HE, general education) and cross-system developments, e.g. quality assurance, progression and transfer of learning outcomes, validation of non-formal learning;
- 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.

The same kind of iterative and incremental processes can be observed in the other established frameworks, such as the French and the English/Northern Irish. The French framework is currently going through a revision which will change its current 5-level structure into an 8-level structure closer to the EQF. The English/Northern Irish has been through a series of reforms and changes since the original establishment of the NVQ framework in the late 1980s. The same kind of gradual change and development can be observed in Scotland. All this shows that the success of frameworks requires continuous and long term-work.

⁽¹⁾ Framework implementation and impact study, report of study team. Available from Internet: <http://www.nqai.ie/documents/FIISreportFINALsept2009.pdf> [cited 17.10.2011] or http://www.nqai.ie/framework_study.html [cited 17.10.2011]

Most newly established frameworks have not yet started to deliver benefits to end users, individuals and employers. There are positive tendencies in this direction however; the Danish NQF now offers advanced internet solutions allowing users to explore the complexities of the Danish education and training system ⁽¹²⁾.

The purposes and objectives of NQFs

NQFs play a key role in linking national qualifications systems to the EQF reference levels and descriptors. International comparability and the need for a common qualifications language is of key importance to all the countries covered by this report. However, the rapid emergence of NQFs in Europe is directly linked to their expected roles and functions at national level. This report shows that these national roles and functions differ significantly between countries, ranging from frameworks with a strong regulatory function to frameworks of a purely descriptive nature whose impact can only be indirect.

David Raffe (Raffe, 2009a) ⁽¹³⁾ distinguishes between communication and reforming frameworks ⁽¹⁴⁾. The main role of the communication frameworks is to improve the description of existing qualifications systems and so clarify available options for stakeholders, be these learners or policy-makers. The communication framework is about making better use of what is already there. The reforming framework aims (explicitly) to improve the existing system by strengthening its coherence, relevance and quality. Part of this reform may imply developing new pathways and programmes or changing the division of roles and responsibilities of stakeholders. We can identify both types of framework in Europe today. Countries like Croatia, Poland and Iceland explicitly stress the role of the NQF as an instrument for national reform: the learning outcome approach is seen as providing an instrument for increasing the coherence, quality and relevance of education and training. Other countries, for example Denmark and the Netherlands, stress that the role of the NQF is purely to increase transparency. The Netherlands goes far in listing functions not to be affected by the framework:

⁽¹²⁾ See website on the Danish qualifications framework for lifelong learning, <http://en.iu.dk/transparency/qualifications-frameworks> [cited 17.10.2011]

⁽¹³⁾ *National qualifications frameworks in Ireland and Scotland: a comparative analysis, 2009.* Available from Internet: http://www.ces.ed.ac.uk/PDF%20Files/NQF_ECER_2009.pdf [cited 7.10.2011]

⁽¹⁴⁾ Raffe also refers to 'Transformational frameworks', using this to capture the ambitious role of the early South-African NQF or the initial version of the New Zealand NQF.

it should not affect existing legislation; it should not directly influence transfer and progression between levels and institutions and the levelling gives no rights to titles or degrees. As is seen in the following chapters, most countries seem to sit between these two extreme positions.

While the French and the English/Northern Irish frameworks have been given a very explicit and strong regulatory role, this is normally not the case for the new frameworks. There are some exceptions. Some comprehensive frameworks build on sub-frameworks with some degree of regulatory function. This applies both to sub-frameworks in vocational education and training and to higher education. Several of the new frameworks will be given a role as a 'gate-keeper' for certificates and diplomas awarded outside the public systems. In these cases, as illustrated by discussions in the Scandinavian countries, frameworks will play an independent role in defining the scope of national qualifications systems. For most of the new frameworks the question is how they will be able indirectly to influence education and training systems and institutions.

To understand this challenge we need to understand the objectives now being pursued by European NQFs. While implementation of the frameworks is still at an early stage (with the exception of Ireland, France, Malta and the UK), framework objectives have now been agreed in most countries, giving a clear indication of their profile and orientation. The following nine objectives are of particular importance, being listed in accordance to the frequency they are being used by countries:

1. Increase international transparency of education and training and aid comparison and transfer of qualifications by implementing the EQF; all countries share this objective and list it as an important reason for initiating work on the NQF.
2. Increase transparency of national qualifications systems; all countries agree on this and emphasise it as an explicit and central *raison d'être* for their NQF.
3. Promote lifelong learning; most countries see this as a role for NQFs.
4. Promote and speed up the shift to a learning outcomes based approach throughout education and training. While generally supported by all countries, approximately half pay particular attention to this shift and see it as a key future reform in education and training. This is exemplified by Croatia, Germany, Hungary, Iceland, Malta, the Netherlands, Norway and Turkey.
5. Improve the permeability of education and training systems to aid transfer and progression; this is a key-objective of many countries (following the emphasis on EQF). Germany, Romania and Turkey pay particular attention

to permeability, stressing that weaknesses and barriers in their existing qualifications systems prevent learners from making progress. This objective can also take shape in the need to link subsystems and to reduce barriers to progression.

6. Aid validation of non-formal and informal learning; this is seen as a priority by many countries. The learning outcomes based levels provide a consistent reference point for validation and the implementation of NQFs will make it easier to develop comprehensive national approaches. Countries like Austria, Belgium, Bulgaria, the Czech Republic, Estonia, France, Germany, Greece, Iceland, Italy, Luxembourg, Norway and Portugal all pay attention to the possible role of NQFs in promoting validation.
7. Approximately one third of the countries see the NQF as an important instrument for improving the consistency of national qualifications, using the learning outcomes descriptors as a reference point. This point is illustrated by both Denmark and Finland where the new outcomes based levels offer potential for systematic dialogue between stakeholders and institutions on relevance and quality.
8. Linked to the above is the view that NQFs will provide a reference point for quality assurance. While quality assurance arrangements already exist in most countries, the introduction of a comprehensive framework makes it possible to see how arrangements in different sub-systems interact and reinforce each other.
9. Several countries see the NQF as an instrument to strengthen cooperation between stakeholders and establish closer links to the labour market.

Other objectives are listed by one or a few countries:

10. Frameworks as an instrument for improving the parity of esteem between vocational education and training and higher education (Germany, Greece);
11. Frameworks as an instrument for monitoring education and training supply and demand (Estonia);
12. Frameworks as an instrument to increase the responsiveness of education and training systems to individual needs (UK);
13. Frameworks as an instrument to increase the skills orientation of qualifications (Germany);
14. Frameworks as an instrument to better express what is expected from individual learners (Norway);
15. Frameworks as a way to strengthen adult learning (Portugal);
16. Frameworks as a way to promote participation in secondary education (Portugal);

17. Frameworks as an instrument to promote social inclusion and equity (Croatia).

While not complete, this list provides an insight into the range of objectives addressed by European NQFs. Though there is no one-to-one relationship between listed objectives and actual (future) impact, most frameworks seems to embrace some elements of reform-orientation. As it is not based on direct administrative and legal regulation of qualifications (at least for the moment), this reforming role seems largely to rest on the shift to learning outcomes, introducing common language and stakeholder engagement and coordination. A coherent and systematic shift to learning outcomes is essential if objectives related to European comparability, national transparency and permeability, coherence of qualifications systems and validation are to be realised. This means that the future success of NQFs will largely depend on their ability to promote the use of learning outcomes in a consistent way.

Main characteristics of NQF design

As emphasised by many authors (Cedefop, 2010b, 2010c; Raffe, 2011b; Allais, 2010 and 2011b), contextual factors are important in shaping NQFs. These include the size of the country, diversity of the education system, its governance arrangements, degree of centralisation/decentralisation, the structure of labour markets and the 'culture of policy making' (Raffe, 2011b) ⁽¹⁵⁾. This has to be kept in mind when comparing the main characteristics and the architecture of European national qualifications frameworks.

Qualification levels

Almost all countries have now decided on the number of levels in their NQF; only Italy and Lichtenstein remain. Most (26 out of 34) have proposed or adopted an

⁽¹⁵⁾ NQFs may use alternative change processes to achieve an objective such as updating standards and making them more relevant to the labour markets. They may do this through stakeholder involvement, regulation or by unitising qualifications. These different change processes may correspond to different principles of governance or 'modes of coordination of social life', as proposed by Thompson et al. 1991. Three models are suggested: bureaucratic/hierarchical model, developments of networks, and markets. Countries with bureaucratic or hierarchical traditions of governance may rely more on regulation, countries where (social) partnership is stronger may rely more on a common language and on stakeholder engagement and coordination, and countries with stronger market-led approaches may rely more on unitisation and the transparency of qualifications.

eight-level structure. While some countries clearly see it as important to operate with the same number of levels as the EQF, this is normally not the only or main reason for adopting eight levels. The majority have based their decision on lengthy consultation and careful analysis of existing (normally implicit) qualifications levels ⁽¹⁶⁾. This is exemplified by Austria where a combination of research and consultation fed into the final decision on eight levels. The first draft of the Belgian (FL) framework was based on a 10-level approach but was reduced to eight following intense analysis and national discussions. The Polish NQF was originally (2009) envisaged as a 7-level framework, closely resembling the existing institutional system. Following a thorough analysis of the learning outcomes basis of the new framework it was decided to introduce a new level 5 as an intermediate between upper secondary and higher education. This level is still 'empty' but can be 'filled' with new qualifications, both 'short cycle' academic and advanced vocational qualifications. The Polish case is illustrative as it demonstrates the difference between input- and outcome-based principles for levelling. While an input-based approach would have to reflect the institutional structure of the country, the learning outcomes based levels can be defined more independently from these institutions and structures, emphasising how knowledge, skills and competence increase in complexity and depth from one level to another. As illustrated by the Polish case, this makes it possible to use the levels as reference points not only for existing qualifications (and their providers) but also for new and developing qualifications.

It is clear that the EQF has played a decisive and partly independent role in promoting convergence. The first Dutch framework proposal contained as many as 13 levels but was reduced to eight as the result of a combination of content-analysis and political pressure. The fact that some countries have adopted the EQF levels and their descriptors as the basis for their national framework further demonstrates this wish for convergence; the Estonian, Cypriot and Portuguese cases exemplify this. This combination of national considerations and European convergence is illustrated by current developments in France where the existing 5-level structure (since 1969) will (probably) be replaced by an 8-level framework. The broad consensus on an 8-level structure is contrasted by some 'first generation' frameworks: Scotland operates with 12 levels; Ireland has adopted 10 levels and England, Wales and Northern Ireland nine (including entry levels). Slovenia has also proposed 10 levels. At the other end of the scale, Iceland and Norway have proposed 7-level frameworks.

⁽¹⁶⁾ This reflects that the number of levels in the EQF was not chosen arbitrarily or in a vacuum but tried to capture an 'average' European qualifications systems.

Some countries, e.g. England, Wales and Northern Ireland and the Netherlands have introduced entry (or access) levels in their frameworks. This addresses the challenges on how to include and reward learning achievements at elementary level, below EQF level 1. Bulgaria has proposed to introduce a NQF level 'zero', covering preschool education. Belgium (FL), Hungary and Iceland have all considered entry levels but decided not to go forward with this. In Belgium social partners feared that introducing an entry level could have negative, stigmatising effects. This discussion on lower levels underlines the importance attributed to an inclusive framework. Frameworks must be able to address the diverse learning needs of the entire population, not only those who have already gained a formal qualification. Those countries having introduced entry or access levels argue that these are directly beneficial to individuals with learning difficulties, to drop-outs from formal education and to adults lacking formal qualifications, for example migrants with low levels of formal qualifications. For these, entry levels form a ladder into the qualifications framework.

Level descriptors

Level descriptors, in draft versions or formally adopted, are now available for 32 countries, in native language and some in English ⁽¹⁷⁾. The following section provides a first interpretation of these descriptors and how they differ and/or converge. An important question is the extent to which these descriptors are able to reflect the EQF descriptors and so provide an instrument for European dialogue and cooperation. Also relevant is the extent to which these descriptors are able to reflect the realities of the national qualifications systems and thus provide an instrument for national dialogue, cooperation and development?

A first group of countries use the EQF descriptors directly or align themselves closely to these: Estonia, Cyprus, Austria and Portugal are examples. Most of these countries have, however, prepared additional explanatory tables or guides with more detailed level descriptors in order to use the frameworks operationally. This is exemplified by Estonia where detailed level descriptors have been prepared for four sub-frameworks: higher education, vocational education and training, professional qualifications, and general education. The frameworks of Croatia, Greece, Malta, and Slovakia are also closely aligned to the EQF descriptors; they depart from the three main pillars of knowledge, skills and competence but introducing some changes to the detailed descriptors.

⁽¹⁷⁾ Examples of national level descriptors are included in Annex 3.

A second group of countries has changed and re-phrased the third 'competence' column of the EQF. While all these countries include autonomy and responsibility as key elements in their descriptors, they tend to incorporate additional dimensions like learning competences, communicative/social/professional competences. In Finland aspects such as entrepreneurship and languages have been added. This may be seen as a way of including and making explicit the dimension of key competences and skills/competences for lifelong learning. Key competences are also emphasised in the Icelandic, Maltese and Norwegian NQFs. The inclusion of the term 'evaluation' in the Polish framework indicates that individuals must be able to reflect on own knowledge, skills and competences and also to judge on how to improve them. In Latvia, analysis, synthesis and assessment are included. Poland also uses the term social competences to identify the third column. This is defined as identity/autonomy, cooperation, responsibility, assessment/awareness of self and of team and understanding of implications of decisions and actions. The tendency to redefine the third column of the descriptors may be seen to reflect the fact that the EQF recommendation operates with two different definitions of competence. While the competence-concept used for the descriptors (third column) is limited to 'autonomy' and 'responsibility', the general definition (In Annex 1 of the EQF Recommendation) points to an overarching understanding where competence is about applying knowledge, skills, and personal, social, methodological and professional competences. The redefinition of the third column can be seen as an effort to address what many have characterised as incoherence in the EQF descriptors. The simple solution to this problem is to introduce more restricted and targeted headlines: this is exemplified by 'responsibility and independence' (the Netherlands), 'general competence' (Norway) and social competence (Poland). ⁽¹⁸⁾ All countries adjusting the third column agree on the relevance and importance of 'autonomy' and 'responsibility' as key features for describing qualifications levels.

A third group of countries use competence as an overarching concept reflecting existing national traditions. This is the case in Belgium (Flanders, Wallonia), Germany, France, Lithuania, Hungary, the Netherlands and Slovenia. All these countries emphasise the holistic and integrative nature of competence as an ability of a person to use knowledge, skills, attitudes and other personal, social and/or methodological abilities in work and study situations, and for professional and personal development. The overall NQF structure in Germany is

⁽¹⁸⁾ The EQF will be evaluated in 2013 and this provides an opportunity to adjust the heading of the third 'competence' pillar in accordance with the changes introduced nationally.

guided by the concept of *Handlungskompetenz* understood as 'readiness to use knowledge, skills and personal, social and mythological competences in work and study situations and for occupational and personal development'. The German national framework (DQR) differentiates between two categories of competence: professional and personal. Methodological competence is understood as transversal and is not separately stated within the DQR matrix. In the Netherlands competence is understood as an integrative concept, aiming to cover a wide range of human abilities to cope with complex tasks. According to Westerhuis (2011, p. 76), (the term) '... *integrative stands for the fact that 1) competences are multi-dimensional and 2) competent performance is only possible if all dimensions are addressed accordingly to a set of standards.*'

The development and implementation of level descriptors raises two important questions on the credibility of the EQF and its usefulness for increasing transparency and comparability in Europe:

- are national descriptor models sufficiently comparable to support and improve understanding across national borders?
- is there a risk that the introduction of comparable level descriptors at national and European level will have a normative effect; implicitly and without debate imposing a particular understanding of learning and of knowledge, skills and competences?

In the first case, in spite of diverse national solutions, there is clear convergence between countries in the way they are defining their descriptors. This convergence is a first, and necessary, step towards shared language on qualifications in Europe. It is partly the result of the extensive exchange of experiences in relation to the international focus on key competences, learning outcomes and frameworks. The Finnish and Icelandic approaches build their strategies on key competences into the descriptors, making it possible to observe a direct link to standards, curricula and assessment.

Convergence in terminology is an important first step but is not sufficient. One of the first real tests of the comparability of descriptors is the referencing to the EQF. Early experiences indicate that existing descriptors are only partly able to capture the differences and similarities between countries. This is exemplified by the continuing debate on locating school leaving certificates, giving access to universities. While it is up to each country to decide on which level to place these qualifications, there is intensifying debate between countries on justification for particular decisions. The Netherlands has decided to reference one of their school leaving certificates (the VWO) to level 5 of the EQF, arguing that this is where 'best fit' can be observed. While this decision is respected by other countries, some see it as a problem that these Dutch qualifications give the same

access rights to university education as other European upper secondary leaving certificates (normally referenced to level 4) and up to now have been treated as equivalent by recognition authorities (ENIC/NARICs). This indicates that countries, at least in contested cases like this, need to document in detail how descriptors have been used and interpreted. The Dutch case also illustrates that 'best fit' always will be a compromise between content and political considerations and that there is a need to specify how the balance between these factors has been struck in each case.

The second question – the normative impact of the descriptors – was much debated during the first stage of the EQF developments and is again an issue due to adoption and implementation of national descriptors and frameworks. A key point is whether learning outcomes descriptors, represented by the EQF and NQFs, point towards a fragmented and 'atomised' approach failing to take into account the 'holistic nature' of competences and the occupations and contexts where these competences are developed and applied (the debate on Beruf in Germany is an example of this). As noted by Mehaut and Winch (2011, p. 31), the idea of autonomous workers – who can plan, control, coordinate and evaluate their own work – differs from the notion of 'autonomy' and 'responsibility' presented in the third column of the EQF. This latter approach, according to Mehaut and Winch, refers to a more limited managerial hierarchy overlooking and/or underestimating the self-direction which is inevitably a key feature of any competent individual. There are important differences in use of learning outcomes, illustrated by the German and English cases. In the former, learning outcomes are understood as 'occupational capacity', very much reflecting the holistic approach and ideology referred to above. In England, outcomes have traditionally been understood more narrowly in terms of work tasks. While this distinction needs to be treated with caution – it is to some extent an ideological position frequently presented independently of empirical documentation – it underlines some of the dangers facing the level descriptors and the shift to learning outcomes they are promoting.

The role of sub-frameworks ⁽¹⁹⁾

Most national qualifications frameworks introduced since 2005 are comprehensive frameworks, addressing all types of qualifications at all levels.

⁽¹⁹⁾ A sub-frameworks is a framework, which covers only one sub-system (e.g. HE, VET) and is part of an overarching comprehensive framework

This means that they, and their descriptors, have to reflect a huge diversity of purposes, institutions, traditions and cultures. One of the fundamental challenges faced by comprehensive frameworks, Young and Allais state (Young and Allais, 2009 and 2011), is to take into account the epistemological differences in knowledge and learning that exist in different parts of education and training.

Education and training in most countries is organised in separate and distinct tracks (Tuck, 2007, p. 21). This is especially so in the sub-systems general education, vocationally oriented education and training and higher education: academically and professionally oriented HE is sometimes organised as separate tracks, sometimes integrated. When pursuing a lifelong learning agenda, many countries aim to strengthen the links between these sub-systems, in particular between general education and VET (e.g. bridging courses in Portugal, Slovenia reforms) and VET and higher education (e.g. Norway, Scotland). A key objective of comprehensive NQFs is to address these links and try to reduce barriers, aiding progression and transfer.

Due to the weak regulatory role of the frameworks – and their dependence on creating an indirect impact – it is still uncertain to what extent they will be able to influence the relationship between sub-systems. In most countries the rules for qualifications design and award are embedded in each of the sub-systems: it is too early to say how the introduction of a national, learning outcomes based approach will influence the practises of each sub-system. It might be seen as a weakness that few European frameworks have formulated an explicit strategy on how to build and develop the relationship between the comprehensive framework and the sub-systems they inevitably have to relate to and build on. Effort has been made in the Polish NQF where consistent level descriptors have been developed for the overarching national level, for the sub-systems and also for framework in professional or economic sectors. This makes it possible to introduce a coherent learning outcomes approach, covering all levels, which at the same time is able to clarify the specific character of each sub-system.

As already noted in 2010, some countries have introduced a clear distinction between levels 1-5 and levels 6-8, the latter being restricted to qualifications awarded by traditional higher education institutions (in line with the Bologna cycles). While visible in the Danish framework, the division can also be found in Bulgarian, Greek, Icelandic and Latvian frameworks.

Another group of countries, including Belgium (Flanders), the Czech Republic, Estonia, Cyprus, and Austria, have reached a compromise, where levels 6-8 have been divided into parallel strands. One strand covers academic qualifications, the other vocationally/professionally oriented higher level qualifications awarded outside the 'Bologna cycles'. In some cases similar

descriptors may be used for the two strands (Belgium Flanders); in others different descriptors are used.

Parallel level descriptors can be also found at lower levels. In the Norwegian NQF parallel descriptors are proposed for level 3 (distinguishing between the general and vocational strands of upper secondary education) and level 4 (capturing the diversity of post-secondary VET programmes).

If the comprehensive national qualifications frameworks are going to play a bridging or integrating role in the future, this interaction between the different levels and sub-systems needs to be much more clearly understood and defined.

As the development of qualifications frameworks for the higher education area has shown, sub-frameworks are playing an important role in the development of NQFs. The framework in Scotland was built in steps, combining implementation of the overarching framework with the gradual development of sub-frameworks.

Scope of the national qualifications frameworks

European frameworks are not developing in a vacuum, but are embedded in particular political and cultural contexts. Many NQFs build on existing reforms in education and training sub-systems (as in VET) which have changed the way qualifications are designed (for example, introducing occupational standards) (Cedefop, 2009a)⁽²⁰⁾. Triggered by the same European initiatives, many of the new qualifications frameworks share common characteristics. Very often these characteristics differ from the 'first generation frameworks', especially in England, Wales and Northern Ireland and France (and, outside Europe, in South Africa and New Zealand). Assuming that emerging European frameworks are just copies of the old (NVQ-based) frameworks is not confirmed by the evidence. Raffe (2011a) makes a distinction between outcomes-led (like the English NVQ framework) and outcomes-referenced frameworks. Outcome-led frameworks can be seen as the most radical approach as they tend systematically to reduce the influence of input factors like duration and institutional origin; this promotes qualification truly independent of delivery mode or learning approach. Comprehensive NQFs in Europe are outcomes-referenced and see learning outcomes as an important (although not the only) element for developing a

⁽²⁰⁾ *The dynamics of qualifications: defining and renewing occupational and educational standards.* Available from Internet: <http://www.cedefop.europa.eu/EN/publications/5053.aspx> [cited 7.10.2011]

common language across sectors. These frameworks also (although to varying degree) take input factors into account, trying to reflect institutional and programme structures, and accepting that volume and learning mode varies and matters. Comprehensive frameworks may include outcomes-led as well as outcomes-referenced sub-frameworks. The sub-frameworks for professional qualifications included in comprehensive NQFs in Estonia and Slovenia exemplify outcome-led approaches.

Framework scope also depends on the success in including the results of learning taking place outside public education and training, for example in the labour market. This tendency is partly about valuing and including the certificates and qualifications awarded by enterprises and sectors and partly about using the frameworks to stimulate the validation of non-formal and informal learning. Sweden illustrates this perspective well, see opening up of the framework to the labour market as a main objective.

NQFs in national education and training strategies

Grootings (2008) and Raffe (2011b) emphasise that qualifications framework development must be part of broader policy context. Isolated frameworks operating outside mainstream policy developments are probably of limited use: policy breadth is required.

Cedefop evidence clearly shows that NQF developments in Europe are embedded in, and part of, broader policy initiatives: lifelong learning strategies underpin developments in Bulgaria, Ireland, Greece, Austria, Portugal and Finland; improving permeability between different sub-systems of education and training is key to German developments. The Portuguese case provides a particularly good example of the importance of policy breadth.

Portugal

The development of the Portuguese national qualification system and national qualification framework is part of broader reform initiatives and programmes in education and training: the New opportunities initiative and the Agenda for the reform of vocational training. These reforms aim to raise the low qualifications level of the Portuguese population (youngsters and adults). ⁽²¹⁾ Three main goals are emphasised:

- to reinforce vocational/technical pathways as real options for young people; (Oliveira Pires, 2010). ⁽²²⁾
- 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. (Agência Nacional para a Qualificação, 2011) ⁽²³⁾

For young people, the reform focuses on measures to prevent early school leaving: it sets out achieving secondary level qualifications as the minimum acceptable for everyone. For adults, the new opportunity is given to all who have not completed secondary education, e.g. by expanding opportunities for education and training complemented with a broad mechanism of recognition, validation and certification of competences.

The framework is one out of several measures introduced to promote reforms but it supports a collaborative model of policy-making, based on partnership and networks across sectors.

National qualifications frameworks: open and inclusive?

The majority of frameworks cover all officially recognised qualifications (general education, vocational education and training and HE) awarded by national authorities. The Danish framework, for example, refers to 'all levels and types of official, publicly recognised qualifications'.

The definition of 'national authority' varies but normally includes ministries of education, higher education and labour. Ministries of economic affairs, agriculture and healthcare may also be involved depending on the national situation. Both

⁽²¹⁾ 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 (in 2010, 28.7%) and the total population having at least upper secondary education was 31.9% in 2010 (Eurostat data)

⁽²²⁾ 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*, p.1. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77477.pdf> [cited 7.10.2011]

⁽²³⁾ The referencing of [the Portuguese] national qualifications framework to the European qualifications framework. p. 13. Available from Internet: http://www.eqf-ref.eu/index.php?option=com_docman&task=doc_download&gid=100&Itemid= [cited 19.10.2011]. Portugal has raised the compulsory schooling age to 18 years.

the Finnish and the Swedish NQFs cover qualifications awarded outside the remit of Ministry of Education, for example related to armed services, police, and agriculture. The same is the case for the Netherlands and Austria. Many frameworks (e.g. Belgium Flanders, the Czech Republic, Estonia, Cyprus, Slovenia) introduce the distinction between educational qualifications, awarded within formal education and training, and occupationally-oriented qualifications, very often referred to as 'professional qualifications', based on national occupational standards and with strong involvement of labour market actors.

In Denmark, Finland, the Netherlands, Norway and Sweden discussions are continuing on how to open up towards qualifications delivered by enterprises or sectors currently outside the remit of public authorities. Both the Dutch and the Swedish see their NQFs as a tool to include all kind of qualifications, including those outside the official, public sector. In the Dutch case, those bodies already responsible for awarding (vocational) diplomas and certificates will act as gatekeepers, making sure that these external qualifications meet the same quality criteria as 'normal' qualifications. The same kind of gatekeeper function is also outlined in the Norwegian case where social partners will play an important role in overseeing developments. Work to bring these different awards together in one framework is important for two main reasons:

- it will improve the overall transparency of qualifications, allowing learners and employers to take into account official 'public' as well as 'private' qualifications;
- it will improve the consistency of these two main types of qualification as the same learning outcomes principles have to be applied and basic quality assurance requirements have to be observed.

The French NQF can be seen as an advanced example of this kind of inclusive framework. It already covers three main types of qualification:

- those awarded by French ministries, cooperating with the social partners through a consultative vocational committee (*Commissions Professionnelles Consultatives, 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.

Sweden

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 decision. This focus on the inclusive character of the framework responds to particular features of Swedish education and training. First, adult and popular education is generally very strong, helping explain 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, their link to the ordinary public system not always being fully transparent and clear. Second, a very important part of VET 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 often require additional training and certification at work. The diverse and extensive system of labour market based training established for this purpose is not easy to overview and a link to the NQF is seen as crucial in increasing overall transparency. A proposal on how to include these 'external' qualifications was presented to the Ministry in April 2011, suggesting that a National Council for Qualifications is set up. This Council – including all relevant stakeholders – would become the 'gatekeeper', making sure that qualifications aspiring to be included in the framework meet nationally established quality criteria and requirements.

The Danish framework for lifelong learning includes full and supplementary qualifications; the latter in particular acquired in adult education and training. This also points towards a more open, flexible and inclusive framework, for example making it possible to include adult education and training and establish a link to work-based training in the private sector. In Austria, discussions continue on how to include learning outcomes from informal learning and qualifications/certificates from non-formal learning without an equivalent in formal education. The focus is on quality criteria which have to be met – based on the EQF/NQF definition of qualification – to consider a bundle of learning outcomes as a qualification, which can be included in the NQF. A number of awards made by professional and international awarding bodies are now included in the Irish framework of qualifications.

Other countries – for example Belgium Flanders, Slovenia, Finland, – have signalled their intention to open up the NQF to qualifications awarded by sector specific organisations, chambers, companies and other private providers.

These developments clearly demonstrate one of the most important features of the new European frameworks: their intention to open up to a broader range of learning providers and awarding institutions. The key challenge is developing quality assurance arrangements ensuring the currency and value of all qualifications. This again requires systematic and strong involvement and commitment of relevant stakeholders.

As stated by Allais (2011b), 'Employers tended to see the frameworks as something coming from educational institutions, and educational institutions to see frameworks as coming from industry.' Whether this will change depends on

the ability of the NQFs to be inclusive to all qualifications and learning outcomes, not just those awarded by public authorities on the basis of formal education and training in traditional institutions. Their relevance to enterprises, sectors, labour markets and individuals will be crucial for their overall success.

NQFs and validation of non-formal and informal learning

In 2010 Cedefop concluded (Cedefop, 2010b, p. 20) that the success of NQFs partly depends on their ability to aid support functions like validation of non-formal and informal learning and credit transfer arrangements. These are concrete measures supporting progression and permeability and will largely decide whether frameworks make any difference to individuals. This analysis of NQF developments 2011 clearly shows an increased focus on validation of non-formal and informal learning at policy and practice level. (GHK, 2011)⁽²⁴⁾ The Portuguese and Finnish experiences illustrate this.

In a number of countries there is a clear link between NQF development and validation of non-formal learning. In Austria, a newly published strategy on lifelong learning reinforces 'competence orientation' and uses European 'Key competences framework for lifelong learning' (2006) as a reference point for ten action strands. Recognition of non-formal and informal learning is an important part of this action plan. In line with the vision of the strategy, all learning outcomes, irrespective how they have been acquired, should be recognised and all relevant stakeholders should jointly develop and implement coherent strategy for validating non-formal learning. Five concrete measures are proposed, including setting up 'bodies responsible for qualifications' acquired outside formal education and training, further strengthening the learning outcomes orientation in curricula in all education sectors, and implementing pilot projects (BMUKK, 2011). ⁽²⁵⁾ A similar approach can be observed in Denmark.

⁽²⁴⁾ Further measure to implement the action plan on adult learning. Lot 1 – Updating the existing inventory on validation of non-formal and informal learning. p. 25-27. Available from Internet: http://ec.europa.eu/education/more-information/doc/2010/inventory_en.pdf [cited 7.10.2011]

⁽²⁵⁾ *Strategie zum lebensbegleitenden Lernen in Österreich*. Available from Internet: http://www.bmukk.gv.at/medienpool/20916/IIIarbeitspapier_ebook_gross.pdf [cited 10.9.2011]

Portugal

The comprehensive NQF in Portugal aims to further develop the national system of recognition, validation and certification of competences (RVCC) and to give new impetus to promoting the attractiveness of vocational training. It is now fully integrated into the national qualifications system and framework.

It integrates two main processes:

- educational RVCC, aiming to improve the education level of adults who have no basic or secondary education certificates;
- professional RVCC, for adults who have no vocational qualifications in their occupational areas.

Adults can acquire a basic or secondary level of education certificate and vocational qualification. The 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. 452 New opportunities centres throughout the country offer integrated services to adults.

Finland

In Finland, NQF development has made a positive contribution to validation of informal and non-formal learning. First, it has led to new and intensified discussions about validation of prior learning in the country. Second, the development of NQF has meant that learning outcomes (in terms of knowledge, skills and competences) have been defined for all levels. It is expected that the elaboration of learning outcomes for each level will make it easier than before to assess prior learning, using the learning outcomes described in the NQF. Third the framework introduces the concept of 'complete competences' to address acquired learning outcomes not part of the existing qualification system. These competences cover a broad area and accrue in most professions and at all levels e.g. continuing training offered to candidates from universities and polytechnics.

Many countries emphasise that developing professional standards based on learning outcomes is a precondition for validation of non-formal learning. This is the case in the Czech Republic, where arrangements for validation are closely linked to the development of professional standards. Estonia, Romania, Slovenia and Turkey also link validation, standards and frameworks. The main aim and challenge in these countries is better links between this parallel system of recognition of non-formal learning and formal education and training. In Slovenia, one of the explicit aims of the NQF is to strengthen the capacity to certify knowledge, skills and competence that have not yet been incorporated in formal education and training programmes; it also aims to provide better links and transferability between education and training and certification systems. In Romania, the system of validation of non-formal learning has been set up parallel to formal VET. The link to the formal system has not been established yet and the results of validation of non-formal and informal learning are not recognised in the formal system: competences certified through validation of non-formal and informal learning cannot support formal education entry or mobility. However, the new Law of national education, adopted in 2011, provides for better integration of

validation and national qualifications framework at the national level. According to this law, professional qualifications awarded via validation can be related to all levels of the NQF.

In Sweden and the Netherlands, with long traditions of learning outcomes and validation, the official aim is to further open up towards learning taking place in non-formal settings: enterprises, adult and popular education. Increased focus on quality arrangements and criteria characterise these debates.

The impact of NQFs: description of status quo or drivers of change?

Several authors (Young, 2011; Allais, 2011a and 2011b; Bohlinger, 2011) have discussed the rapid development of NQFs in Europe (and beyond) criticising the lack of evidence of added value and ability to respond to stated (and ambitious) objectives. The same authors also frequently point out that 'first generation frameworks' (in Australia, New Zealand, South Africa and the UK) have different flaws, making them unsuitable as blue-prints for general expansion of national qualifications frameworks. As articulated in this executive summary, and to be demonstrated in the national chapters, European developments are now gradually providing more evidence on the impact of the frameworks. While still limited and scattered – reflecting that frameworks are still at an early stage of development and implementation – this evidence now make it possible to identify some of the strengths and weaknesses of this approach.

Impact at European and international level

NQFs are now making a difference at European level. Triggered by the EQF and QF-EHEA, the number of national qualifications frameworks in the EU/EEA and the candidate countries to the EU has increased from three (Ireland, France and the UK) to 34 countries in a period five years. While the number of national frameworks alone provides little evidence of impact (some would say this is an example of 'blind policy copying'), the processes leading to these frameworks are of key significance. These processes have, from the start, been characterised by intensive debate on the conceptual and terminological challenges of increasing European cooperation in education and training. The developments of the new European NQFs have been more about reaching a common understanding of existing challenges (and values) in education and training than on the adoption of

a particular structure or number of levels. This is exemplified by the (surprisingly) intense debate on 'competences' which immediately started after the launching of the first EQF proposals. This debate has been taken forward at national level and helped countries in developing frameworks that reflect their national systems and culture. The development of NQF descriptors in more than 30 countries shows, beyond much doubt, that this is not 'blind policy copying' but a particular national processes trying to define the character and direction of overall qualifications systems.

While frequently demonstrating the problems involved in developing a shared language, the new learning outcomes based descriptors now provide an important instrument for future cooperation – in particular as a reference for further developing the quality and content of qualifications and as a way to support transfer and recognition of qualifications across institutional and national borders. As the European Training Foundation has demonstrated, the impact of the qualifications frameworks cannot be limited to the European context: NQFs may become instruments for world-wide dialogue on the content and value of qualifications. Recent initiatives in India and China to start developing frameworks point in this direction, as does formal dialogue between the EU and Australia on the links between the EQF and Australian qualifications framework.

Coordination and stakeholder involvement

The development of NQFs has required involvement of a broader set of stakeholders than what is normally the case: these include both the public and the private sector. While governance of education and training is normally carried out within sub-systems (general, vocational and higher education), the concept of a comprehensive framework has forced countries to broaden the approach. This is illustrated by the German qualifications framework which includes not only federal and regional (Länder) representatives, those from different parts of education and training, but also representatives of the social partners, particular economic sectors and researchers. This new composition of stakeholders – emphasising the link between education and work – has changed the dynamic of discussions and forced stakeholders to go beyond their own position and look at the interaction and relationship between sectors and institutions. It has brought out into the open a series of tensions and conflicts of interests, thus establishing a realistic basis for moving forward and for meeting agreed objectives. While developing a German NQF, due to the size and complexity of the country, can be

seen as a particularly daunting challenge, the same dynamic can be observed in most countries covered by this report.

An interesting feature is the growth in ambitions which can be observed as frameworks move from early design into adoption and implementation; the Norwegian framework illustrates this change. Treated with caution from the start by many stakeholders – not least the social partners – a main criticism in the final consultation in spring 2011 is that the reform-potential of the framework is not fully used. The employer organisation for service and trade, for example, stresses the potential of the framework for linking education and work.

While this broadening of participation and involvement is a clear feature of framework developments across Europe, there is no guarantee that countries will be able to sustain the situation. There is a danger that the formal adoption of the framework, and referencing to the EQF, will tempt countries into a ‘mission accomplished’ mode. As shown in the evaluation of the Irish NQF in 2010, the success of the frameworks depends on a continuous process in which stakeholder involvement is gradually broadened and (in particular) deepened.

NQFs and the shift to learning outcomes

The use of learning outcomes to define and describe qualifications has been developing independently of frameworks for a long time. This is seen in Nordic countries where learning outcomes and competence concepts has been systematically introduced into education and training prior to framework developments.

However, there is now clear evidence that countries are using the new frameworks to initiate concrete and more systematic work in this area. Many of the countries in this report note practical initiatives and developments, in particular in VET and higher education. General education is lagging behind in some countries, but developments can also be observed in this field. These developments are also demonstrated by other Cedefop studies, for example on standards (Cedefop, 2009a) ⁽²⁶⁾ and on curriculum developments (Cedefop, 2010a). ⁽²⁷⁾.

⁽²⁶⁾ The dynamics of qualifications: defining and renewing occupational and educational standards. Luxembourg: Publications Office, 2009. (Cedefop panorama series). Available from Internet: <http://www.cedefop.europa.eu/EN/publications/5053.aspx> [cited 7.10.2011]

⁽²⁷⁾ Learning outcomes approaches in VET curricula: a comparative analysis of nine European countries. Available from Internet: http://www.cedefop.europa.eu/EN/Files/5506_en.pdf [cited 10.10.2011]

The use of learning outcomes in established and emerging frameworks responds to the need to ensure coherence and overview. In several countries frameworks are used to identify those parts of the qualifications system not described through learning outcomes, so providing a reference for future developments. Croatia, Iceland and Poland illustrate this systematic use of the frameworks to promote learning outcomes: all are using frameworks to influence and change the way qualifications are defined and described in the different sub-systems. Polish efforts in higher education during 2009-10 illustrate this, as do Croatian and Icelandic efforts to redefine vocational education and training qualifications. The Norwegian framework clarified that existing qualifications in post-secondary VET (Fagskoler) had not been defined according to learning outcomes; a direct result of the framework is the revision of these qualifications according to the overall principles now introduced at national level.

Learning outcomes based level descriptors in comprehensive NQFs introduce common language across sectors of education and training, helping make the system more coherent and permeable. Further reforms can build on that what is exemplified by change currently under way in Ireland.

NQF developments also clarify some of the dangers and limitations of the learning outcomes approach. Existing quality assurance approaches are only partly oriented towards learning outcomes: how to quality assure the way learning outcomes are defined and applied is emerging as a critical issue for frameworks.

NQFs and the consistency of national qualifications systems

The emerging frameworks add value by providing an independent reference point not only for comparison of existing qualifications (as is the intention of the EQF) but also as a reference for improving and further developing qualifications. This function of the frameworks was emphasised by representatives of the Finnish higher education community. Highlighting the (quality) differences between institutions in different parts of the country, they saw the new framework and its descriptors as an opportunity – and a neutral reference point – for promoting dialogue on how to close these negative gaps. The same perspectives are frequently presented in other countries, notably Estonia and Poland where multi-levelled descriptor approaches (national, sub-system and economic sector) allow for dialogue on the overall consistency of the qualifications system. The extent to which frameworks will be used to improve consistency is still to be observed. The

points made by Estonians, Poles and Finns, however, suggest an important reforming role for frameworks in the coming period.

Challenges ahead

- The future success and impact of the NQF very much depends on the shift to learning outcomes. Despite the positive tendency in most countries, major gaps still exist and need to be addressed. The completion of national level descriptors (in most countries) raises the question of how to promote learning outcomes in depth; e.g. systematically addressing standards, curricula, assessment, and learning methods. Both at European and national levels there is a need for exchange of experience on how best to define and describe learning outcomes.
- This is particularly linked to the success in coordinating and involving stakeholders and in being willing to discuss existing challenges openly. A key challenge is to deepen participation and involvement as frameworks develop and mature. Involvement and participation of educational institutions and progressive alignment of NQF developments and education and training systems and practises is required.
- If comprehensive NQFs are to play bridging or integrating roles in the future, this interaction between different levels and sub-systems needs to be much better understood and conceptualised.
- How can frameworks be sustained financially? Many countries are basing their NQF developments on European Social Fund resources: can this be continued? Can cost-benefit analyses be developed?
- The impact of NQFs, and especially connections between the impact of the NQFs in diverse national contexts and of different types of NQF, need further conceptualisation and research.
- The success of the NQFs, in terms of being able to increase access and promote progression in education and training, depends on their ability to support and promote other instruments: validation of non-formal and informal learning, credit transfer arrangements and renewal of curriculum and assessment methodologies.
- The success of the frameworks depends on their ability to strengthen national systems and arrangements for validating non-formal and informal learning. Validation makes it possible to apply the learning outcomes approach of the frameworks in a way which directly benefits individual learners.

- NQFs must be made visible to end users.
- There needs to be systematic monitoring, research and evaluation of NQF implementation. Indicators need to be developed to permit better understanding of conditions for success and for reaching end-users (individuals and employers).

AUSTRIA

Introduction

Austria is putting in place a comprehensive national qualifications framework (NQF). Its introduction is broadly supported by all main political stakeholders in the country. According to the government programme (2008-13) ⁽²⁸⁾ it is expected that all Austrian national qualifications will be included in the eight-level national structure by 2013.

NQF development started after the EQF consultation in January 2007. Most stakeholders involved in the consultation agreed on the need to develop an NQF. The first 'fact-finding phase' (February to October 2007) aimed to gather and analyse information, to do research work (Markowitsch, 2009) ⁽²⁹⁾ and to prepare a consultation paper.

The work formed the basis for national consultation taking place from January to June 2008. A total of 270 responses were received and the expert team presented its conclusions and recommendations in November 2008 to the national steering group. The resulting report (*Konsolidierung der Stellungnahme zum Konsultationspapier*) identified a number of open questions ⁽³⁰⁾ and was used by the Federal Ministry of Education, Arts and Culture and the Federal

⁽²⁸⁾ Regierungsprogramm der 24. Gesetzgebungsperiode (2008-13). Available from Internet: www.austria.gv.at/DocView.axd?CobId=32965 [cited 7.7.2011].

⁽²⁹⁾ Der Nationale Qualifikationsrahmen in Österreich: Beiträge zur Entwicklung. Vienna: Lit Verlag. (Studies in lifelong learning, 3).

⁽³⁰⁾ All documents are available from the Internet of the Federal Ministry of Education, Arts and Culture. Available from Internet: http://www.bmukk.gv.at/europa/eubildung/nqr/nqr_sn.xml [cited 7.7.2011] or Federal Ministry of Science and Research <http://www.bmwf.gv.at/wissenschaft/national/nqr/> [cited 7.7.2011].

Ministry of Science and Research to prepare a policy paper (October 2009 ⁽³¹⁾) outlining the strategy for implementing the Austrian NQF.

This policy paper clarifies the relationship between qualifications at levels 1-5 and 6-8. Qualifications at levels 1-5 from all sectors of education and training will be referenced according to the same set of level descriptors, i.e. EQF level descriptors. At levels 6-8 two sets of level descriptors will be used, allowing academically and vocationally oriented qualifications to coexist ⁽³²⁾. Dublin descriptors will be used for qualifications related to Bologna cycles (BA, MA, Doctorate) and awarded by HE institutions (i.e. universities, universities of applied sciences (*Fachhochschulen*) and university colleges for teacher education (*Pädagogische Hochschulen*). VET qualifications and qualifications from adult learning will be allocated to the NQF based on EQF descriptors and additional criteria ('non-Bologna' strand).

Explanatory tables, including criteria and procedures, have been developed to complement and further elaborate the EQF descriptors and to ease referencing of national qualifications to NQF levels.

The Austrian NQF will be given a separate legal basis: an act is currently being prepared and is expected to be adopted in 2012. This law will provide the basis for aligning national qualifications to the NQF and referencing to the EQF.

Rationale, main policy objectives and scope of the framework

The main objective of the Austrian NQF is to map all officially recognised national qualifications, present them in relation to each other, and to make implicit levels of the Austrian qualification system explicit, nationally as well as internationally. The specific objectives are to:

- (a) assist referencing of Austrian qualifications to the EQF and thus strengthen understanding of Austrian qualifications internationally;
- (b) make qualifications easier to understand and compare for Austrian citizens;
- (c) improve permeability between VET and HE by developing new pathways and open new progression possibilities;

⁽³¹⁾ *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].

⁽³²⁾ *Aufbau eines Nationalen Qualifikationsrahmens in Österreich*, p. 7. [unpublished].

- (d) reinforce the use of learning outcomes in standard-setting, curricula and assessment;
- (e) support lifelong learning and enable stronger links between adult learning and formal education and training;
- (f) recognise a broader range of learning forms (including non-formal and informal learning).

The NQF plays an important part in establishing a strategy of lifelong learning (BMUKK, 2011) ⁽³³⁾ that assigns all contexts of learning (formal, non-formal and informal) the same value. (Brandstetter, 2010) ⁽³⁴⁾ However, the NQF development process is organised into three strands (*Korridore*): formal qualifications, qualifications acquired in non-formal learning (for example in adult education institutions outside formal education and training) and informal learning. The policy paper ⁽³⁵⁾ suggests some steps for including non-formal qualifications in the NQF, e.g. setting up 'bodies responsible for qualifications'. This issue is still under discussion. A conceptual paper will be prepared and pilot projects carried out on how to describe these qualifications in terms of learning outcomes and set up quality assurance procedures. Discussion will start with all relevant stakeholders on linking validation and allocation of non-formal qualifications to the NQF and on establishing validation and quality assurance procedures.

Stakeholder involvement

The General Directorate for Vocational Education and Training of the Federal Ministry of Education, Arts and Culture has initiated and is coordinating NQF development and implementation with the Federal Ministry of Science and Research, which is in charge of higher education.

In 2006, an NQF project group was set up, with representatives from the Federal Ministry of Education, Arts and Culture and the Federal Ministry of Science and Research. The group coordinated the NQF agendas within both ministries and is responsible for strategic planning, commissioning research studies and communication with stakeholders. Members of this group were the

⁽³³⁾ *Strategie zum lebensbegleitenden Lernen in Österreich*. Available from Internet: http://www.bmukk.gv.at/medienpool/20916/lll/lll-arbeitspapier_ebook_gross.pdf [cited 10.9.2011].

⁽³⁴⁾ *European inventory on validation of non-formal and informal learning 2010, country report Austria*. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77444.pdf> [cited 7.7.2011]

⁽³⁵⁾ *Aufbau eines Nationalen Qualifikationsrahmens in Österreich*, p. 11. [unpublished].

director general for VET (Federal Ministry of Education, Arts and Culture) as chair, the director general for universities and universities of applied science (Federal Ministry for Science and Research) as joint chair, and coordinators of several departments of these two ministries (VET; general education; adult education and lifelong learning; management of staff and school; research; universities and universities of applied sciences).

In February 2007, a national NQF steering group was set up. This is the key decision-making body and includes 23 members representing all the main stakeholders (all relevant ministries, social partners and Länder). The main task of this group is to coordinate the implementation of the NQF and to make sure that the framework reflects the interests of stakeholders. Since qualifications and validation policies require cross-sector cooperation, ensuring coordination and a sense of ownership is crucial to success. This group will also be the decision-making body for the EQF referencing report.

Separate working groups have been set up (2006) to pursue the development of a qualifications framework for higher education. Involved in this work are departments within the Federal Ministry for Science and Research, the students' union, universities, and universities of applied sciences. Self-certification to the QF-EHEA is expected in 2012 (coordinated with referencing to the EQF and presented in one report).

Levels and descriptors

The Austrian NQF is composed of eight levels. The EQF descriptors, based on knowledge, skills and competence, are used as national descriptors. The decision was based on the broad consultation process and a study, providing information on an existing implicit hierarchy in the Austrian qualification system, using statistical educational research and statistical frameworks. (EQF Ref, 2011, p. 46) ⁽³⁶⁾ 'Explanatory' tables including criteria and procedures have been developed to ease referencing of national qualifications to the NQF levels. Explanatory tables are based on analyses of legal documents, decrees, curricula and training regulations. Reference qualifications are used to illustrate the level of learning outcomes.

A NQF manual has been prepared, including criteria and procedures for classifications of qualifications and NQF governance structure.

⁽³⁶⁾ *EQF Referencing Process and Report*, p. 46. Available from Internet: http://www.eqf-ref.eu/index.php?option=com_content&view=article&id=3&Itemid=6 [cited 10.10.2011].

The qualifications framework for higher education uses Dublin descriptors as a starting point for further development.

Use of learning outcomes

Through the implementation of the NQF, Austria is strengthening the learning outcome approach across education and training: this will be 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.

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) ⁽³⁷⁾ and in VET ⁽³⁸⁾. The 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 respective field. Four competences are described:

- (a) subject-matter competence;
- (b) methodological competence;
- (c) social competence (communication competence, competence to cooperate and interact);
- (d) personal competence (being able to steer own actions by self-motivation and self-control).

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 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.

⁽³⁷⁾ For development of educational standards in Austria see the web site of the BIFIE <https://www.bifie.at/downloads> [cited 3.11.2010] or see: *Bildungsstandards in Deutschland, Österreich, England, Australien, Neuseeland und Südostasien*. (2006) Available from Internet: http://www.edudoc.ch/static/web/arbeiten/harmos/lit_analyse_1.pdf [cited 10.5.2011].

⁽³⁸⁾ See: <http://www.berufsbildendeschulen.at/de/downloads.html> [cited 10.5.2011].

The *Lehrabschlussprüfung* (final apprenticeship examination) is a theoretical and a practical test to assess whether the candidate has acquired the necessary skills and competences for entry to qualified work. Master craftsperson examinations (for manual trade vocations) and examinations to prove the respective competence (for other regulated trades) are organised by the economic chambers in the *Länder*.

In higher education a qualification profile, describing the expected learning outcomes (and definitions of learning outcomes) for each module, was introduced by the university Act (*Universitätsgesetz*) in 2002, but implementation differs between HE institutions.

Validating non-formal and informal learning

The NQF policy paper and the recently adopted Strategy for lifelong learning (BMUKK, 2011) place high importance on general demand for integrating non-formally and informally acquired learning outcomes in the NQF.

Austria does not have a uniform legal framework to regulate validation and recognition of non-formal and informal learning. (Brandstetter, 2010, p. 1-2) However, there are different acts and regulations which include mechanisms and arrangements that allow formal education and training institutions to recognise learning outcomes acquired outside formal education and training (e.g. acquisition of *Hauptschule* qualification by adults ('second chance education'), exceptional admission to the apprenticeship examination, awarding of the professional title *Ingenieur* or recognition of work experience and further education to access requirements to regulated professions, etc.).

The strategy for lifelong learning also reinforces the 'competence orientation' and uses a framework of eight key competences for lifelong learning (2006) as a reference point for ten action strands, of which one focuses on recognition of non-formal and informal learning. In line with the vision set in this strategy, all learning outcomes, irrespective of how they have been acquired, should be recognised and all relevant stakeholders should jointly develop and implement coherent strategy for validation of non-formal learning in Austria. Five concrete measures are proposed, including setting up 'bodies responsible for qualifications' acquired outside formal education and training system, further strengthening the learning outcomes orientation in curricula in all education sectors, and implementing pilot projects. (BMUKK, 2011, p. 46)

Despite NQF implementation, there is still the question of how to include learning outcomes from informal learning and qualifications/certificates from non-

formal learning without an equivalent in formal education. The discussion focuses on quality criteria, which have to be met – based on the EQF/NQF definition of qualification – to consider a bundle of learning outcomes a qualification which can be included in the NQF.

Referencing to the EQF

The Austrian referencing report will – according to current plans – be presented as one comprehensive report: the Ministry of Science and Research is responsible for preparing information on the Bologna qualifications and the Ministry for Education, Arts and Culture will cover all other qualifications. The work has been supported by EQF test and pilot projects, notably the Leonardo da Vinci EQF Ref: Referencing process – Examples and proposals (EQF Ref, 2011). A draft referencing report is expected to be prepared in late 2011 and presented to the EQF AG in spring 2012. The Austrian NCP was set up as an organisational entity at OeAD (Österreichischer Austauschdienst, Austrian agency for international cooperation in education and research). The main role of the NCP 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 does not have any decision-making role in NQF development and referencing.

Important lessons and the way forward

An important 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. The establishment of an NQF law and decree, and all related activities, are seen as the essential next step in NQF development, supporting future successful implementation and legitimacy of the NQF.

The consultation paper emphasised that NQFs will have an orientation and communication function to make the existing qualification system visible and to help individuals compare their qualifications and engage in further learning. While this was broadly supported in the consultation, subsequent developments have raised the question of whether, and to what extent, the NQF and learning outcomes approach should be used to support national reform. This is perhaps

best illustrated by the question of how to use the three highest levels (6-8) of the framework. Should these be exclusively used for those qualifications forming a part of the Bologna framework or should they also be open to other, vocationally and professionally oriented qualifications? The answer to this question is the latter, raising a number of questions regarding the equivalence of academically and vocationally oriented higher level qualifications.

National reforms could potentially be supported or fuelled by NQF development and implementation. These are largely related to continuing curricula reform and the shift from input to outcome-oriented teaching policies, the development and implementation of national educational standards (*Bildungsstandards*), and the development and implementation of a comprehensive system for quality assurance and management in vocational education and training (QIBB).

Further development is needed to clarify questions relating to the learning outcomes approach in terms of concepts and sound assessment methodologies and tools. How to balance outcome orientation and input factors will be one of the central questions to be answered in the near future, as will be the question of whether learning outcomes are to be implemented in a coherent way across different education and training subsystems (general, VET and HE).

Another issue is the integration of qualifications, awarded outside formal education and training and validation of non-formal and informal learning in the NQF developments and equivalences of qualifications. Currently frameworks place high importance on integrating non-formally and informally acquired qualifications. There is still the question of learning outcomes from informal learning or certificates from non-formal learning without an equivalent in the formal system. (Brandstetter, 2010, p. 1)

Experience until now has shown that stakeholder involvement in all phases of NQF development is both crucial and beneficial. A good platform for cooperation between different stakeholders has been created but further involvement of stakeholders to strengthen ownership and commitment will be needed. To ensure successful NQF implementation now implies the need to engage and include education and training providers and universities.

Good cooperation in further development of the NQF for lifelong learning and the QF for HE will be needed to establish conditions for better progression possibilities between different subsystems.

Main sources of information

Information on the consultation paper, the process and the research work is available on the website of the Federal Ministry of Education, Arts and Culture: <http://www.bmukk.gv.at/europa/index.xml> [cited 7.7.2011] and on the website of the Federal Ministry of Science and Research: http://www.bmukk.gv.at/europa/eubildung/nqr/nationaler_qualifikationsrah.xml [cited 7.7.2011].

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 the education and training in the two regions. The 2010 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. The 2010 report also pointed to the solution adopted by the UK where a joint and coordinated referencing report covering all the different qualifications frameworks was presented to the EQF advisory group. It is now clear, following the referencing of the Flemish framework to the EQF in June 2011, that the UK approach will not be followed and that the regional frameworks will be referenced separately. However, many of the same basic principles have been adopted for the frameworks of Flanders and the French-speaking community; the German speaking community is also signalling that it will follow this basic model. This provides a good basis for future cooperation and coordination and may also influence the design of the framework for German speaking community.

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) ⁽³⁹⁾ (*kwalificatiestructuur*) introducing a comprehensive qualification 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.

While the Flemish framework (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 these. 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 and difficult than foreseen. As late as mid-2011 the implementation decrees necessary for putting the framework into practice had yet to be fully agreed, in particular with social partners represented in the Economic and Social Committee, thus making it impossible to include actual qualifications into the FQF. So while the FQF can be seen as the first ‘new’ NQF to be adopted in responses to the EQF, it is still very much work in progress.

Rationale, main policy objectives and scope of the framework

The 2009 Act defines the Flemish qualification system as ‘... a systematic classification of recognised qualifications based on a generally adopted

⁽³⁹⁾ Flemish Act of 30 April 2009 on the qualifications structure. Available from Internet: http://www.evcvlaanderen.be/files/DecreetVKS_ENG.pdf [cited 9.11.2011]

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 by using an eight-level qualification framework.

qualifications framework (FQF)'. The qualification structure (including the qualification 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 qualification 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 the pathways leading to recognised qualifications is being followed up through the establishment of the Flemish Agency for Quality Assurance (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 5-8 a joint accreditation organisation has been set up together with the Netherlands (NVAO, Nederlands-Vlaamse Accreditatieorganisatie)

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

The Flemish NQF process has involved a broad range of stakeholders at all stages of the process, 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 of 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 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.

The adoption of the framework in 2009 by Parliament moved the work into a new stage. It became clear that translation of the framework principles into practice would be more difficult than anticipated, in particular in relation to

professional qualifications. 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. While these standards have to comply with the general requirements set by the Ministry of Education and training (in cooperation with AKOV, the quality assurance agency), no professional qualification can be approved without the active input and approval of the social partners. For the framework to become fully operational, social partners have to indicate how existing competence standards should be linked to the appropriate FQF descriptors and levels. A general agreement – between the Government and the SERV – on how to proceed was not reached until January 2011 and more detailed discussions were continuing in mid-2011. While the complexity and scope of the task may explain some of the delay, some scepticism towards the framework may also be observed. Is it possible – for example – that the stronger emphasis on autonomy and responsibility in the FQF descriptors could change the relative position of qualifications? Could this potentially influence single employees and enterprises, for example as regards wages and promotions? Most of these questions now seem to have been resolved and it is expected that linking professional qualifications to the FQF will be completed by the end of 2011 or the beginning of 2012.

Levels and descriptors

The Flemish qualifications framework is based on an eight-level structure described by the categories of knowledge, skills, context, autonomy and responsibility⁽⁴⁰⁾. Compared to the EQF, the FQF-descriptors are more detailed, in particular for lower levels. A main difference lies in the fact that the FQF does not use ‘competence’ as a separate descriptor category. Instead it considers competence as interchangeable with learning outcomes and uses responsibility and autonomy as separate terms. A main feature of the Flemish framework is the use of the element ‘context’. The context in which an individual is able to function is seen as an important part of any qualification and is a necessary part of the descriptors. This can be seen as a criticism of the EQF descriptors which contain important contextual elements but fail to make this explicit as a separate element or feature.

⁽⁴⁰⁾ See Annex 3.

In the referencing of 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 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 6-8 and allow direct integration of the HE framework into the new NQF. This was also linked to an argument that learning outcomes at levels 6-8 could best be focused on the category of ‘knowledge’. This was not accepted by the majority of 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.

Use of learning outcomes

The learning outcomes/competence (the two are used as synonyms) approach is not new to Flemish education and training and is a key to the new qualifications framework. It is broadly supported at political level.

The learning outcomes based 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.

Progress on practical implementation of the principles of learning outcomes/competences in Flanders 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). The 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: how can existing VET standards be understood in relation to the learning outcomes based descriptors introduced by 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. Work continues in vocational education and training to define and describe qualifications in term of learning outcomes. These descriptions will be based on the job profiles (professional standards) defined with the involvement of social partners.

Validating non-formal and informal learning (Mathou, 2010) ⁽⁴¹⁾

Validating non-formal and informal learning 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 qualification 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 the professional competence standards (approved by the social partners in the Social and Economic Council) as reference. This allows people without any diploma to demonstrate their professional skills and competences with certificate, granted by the Flemish government, as formal proof of a professional competence. In the period 2004-10 2039 certificates were granted. 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.

The Belgian NQF for lifelong learning (Flanders) and higher education

A qualification framework for higher education linked to the Bologna process has been 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.

⁽⁴¹⁾ European inventory on validation of non-formal and informal learning 2010, country report Belgium (Flanders). Available from Internet:
<http://libserver.cedefop.europa.eu/vetelib/2011/77449.pdf> [cited 7.10.2011]

Referencing to the EQF

Referencing to the EQF was completed in June 2011 ⁽⁴²⁾, preparation having been carried out by the new Flemish Agency for Quality Assurance (Agentschap voor Kwaliteitszorg in Onderwijs en Vorming, 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 makes it difficult for other countries to judge how Flemish qualifications compare to their own. It was clearly signalled that Flanders will have to come back to the EQF AG with an update as soon as implementation of professional qualifications has taken place.

Table 1. **Level correspondences 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 in Flanders and Belgium there is a long tradition of involving stakeholders and social partners in education and training policy and legislation, the development and implementation of a qualifications framework requires continuous dialogue with all relevant stakeholders. The delay encountered in implementing the framework illustrates the importance of this involvement and dialogue. This delay may, however, prove a benefit as it stresses the need to anchor the framework in the labour market.

The Flemish experience illustrates the long term character of framework developments. Already in development for more than six years, the FQF will still need time before it starts to influence the overall transparency and coherence of Flemish education and training.

⁽⁴²⁾ Flemish Government, Agency for quality assurance in education and training (AKOV): Referencing the Flemish qualifications framework to the EQF, Brussels, June 2011.

Main sources of information

Flemish Act of 30 April 2009 on the qualifications structure. Available from Internet: http://www.evcvlaanderen.be/files/DecreetVKS_ENG.pdf [cited 24.10.2011]

Belgium (French-speaking community) ⁽⁴³⁾

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. The work on a qualifications framework for higher education, linked to the Bologna process, has been going on in parallel. Although the idea of a NQF (and its link to the EQF) have received broad support, the question of how to integrate the qualifications framework for higher education within a comprehensive NQF have been much debated and have delayed the process.

From autumn 2009 and onwards – following changes in governments – the speed of the process has increased and significant progress has been made. On 16 September 2010, the Governments of the French community, the Walloon Region and the CoCoF agreed on the principle of creating a qualifications framework with double entry, one for educational qualifications and one for the professional qualifications, declined 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 groundwork for a legal text and a draft referencing report for 2011. In a meeting end of July 2011 all major stakeholders agreed on these main principles of the framework. This decision to align the two frameworks

⁽⁴³⁾ 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 communautaire française) in Brussels.

to each other could help to increase overall transparency within and between the Belgian communities and give citizens a better understanding of how qualifications can be compared and relate to each other.

Rationale, main policy objectives and scope of the framework

The main rationale for pursuing a comprehensive NQF is to increase the overall transparency of 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 instruments for transparency, notably validation of non-formal and informal learning and credit transfer. The framework is seen as an important instrument for strengthening the use of learning outcomes and for referencing to the EQF.

The Belgian NQF for LLL (French-speaking community) and higher education

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 2011-12. The work on the qualifications framework for HE has gone on partly in parallel to that on the qualifications framework for LLL, with an observed reluctance of the higher education sector to associate itself with a comprehensive NQF. The approval in May 2008 of a separate decree binding levels 6-8 to the bachelor, master and doctorate cycles of the EHEA confirmed this. Higher qualifications awarded outside the university sector were effectively prevented from being placed at one of these levels, even in cases where their profile and content would recommend such a levelling. In the period following 2008 the discussion on the link between higher education and the remaining parts of education and training has continued and resulted in a softening of positions. Stakeholders have increasingly come to accept that levels 6-8 need to be opened up to non-academic qualifications, for example advanced vocationally or professionally oriented qualifications. This agreement is reflected in the decision to distinguish between educational and professional qualifications and open up all levels to all forms of qualifications.

It is emphasised, and in line with the original 2006 proposal, that such a levelling is for transparency purposes only, it will not imply automatic recognition of equivalences.

Stakeholder involvement

The NQF initiative was taken by the joint government of the French region and initially followed up by a high level intergovernmental group. This somewhat centralised approach has been balanced in the practical follow up to the proposal throughout 2007-11. The original 2006 proposal has been followed up and further elaborated by a technical working group (FOREM ⁽⁴⁴⁾, IFAPME ⁽⁴⁵⁾, Brussels Formation and Ministry of Education for the Education for Adults). This effort has resulted in wide-ranging testing of an 'NQF methodology' involving stakeholders in more than 50 of CVET qualifications. In spite of the lack of political clarification prior to 2009-10, the testing and piloting phase have resulted in broad stakeholder involvement. This testing now forms an important experience base for the further development and implementation of the framework.

Levels and descriptors

An eight-level structure is foreseen, using the terms knowledge, skills, context, autonomy and responsibility. The detailed descriptors are still being developed and will be available in 2012.

The question of entry levels, raised by the UK and Iceland, has not been addressed by the French region. It is acknowledged, however, that the future framework needs to take account of reintegration of drop-outs (in particular from VET) and to articulate a strategy for access and progression.

Use of learning outcomes

In the French-speaking region of Belgium, learning outcomes are integral to a range of recent and continuing reforms (Cedefop, 2009c) ⁽⁴⁶⁾. These outcomes, however, are described in various ways and the extent to which they influence education and training practice differs.

⁽⁴⁴⁾ Le service public wallon de l'emploi et de la formation.

⁽⁴⁵⁾ Institut wallon de formation en alternance et des indépendants et des petites et moyennes entreprises.

⁽⁴⁶⁾ *The shift to learning outcomes: policies and practices in Europe*. Available from Internet: <http://www.cedefop.europa.eu/EN/publications/12900.aspx> [cited 24.10.2011].

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⁽⁴⁷⁾ is a new structure including IVET (vocational compulsory education) and CVET (education for adults, 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. 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 practices. For the *Hautes Écoles* (higher education institutions outside universities, delivering bachelors and masters) the definition of common competences profiles is in process.

An interesting part of the NQF developments in the French region of Belgium is the methodology developed by the CVET stakeholders for placing qualifications at learning outcomes-based NQF levels. This methodology is also relevant for other countries and can illustrate the challenges – and opportunities – inherent in applying a ‘best fit’ approach. The methodology is based on the following four steps (and questions):

- (a) is it possible to position the qualification? In answering this it must be considered whether the qualification in question is relevant (to the labour market or as part of education and training progression); whether it is defined and awarded by an appropriate and authorised authority; whether there is a clear assessment procedure; and whether there is a title delivered at the end of the learning process?
- (b) how is the qualification positioned to the levels and descriptors of the NQF and the EQF? In answering this, the type of activity, the context of the activity, and the expected level of responsibility and autonomy are considered.

⁽⁴⁷⁾ SFMQ: Service francophone des metiers qualifications.

- (c) how does this qualification relate to other (equivalent) qualifications and to regulations in the labour market (and elsewhere)?
- (d) at what level should the qualification be positioned? Based on the three steps described above a recommendation will be made. The decision on the positioning of the qualification is seen as important not only for transparency reasons, but also as a reference point for quality assurance and reform.

Validating non-formal and informal learning (Mathou, 2010) ⁽⁴⁸⁾

Much effort has been invested in the development of a system for validating non-formal and informal learning in the French-speaking community of Belgium. These developments, involving broad stakeholder groups, may prove beneficial for the broader development of the NQF.

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 of 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 ⁽⁴⁹⁾, i.e. the system is geared towards measuring skills of direct relevance to specific job profiles. In the past, the system consisted of job profiles developed by the French ROME system and by the *Commission Communautaire des Professions et des Qualifications* ⁽⁵⁰⁾ (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

⁽⁴⁸⁾ European inventory on validation of non-formal and informal learning 2010, country report Belgium (Wallonia). Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77451.pdf> [cited 7.10.2011].

⁽⁴⁹⁾ Consortium d Validations des compétences.

⁽⁵⁰⁾ The CCPQ, which developed principally standards for IVET, is now replaced by a wider institution, the SFMQ including IVET and CVET.

the labour market, making visible prior learning and achievement of the individual in question. Due to their recent introduction, these 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, education of adults 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 integrated 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 2012.

A national coordination point for the EQF referencing was established in September 2010. This NCP, under the responsibility of the Service francophone des métiers et des qualifications (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 remaining parts of the education and training system. The Belgian experiences demonstrate the highly politicised character of NQF developments, warning against treating them as purely technical or administrative arrangements.

Belgium (German-speaking community)

The German-speaking community of Belgium will develop its own qualifications framework. The approaches now agreed for the two other communities form a starting point for this work, but consideration will also be given to the experiences of dual-system countries like Germany and the Netherlands. Due to its particular geographical location, the German-speaking community sees cross-border mobility as a particular challenge and the introduction of a learning outcomes based framework as an opportunity to reduce barriers to learning and working. A first NQF draft is due to be published in 2011. It is likely to contain eight levels and be similar to the Flemish model; all competence levels may be achieved not only by the general education but also by professional education. Coexistence between NQF and Bologna criteria is expected for levels 6 to 8. A discussion with all stakeholders on the first NQF draft and on the following process was organised mid-2011. At the end of 2011 a NQF conference will be held in the German-speaking community to validate the NQF concept and its alignment with formal certificates and degrees. The NQF for the German-speaking community will be adopted – through a parliamentary decree – during 2012. The referencing of the qualification framework to the EQF has still to be discussed and finalised.

BULGARIA

Introduction

A draft Bulgarian national qualifications framework for lifelong learning was presented in spring 2011 and approved by the Minister for Education, Youth and Science on 3 June 2011. The Bulgarian government sees the NQF as a precondition for implementing the EQF and an important national priority ⁽⁵¹⁾. The approved framework builds on the proposals of a working group set up by the Ministry of Education in April 2008 on how to relate national qualification degrees

⁽⁵¹⁾ Programme for the European Development of Bulgaria (2009–13). Available from Internet: <http://www.mlsp.government.bg/bg/03.11.2009FINAL-ednostranen%20pechat1.pdf> [cited 10.5.2010].

to the EQF, on how to pursue sectoral qualifications development, and on necessary changes in national legislation.

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

The framework is based on learning outcomes defined levels, with direct links to the ISCED and EQF levels. State education requirements (standards) for general, VET and higher education and the List of professions for VET served as a basis for NQF development. (Nikolova, 2010, p. 5) ⁽⁵²⁾

NQF development refers to and is based on a number of existing policy initiatives in education and training and lifelong learning:

- (a) the national programme for school and pre-school education development (2006-15);
- (b) the national lifelong learning strategy of the Republic of Bulgaria (2008-13); ⁽⁵³⁾
- (c) the national strategy for continuing vocational training (2005-10);⁽⁵⁴⁾
- (d) acts governing different subsystems of education and training (in school education, VET, HE).

It is planned that a decree on the introduction of the NQF will be adopted by the Council of Ministers in 2011 after the consultation process.

Rationale, main policy objectives and scope of the framework

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 all target groups and stakeholders are informed about national qualifications. It is hoped that this will

⁽⁵²⁾ *European inventory on validation of non-formal and informal learning 2010, country report Bulgaria*, p. 5. Available from Internet:
<http://libserver.cedefop.europa.eu/vetelib/2011/77453.pdf> [cited 7.7.2011].

⁽⁵³⁾ http://www.minedu.government.bg/opencms/export/sites/mon/left_menu/documents/strategies/LLL_strategy_01-10-2008.pdf [cited 7.7.2011].

⁽⁵⁴⁾ http://www.minedu.government.bg/opencms/export/sites/mon/left_menu/documents/strategies/strategy_prof_edu-2005-10.pdf [cited 7.7.2011].

raise trust in the education and training system and make mobility and recognition of qualifications easier. More specific aims addressed by NQF development are to:

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

Having a single NQF covering all national official qualifications that can be acquired in formal education and training is expected to make designing sectoral qualifications frameworks easier, stimulating cooperation and discussion among different stakeholders and opening up towards other types of qualification, e.g. related to the labour market. These will make qualifications in the different economic sectors more transparent and aid recognition of qualifications.

Stakeholder involvement

The Ministry of Education, Youth and Science has leading role in drafting the NQF and coordinating its implementation. The European Integration and International Cooperation Directorate in the Ministry of Education, Youth and Science is responsible for coordinating the development work with a broad range of stakeholders.

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 asked for 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 relevant stakeholders at national level: representatives from the Ministry of Education and Ministry of Labour and Social Policy, employers' organisations, trade unions, representatives from the rectors' conference and representatives from national quality assurance bodies⁽⁵⁵⁾. A broad national consultation process is under way

⁽⁵⁵⁾ The National Evaluation and Accreditation Agency and the National Agency for VET. While the latter has been involved from the beginning of the process, the former, responsible for higher education, was involved from 2011 and onwards.

and is open until end October 2011. It is foreseen that the proposal will be officially approved and adopted by the Council of Ministers in a decree in November 2011.

Levels and descriptors

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

All levels are described in terms of knowledge (theoretical and factual), skills are described as cognitive (use of logical, institutive and creative thinking) and practical (manual dexterity and the use of methods, materials, tools and instruments) and competences. The proposal distinguishes between personal and professional competences. They include autonomy and responsibility, but key competences as learning competences, communicative and social competences are also emphasised. ⁽⁵⁶⁾

The expected learning outcomes of qualifications levels reflect the legal acts governing different subsystems of education and training and national state education requirements (see below).

Higher VET qualifications clearly correspond to EQF level 5. Qualifications at levels 6-8 are restricted to those awarded by higher education institutions within the Bologna process

Use of learning outcomes

For the general education part and VET, standards are defined by the State educational requirements on the educational contents and the State educational requirements on acquisition of qualification by professions.

The state educational requirements are developed by expert groups, evaluated by tripartite committees (state institutions, employers, employees' representatives) and approved by the Minister for Education, Youth and Science. In general education, State education requirements are related to the curriculum and the syllabus for each subject, as well as the knowledge and skills expected on completion of the respective education level.

⁽⁵⁶⁾ See proposed level descriptors in Annex 3.

State education requirements in VET include access requirements, a brief description of the profession, learning objectives, learning outcomes, requirements for facilities, and required qualifications of teachers and trainers. Learning outcomes are defined as knowledge, skills and personal capabilities.

Work on professional standards based on learning outcomes has been under way since 2006: 100 professional standards classified in 11 occupational sectors have been elaborated so far. (Nikolova, 2010, p. 5) These are seen as prerequisite for setting up of a validation system and updating VET curricula, two important policy priorities. Updated VET standards will be used in the process of validating non-formal and informal learning.

For higher education, there are State requirements for acquisition of higher education at educational and qualification degrees of bachelor, master, and specialist (2003); they set the expected learning outcomes for each of these degrees. The specialist degree was replaced by the professional bachelor degree in 2007 by amendments and supplements of the Higher Education Act. At institution level there are qualification descriptions for each specialty (by education and qualification degrees). These describe the knowledge, skills and competences to be acquired by the graduates.

Referencing to the EQF

The referencing to the EQF is seen as an integrated part of the overall work on the NQF. A draft referencing report is being elaborated together with the draft NQF. One single report aims to reference Bulgarian qualifications to the EQF and QF–EHEA. Referencing to the EQF is expected to take place in late 2011 or early 2012.

Important lessons and the way forward

One of the aims of the NQF is to provide greater transparency in education and training and to aid knowledge and skills transfer and improve labour force mobility. Level descriptors defined in learning outcomes aim to provide a common reference point and common language for diverse qualifications from different education sub-systems. As educational levels and state educational requirements on which the NQF is based provide a very strong input-based dimension of the framework, learning outcomes-based level descriptors will have a very important role in providing a communication tools for supporting dialogue

and discussion among stakeholders to strengthen the learning outcomes dimension in qualifications design. It will also address vertical and horizontal progression possibilities.

The development of sectoral qualifications frameworks (SQF) is considered very important. SQFs will allow the qualifications in economic sectors to be described in a more clear and transparent way for all target groups and stakeholders, using a learning outcomes approach and linking them to the credit system where applicable. It will also commit all the stakeholders and social partners by sectors to joining the process. The work on the SQF will start after the NQF is in place.

Main sources of information

The European Integration and International Cooperation Directorate in the Ministry of Education, Youth and Science is designated as the EQF national coordination point (NCP), <http://www.mon.bg> [cited 7.7.2011]. 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 for lifelong learning, CROQF. It will link and coordinate different education and training subsystems. It also forms the basis for validation of non-formal and informal learning and incorporates credit systems.

The main outline of the framework, reflecting the proposal of a national, high level committee, was adopted by the government in 2009. (Vlada Republike Hrvatske, 2009) ⁽⁵⁷⁾ Following the consultation with a range of stakeholders, Croatia is now implementing the framework. The Croatian authorities intend to start aligning qualifications to levels by the end of 2011. All qualifications need to

⁽⁵⁷⁾ *Hrvatski kvalifikacijski okvir uvod u kvalifikacije* [Croatian Qualifications Framework]. Available from Internet: http://personal.unizd.hr/~mdzela/hko/HKO_Prirucnik.pdf [cited 10.10.2011].

be analysed to be assigned the CROQF level and then the EQF. The Ministry of Education has prepared a draft law regulating the implementation of the CROQF, which is expected to be adopted by the end of 2011. The proposed law describes the procedures for inclusion of qualifications in the CROQF, governance structures and defines various registers.

The main responsibility and competence for implementing CROQF lies (according to the draft proposed law) within the National Coordination Body, which comprises the Governing Board, Expert Council, various support units and 26 sectoral groups. The Governing Board includes policy-makers from the Ministry of Research and Education, various national councils (e.g. for research, higher education, adult education vocational education and training), social partners, and education and training providers. A new institution is not currently planned.

The work on the CROQF started in 2006 and was given its current direction through the adoption, in 2007, of a five-year action plan and programme for 2008-12. The following steps were outlined:

- agree on a theoretical basis and instructions for the CROQF development with examples of qualifications (2009);
- develop guidelines for curriculum development, proposals for legislative change (2010);
- .initiate a curriculum development process (2011-12).

The schedule indicated by the action plan has largely been maintained and continues to form the basis of the process. Croatia is currently writing the referencing report to link national qualifications levels to the EQF and to self-certify to QF-EHEA.

Rationale, main policy objectives and the scope of the framework

Apart from its transparency function, the CROQF is seen as an important tool for reforming national education and training, especially for the VET sector. It builds on the reforms under way since 2005, e.g. developing new educational standards and national curricula for general education, introducing national state exams and State matura. As part of the process, in 2006 a VET agency established 13 sector councils. They were entrusted with developments of occupational and qualifications standards, thus providing the basis for new VET curricula.

Besides helping the link to the EQF, and thus making Croatian qualifications better understood abroad, the framework is seen as reflecting national needs and

priorities and as an instrument making it possible to develop and implement new education and training solutions specific to the Croatian context, e.g. to:

- (a) better link education and training with labour market needs;
- (b) improve social inclusion and equity;
- (c) improve pathways between subsystem and between sectors;
- (d) make qualifications transparent and more consistent;
- (e) support lifelong learning and offer a good basis for validation of non-formal and informal learning.

One of specific aims of CROQF is to set up a system for validating and recognising non-formal and informal learning and create a well founded quality assurance system. (Buric, 2010, p. 3) ⁽⁵⁸⁾

Stakeholder involvement

There is a strong political commitment to NQF development.

The work was initiated in 2006 and has been led by the Ministry of Science, Education and Sports. The High Level Committee for the CROQF development was established in September 2007, was chaired by the Deputy Prime Minister and comprised 27 members, representing different ministries, social partners, schools, universities and agencies. The committee cooperated closely with the Bologna follow-up group and recently also with the National Curricula Committee.

In April 2008, an operational team, composed of members of different ministries, social partners and agencies, was established by the Ministry of Science, Education and Sports to support the High Level Committee. Its main tasks are to prepare documents for adoption by the committee and to conduct research.

In February 2010 a new High Level Committee was formally established to put the CROQF in place; it has 20 members, representing different ministries and relevant stakeholders, from students to employers and is chaired by the Deputy Prime Minister. The Ministry has also set up 26 Sectoral Working Groups to develop qualifications standards, which will be the basis for aligning qualifications to the CROQF levels.

The agency for science and higher education acts as quality assurance agency in this sector.

⁽⁵⁸⁾ *European inventory on validation of non-formal and informal learning 2010, country report Croatia*, p. 3. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77465.pdf> [cited 7.7.2011].

The national coordination body has the overall responsibility for implementing the CROQF for lifelong learning. Its tasks include developing and maintaining new national registers (e.g. register of occupational standards, register of qualifications standards and units of learning outcomes), defining criteria and procedures for inclusion of qualifications into the CROQF, and overseeing quality arrangements for the referencing process and dissemination of information.

Levels and descriptors

The CROQF is a qualifications and credit framework. It has eight reference levels, in line with the EQF, but with four additional sublevels at levels 4, 5, 7 and 8 to cater especially for older 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). For example, a qualification with the volume of minimum 180 ECVET points (from which a minimum 120 ECVET points are acquired on the fourth reference level or higher) will be referenced to the level 4.1. For a qualification at level 4.2 a minimum 240 ECVET points are required (of them a minimum 180 ECVET points on the fourth reference level).

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). The CROQF introduces two classes of qualifications: full and partial.

The CROQF is currently empty: assigning qualifications to levels will start towards the end of 2011.

Use of learning outcomes

The shift to learning outcomes is seen as an essential part of the CROQF development and is supported by all relevant stakeholders.

The VET reform agenda includes a move towards an outcome-based approach in standards and curricula. Pilot occupational standards and outcomes-based curricula are being developed in adult education. A new approach to evaluation of schools outputs introduces a system of common final exams 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 social community in particular, has not yet been well established.

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. (Buric, 2010, p. 3)

The CROQF is supported by new registers (e.g. register of occupations and qualifications standards, register of units of learning outcomes), which will also support validation of non-formal learning.

Referencing to the EQF

Referencing process of the CROQF to the EQF has started. One comprehensive draft referencing report, which is also self-certifying against QF-EHEA, has been prepared for national consultation and discussion with international experts. The CRQF is expected to be referenced to the EQF late 2011, beginning 2012.

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 point towards genuine partnerships. The involvement of the deputy prime-minister in the initial process may also have contributed to success as it signals the priority attributed to the initiative. Active collaboration at international level can also provide new insights, help develop adequate expertise and mirror broader national development.

How to engage institutions and groups of interests have proved challenging tasks. However, some effects are already visible: strong demand for information

from different groups signals increased awareness and interest in the CROQF and its potential benefits; cooperation among different stakeholders has been strengthened. A progressive, step-by-step development is emphasised. It has, so far, been a very inclusive process with more than 200 meetings, workshops and conferences, 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. The work on aligning qualifications to the NQF levels will start in autumn 2011.

Main sources of information

The EQF national coordination point (NCP) 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> [cited 7.7.2011].

CYPRUS

Introduction

Cyprus has prepared a proposal for a comprehensive national qualifications framework (NQF), which includes all levels and types of qualifications from all subsystems of education and training, from primary to higher education qualifications. Discussions on recognising and validating non-formal and informal learning are an integral part of NQF development, with numerous public and private stakeholders participating. (Manoudi, 2010). ⁽⁵⁹⁾

The system of labour-market oriented vocational qualifications, being developed by the Human Resource Development Authority of Cyprus, will constitute an integral part of the proposed NQF. The formal educational qualifications (from primary, secondary, upper secondary general, technical and vocational education and higher education) and occupationally oriented

⁽⁵⁹⁾ *European inventory on validation of non-formal and informal learning 2010, country report Cyprus*, p. 1. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77457.pdf> [cited 7.7.2011]

vocational qualifications, will constitute two separate/distinct strands within the NQF. Common structures and elements, which will offer opportunities for combining and transferring credits, are being discussed.

The main role of the NQF is to classify qualifications according to a set of criteria for achieving predefined levels of learning outcomes. The reform potential⁽⁶⁰⁾ of the NQF is being acknowledged by linking it to the wider reforms and procedures for quality assurance, assessment and awarding of qualifications.

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.

Rationale, main policy objectives and scope of the framework

The main policy objectives and targets to be realised through NQF development are to:

- (a) support recognition and validation of qualifications;
- (b) enable progression and mobility;
- (c) 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;
- (d) improve transparency, quality and relevance of qualifications;
- (e) strengthen the link with the labour market.

In the analysis of the existing national qualification system⁽⁶¹⁾ it is emphasised that NQF can contribute to these objectives, if it is a part of wider strategy resulting in the necessary reforms and institutional regulations as regards quality assurance, assessment and awarding of qualifications: 'It is important to underline that all qualifications should be the formal result of an assessment and validation procedure, safeguarding that an individual has achieved the necessary/required learning outcomes.'

⁽⁶⁰⁾ Interim report of the National committee and working committee on the development and establishment of a national qualifications framework in Cyprus, p 7. [unpublished]

⁽⁶¹⁾ *ibid*, p. 7-8.

It is also important to note, that the aim is to develop an inclusive framework, and open to qualifications awarded outside formal education by including the system of vocational qualifications, established by the Human Resource Development Authority of Cyprus. These labour market-oriented qualifications are based on occupational standards and assessment and certification of the capacity of individuals to achieve a defined level of competence in the real workplace or under simulation.

With the inclusion of the system of vocational qualifications in the NQF, there will be comparability and better correlation of various qualifications, which will result in the upgrading of knowledge, skills and competences throughout lifelong learning.

Stakeholder involvement

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 General Director of the Human Resources Development Authority or their representatives. Higher education representatives are involved but they maintain a degree of autonomy.

The NQF of Cyprus will be established at the Ministry of Education and Culture as an in-service department. The stakeholders responsible for the accreditation of qualifications will continue to work according to the existing legislative framework for their operation. However, new legislation on the operation of the NQF, referencing to the eight NQF levels and cooperation among different stakeholders are necessary. A new permanent body is planned: the Council of the national qualifications framework of Cyprus. 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.

Levels and descriptors

An eight-level reference structure is proposed, reflecting the main characteristics of the national qualification system. This is still under discussion. The EQF level descriptors are taken as national descriptors, defined in terms of knowledge, skills and competence. Discussion on the inclusion of partial qualifications with relevance for the labour market will be part of the national consultation.

Labour market-oriented VET qualifications, developed under the responsibility of the Human Resource Development Authority of Cyprus, will be aligned from level 2 to level 7 of the NQF.

Use of learning outcomes

The existing national qualifications system is mainly based on inputs such as quality of teachers and length of educational 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.

Experiences gained in developing competence-based vocational qualifications will be taken into account. These are based on occupational standards and provide the framework for training and certification. A candidate can be awarded vocational qualification no matter how they have acquired the necessary knowledge, skills and competences (e.g. through formal, non-formal or informal learning). In the future there will be analysis of how the system can incorporate branches/titles of technical and vocational schools and the apprenticeship system and other initial vocational programmes. 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. (Cedefop Refernet Cyprus, 2010) ⁽⁶²⁾

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 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 levels of education.

⁽⁶²⁾ *VET in Europe country report Cyprus 2010*. Available from Internet: http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_CY.pdf [cited 7.7.2011].

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 the second half of 2012.

Important lessons and the way forward

Broad involvement of different stakeholders, taking into account the specifics of the national situation, and learning from good practice in other countries are important parameters.

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 relevant 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's organisation and the academic community.

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

The proposal on the NQF ⁽⁶³⁾ emphasises policy breadth: '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.'

Main sources of information

Ministry of Education and Culture: <http://www.moec.gov.cy> [cited 2.5.2011]

⁽⁶³⁾ Interim report of the National committee and working committee on the development and establishment of a national qualifications framework in Cyprus, p 12. [unpublished]

THE CZECH REPUBLIC

Introduction

The Czech Republic has yet to decide to develop a comprehensive NQF (EQF Ref, 2011, p. 53) ⁽⁶⁴⁾. However, sub-frameworks, for example for vocational qualifications and for tertiary education qualifications, are being developed. The proposed descriptors for primary and secondary education may also be seen as pointing in this direction and the question now being discussed is whether an overarching framework can help to coordinate and bridge these separate developments.

Work on the framework for vocational qualifications started in 2005, based on the Act on the Verification and Recognition of Further Education Results (2006) ⁽⁶⁵⁾, which is also the legal framework for recognition and validation of non-formal learning. Both processes are closely related. Eight levels were adopted and level descriptors drafted mainly by VET stakeholders. The core of the framework is the publicly accessible national register of vocational qualifications (NSK). Complete and partial qualifications are included. For each qualification, a qualification standard and an assessment standard are drafted. This is seen as a precondition for validation and recognition of non-formally acquired knowledge and competences to be carried out.

These occupationally oriented qualifications, linked to a national register of occupations, are mainly open to adults wanting to validate their non-formal and informal knowledge and competences. However, step by-step links to formal education are established to ensure permeability between the two systems and comparability of qualifications. Most complete qualifications in the register correspond with qualifications from initial VET, signalling that the qualifications standards in the NSK are progressively being used as basis for initial VET programmes and the final examinations in these. (Uličná, 2010, p. 1) ⁽⁶⁶⁾

⁽⁶⁴⁾ The implicit education levels are well understood by different stakeholders, *EQF referencing process and report*, p. 53. Available from Internet: http://www.eqf-ref.eu/index.php?option=com_content&view=article&id=3&Itemid=6 [cited 10.10.2011].

⁽⁶⁵⁾ *The Act No. 179 of 30 March 2006 on verification and recognition of further education results*. Available from Internet: <http://www.msmt.cz/areas-of-work/act-no-179-of-30-march-2006> [cited 24.6.2011].

⁽⁶⁶⁾ *European inventory on validation of non-formal and informal learning 2010, country report Czech Republic*, p. 1, Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77454.pdf>

Qualifications standards thus play an important role in bridging both systems. Validation of prior learning via nationally recognised exams based on assessment standards and retraining courses based on qualification standards are viewed by employers as the most efficient way to solve mismatch between supply and demand in skills and qualifications in the labour market.

Experience of developing qualifications based on learning outcomes and level descriptors for vocational qualifications framework and register (NSK) are the base for more comprehensive developments. A new ESF-funded project of the Ministry of Education, Youth and Sports. The development and implementation of the National Qualifications Register (NSK2), started in 2009. It will complete and support further qualifications developments.

The framework concerned for tertiary qualifications was designed under the Q-RAM project, in process since 2009.

Both projects, as they link to VET and HE respectively, will address qualifications at levels 5 to 7. These levels present a special challenge and discussions continue. There are plans to reform higher vocational schools (in place since 1995) which offer tertiary vocational programmes (lasting three to three and a half years and presently referenced to EQF level 6) to correspond better to level 5. There are different views on this among stakeholders, some arguing that these studies should be considered as having a vocational bachelor's level because they last for three years (even three and a half for nursing). Others think that competences acquired within these studies better match the level descriptor 5 or are between level 5 and 6 of the EQF. (Kirsch, Beernaer, 2011) ⁽⁶⁷⁾

Rationale, main policy objectives and scope of the framework

The development of the NQF for vocational qualifications can be seen as a key instrument in a national strategy for lifelong learning (Ministry of Education, Youth

According to the e-mail correspondence with NUOV, the titles of complete qualifications (CQs) in NSK and in the IVET qualifications are the same at level 2 and 3. Standards for higher levels qualifications are mostly to be drafted. The focus at higher levels is (and will be) on partial qualifications (PQs), not on CQs.

⁽⁶⁷⁾ Kirsch, Magda; Beernaer Yves; EURASHE (2011). *Short cycle higher education in Europe level 5: the missing link*. Available from: <http://eurashe.innovationpros.net/wp-content/uploads/2011/11/SCHE-in-Europe-long-version-with-cover140311.pdf> [cited 19.12.2011].

and Sports, 2007) ⁽⁶⁸⁾ aiming at an open area of lifelong learning and a more permeable education and training system. The main elements of this strategy, reflecting identified and agreed needs, are:

- (a) building the base for recognising learning outcomes irrespective of the way they were achieved;
- (b) making the whole system more readable and understandable for all stakeholders, namely learners and employers, employees, training providers, etc.;
- (c) linking initial and continuing education and learning;
- (d) systematic involvement of all stakeholders in vocational education and training and in developing national qualifications;
- (e) response to European initiatives such as making qualifications more transparent and supporting the mobility of learners and workers;
- (f) support for disadvantaged groups and people with low qualification levels.

Another important issue is to open up different pathways to qualifications and improve the flexibility of the qualification system. Complete qualifications in the NQF 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). It is also possible to acquire partial qualifications from the national register of qualifications and build a complete qualification step-by-step. Exams can be taken for all partial qualifications of a given complete qualification but for a complete qualification (attaining a level of education) one must pass the final exam. This final exam, based on a qualification standard, is a bridge between the systems, though this is not the most sought after or expected goal. The majority of applicants do not seek higher level of education, because more than 90% of the population have already finished upper secondary education. The focus is more on partial or independent additional qualifications, which can facilitate employment and solve shortages in certain qualifications in the labour market.

The impact qualification of standards, defined in terms of learning outcomes, on current curriculum reform in VET is important; they strengthen the learning outcomes dimension and make VET curricula more relevant to labour market needs.

Parallel processes are under way in tertiary education.

The intention to develop and implement the NQF for tertiary education has been explained in major policy documents on HE, including *The strategic plan for*

⁽⁶⁸⁾ *The strategy of lifelong learning in the Czech Republic*. Available from Internet: http://www.msmt.cz/uploads/Zalezitosti_EU/strategie_2007_EN_web_jednostrany.pdf [cited 8.7.2011].

the scholarly, scientific, research, development, innovation, artistic and other creative activities of higher education institutions for 2011-15. ⁽⁶⁹⁾ The rationale can be summarised as follows:

- (a) improving understanding of the Czech HE system and its qualifications in European and global contexts and thus supporting learner and worker mobility;
- (b) building the base for a new quality assurance system for HE based on learning outcomes;
- (c) allowing for better permeability of learning paths in HE;
- (d) linking initial and continuing learning.

These developments – limited to sub-system perspective and very often project-based – point to a number of challenges for more coordinated developments at different levels, e.g. conceptual, design and implementation, towards a more comprehensive national qualifications framework.

Stakeholder involvement

The Act on the Verification and Recognition of Results of Further Education, which came into force in 2007, sets out the basic responsibilities, powers and rights of all stakeholders in design and award of vocational qualifications.

The Ministry of Education, Youth and Sports (MEYS) coordinates the activities of the central administrative authorities (ministries) and approves, modifies, removes and issues the list of partial and complete qualifications. It funds the activities of the National Qualification Council.

Authorising bodies (other ministries) grant authorisation to individuals or legal entities on verification that they meet the legal requirements. They monitor the fulfilment of requirements for assessment, collect data as set out in the law, and submit them to the National Institute of Technical and Vocational Education (NUOV) for central record keeping. They also participate in preparing and updating qualifications and assessment standards.

Authorised bodies (schools, associations, companies, public or private providers of further education, etc.) assess applicant learning outcomes regardless of the way they were achieved.

⁽⁶⁹⁾ <http://www.msmt.cz/areas-of-work/the-strategic-plan-for-higher-education-institutions-2011> [cited 27.7.2011].

Social partners (chambers of employers, vocational organisations, schools, representatives of universities) participate in the development of qualification and assessment standards.

The National Qualifications Council – including all relevant stakeholders – acts as an advisory body to the Ministry of Education, Youth and Sports (MEYS) on qualifications. Sector councils are in charge of developing qualification and assessment standards up to level 7 of the NSK; most qualifications are at levels 3 and 4. At higher levels they define only specialised additional qualifications, not those awarded by higher education institutions (bachelor, master and PhD degrees). (Uličná, 2010, p. 3) Opening up higher levels (up to level 7) for qualifications awarded outside higher education institutions is seen as important to support lifelong learning.

Levels and descriptors

The framework for vocational qualifications consists of eight levels, differentiated by competence. The level descriptors are closely linked to the complexity of working activities. As these descriptors have strong occupational character and the knowledge component is not very visible, it proved difficult to use these level descriptors to include results of general and/or tertiary education. ⁽⁷⁰⁾ In one of the meetings at national level the need for modification and broadening of NSK descriptors was identified. The possible decision on that will be taken only after the results of the Q-RAM project are published.

In the tertiary education system the framework will consist of two layers. The first layer will consist of generic descriptors for all levels of qualifications, compatible with the overarching framework for EHEA and partly incorporating the EQF descriptors. Learning outcomes are described as knowledge, skills and general competences, the latter including capacity to:

- make judgments,
- communicate,
- continue with further education.

⁽⁷⁰⁾ In the proposal on qualifications levels in the national qualifications systems, adopted by 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.

These descriptors cover four levels, corresponding to levels 5 to 8 in the EQF, and address tertiary vocational qualifications, bachelor, master and doctorate degrees.

The second layer will be based on subject specific benchmarks, i.e. the descriptors which cover specificities for a certain cluster of disciplines. These descriptors are being developed in cooperation with all stakeholders (see above); they will also reflect the needs of the labour market, will underline specificities of a respective cluster and will serve as contours for institutions to define the vocational profile of their degree programmes. Consequently at levels 5 to 8 two parallel sets of level descriptors will coexist.

A set of level descriptors for primary and secondary education (EQF levels 1-4) was also drafted, based on core curricula. In this proposal, descriptors are grouped into three categories: academic (consisting of knowledge, learning strategies, methods, information processing, linguistic skills, and information and communication technology); work (consisting of work skills, safety and use of tools, teamwork, evaluation of results, and knowledge of the labour market); and social (consisting of social relations communication, legal and societal norms).⁽⁷¹⁾ It was decided not to use them in the referencing process⁽⁷²⁾, but continue dialogue with all education sectors.

Use of learning outcomes

Core curricula for primary and secondary education represent a new concept, with emphasis on key competences, their connection with the education system and practical use. Expected learning outcomes are defined in terms of activities, i.e. tasks students are able to perform. The School Act, which came into force in 2005, legally regulates curriculum reform at secondary school level, emphasising learning outcomes and strengthening the influence of the social partners, especially employers. Key competences (ICT skills, learn to learn, problem-solving) have become very important. Modularisation of courses was introduced to improve transferability between various pathways and initial and continuous

⁽⁷¹⁾ Draft referencing Czech qualifications levels to the European qualifications framework, 28.2.2011, p. 45. Internal. [unpublished].

⁽⁷²⁾ It is proposed that formal education qualifications are referenced to the EQF via educational programmes.

education, but is not yet in place in most schools. (Cedefop Refernet Czech Republic, 2010) ⁽⁷³⁾

A competence-based and learning outcomes oriented approach is common to VET and HE 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. It is embedded in the Czech lifelong learning strategy. IVET framework curricula are increasingly being aligned with competences defined in the NSK. Standards for levels 4 and up are still in the process of drafting.

The competence model is the fundamental principle that links occupations, qualifications, learning and educational programmes, examination, recognition and certification. It is not only applied in the NSK development, but also in the national system of occupations, allowing for better matching and mapping skill needs and supply.

Each competence has both a skill and a knowledge component, suggesting that competences have not only a 'knowledge' dimension, i.e. field or discipline, but also an 'activity' dimension. The activity dimension is considered to be the primary. The classification starts from a two-level numerical code for the type of work activity, which was developed on the basis of detailed investigation and abstraction of work activities. Subject or discipline category is then added, taking into account particular specialisations.

Students learn key competences and expand their general and vocational education. The NSK consists of qualifications and assessment standards for complete and partial qualifications. Arrangements for recognising learning outcomes, including non-formal and informal learning, have been developed and are used.

In the Q-RAM project (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.

⁽⁷³⁾ *VET in Europe country report Czech Republic 2010*. Available from Internet: http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_CZ.pdf [cited 25.7.2011].

Validating non-formal and informal learning

The framework for vocational qualifications and the developing system for validating non-formal and informal learning are closely related. The legal framework for recognising non-formal and informal learning and the framework for vocational qualifications developments is the Act on the Verification and Recognition of Further Education Results. This act defines the conditions, responsibilities and the process for validation of non-formal learning with the view of achieving complete or partial qualification. They can be at all levels except HE degrees. (Uličná, 2010, p. 2) Partial qualifications can be part of complete qualification or can be independent additional ones. This act also defines the national register of qualifications, which is the basis for the NQF for vocational qualifications. Validation and recognition are carried out according to the qualifications and assessment standard included in the national register of qualifications. Links are increasingly being established with formal education and training as qualifications standards are the basis for new VET curricula and final exam for complete qualification is common for both ways of learning. The main focus of validation and recognition of non-formal learning is not so much on acquiring higher education level, ⁽⁷⁴⁾ but more on partial qualifications or additional qualifications, because qualifications support employment and can solve shortages in certain qualifications in the labour market. Most development is taking place in this area and the political emphasis is on supporting employability. It also gives people with low or no qualifications the chance to upgrade their status. The system for validating non-formal learning is relatively new (started in 2009) and the figures remain relatively modest (3126 by July 2010). (Uličná, 2010, p. 8-9) It is difficult to say how partial qualifications will be valued by the labour market. Since employers in sector councils design and define standards, it is expected that partial qualifications will be accepted and well valued on the labour markets.

Referencing to the EQF

The referencing of national qualifications to the EQF is the responsibility of the Ministry of Education, Youth and Sport. The NCP, established at the National

⁽⁷⁴⁾ Most applicants do not seek higher level of education, because more than 90% of population already has at least upper secondary education.

Institute for Technical and Vocational Education (NUOV) ⁽⁷⁵⁾ plays an important role in organising the referencing process on the technical level and writing the referencing report.

The draft referencing report has been prepared and presented to the EQF AG meeting in June 2011. Formal education qualifications from primary, secondary and tertiary education and national vocational qualifications, included in the national register of vocational qualifications, are referenced to the EQF levels. A report on qualifications from tertiary education to self-certify towards QF-EHEA is planned to be prepared in 2012 after the results of the Q-RAM project are available. The lack of integration with self-certification towards EHEA may point to some challenges in developing a more comprehensive approach.

Important lessons and the way forward

Reforms in the Czech Republic build on the good situation in education, training and qualifications developments. The overall qualifications attainment of the population is among highest in the EU ⁽⁷⁶⁾.

Developing a national framework for vocational qualifications, based on learning outcomes, and setting up a system for recognising and validating knowledge acquired outside formal education and training, mainly addresses the need to recognise and give value to competences and knowledge acquired outside formal education and training and to broaden and open up the national qualification system. Development of qualification standards has stimulated reforms in IVET towards strengthening the learning outcomes dimension in curricula and assessment, e.g. reform of the final exam for vocational secondary education was introduced in 2005.

The new Ministry of Education, Youth and Sport's project NSK2 and Q-RAM will build on the achievement and experience gained so far with the developments of vocational qualifications, current reform in tertiary education and other areas of education and training. They aim to address some current challenges, e.g. how to strengthen the vertical and horizontal permeability of the education and qualification system, to overcome the divide between pre-university and university education, and better link VET and HE. This is exemplified by the current discussions and planned reform of higher vocational

⁽⁷⁵⁾ In July 2011, the institute (NUOV) was merged with two other agencies. The successor organisation is the National Institute for Education.

⁽⁷⁶⁾ For example 90% of working population (aged 25-64) has at least upper secondary education and the drop-out among young people (18-24) is among the lowest in Europe.

schools. ⁽⁷⁷⁾ Both projects also aim to involve labour market stakeholders in a more systematic manner in qualifications development, not only at lower levels but also at levels 5 to 8.

Bringing together emerging sub-frameworks into a more coherent framework with uniform and comprehensive definition of learning outcomes could help address some challenges mentioned above. Introducing a common language across education sectors would be an important communication tool for different stakeholders to engage in reforms to strengthen the transparency and coherence of the national qualification system.

The choice to link together the NSK approach with information systems developed for the labour market is interesting and shows the importance of agreeing on a conceptual approach (in this case competences) able to bridge qualifications and occupations.

Main sources of information

The National Institute of Technical and Vocational Education (NUOV) – since July 2011 merged with two other agencies to the National Institute for Education – 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> [cited 7.7.2011]

A register of all approved qualification and assessment standards is available from <http://www.narodni-kvalifikace.cz/> [cited 7.7.2011]

Q-RAM project: <http://www.msmt.cz/european-union/ipn-in-the-field-of-tertiary-education-research-and-development/qualification-framework-for-tertiary-education> [cited 7.7.2011]

⁽⁷⁷⁾ They are governed by legislation on secondary education.

DENMARK

Introduction

The Danish national qualifications framework for lifelong learning was formally referenced to the EQF in May 2011, signalling that the framework is now operational. The implementation of the 8-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 work on the framework was initiated in 2006 and builds directly on – and integrates – the qualification framework for higher education established in 2006-07. The idea of a comprehensive qualifications framework was first raised (2005) in the context of the work on a national strategy on globalisation (A Government strategy for Denmark in the global economy), with the need for a coherent qualifications system aiming at permeability and transparency underlined. European developments also played a significant role and the setting up of the inter-ministerial group in 2006 was triggered by the preparatory work on the EQF launched by the European Commission and the Council in 2004-05.

Rationale, main policy objectives and scope of the framework

The Danish NQF provides a comprehensive, systematic overview, divided by levels, of qualifications that can be acquired within the Danish system. It covers primary and lower secondary level, university level and adult and continuing education and training. It is also stated that the NQF includes 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 (The Danish Evaluation Institute, 2011, p. 13-14) ⁽⁷⁸⁾.

⁽⁷⁸⁾ *Referencing the Danish qualifications framework for lifelong learning to the European qualifications framework*, p. 13-14. Available from Internet: http://www.iu.dk/dokumentation/kvalifikationsrammer/National_report_Referencing_DK_Qualifications_Framework_to_EQF.pdf [cited 13.10.2011].

The transparency and overview introduced by the framework is supposed to make visible the pathways leading to a qualification, how they can be acquired and what they can be used for. Being based on a learning outcomes approach, the framework aims to make it easier to compare different degrees and certificates and to see how they relate to each other. The framework can also be seen as a reference point for new qualifications, making it easier to identify their level and profile. The framework is an effort to realise an education, training and learning system, always making it possible for individuals to progress, be this vertically or horizontally and irrespective of their prior learning, age or employment situation. This transparency also supports mutual recognition. Each of the levels of the Danish framework is explicitly referred to the appropriate EQF level and can be directly compared to the qualifications levels of other European countries. The framework has no regulatory function for qualifications at levels 1-5, emphasising its main transparency function. Levels 6-8 refer to the legal framework covering universities and higher education and their use is strictly regulated as regards quality assurance and accreditation.

The NQF implemented in 2011 is presented as work in progress and evaluation is expected to take place as early as 2012-13. A point of particular importance is the potential opening up of the framework to private sector or non-state regulated certificates and diplomas. The upcoming review is expected to make proposals on how to accomplish these qualifications, and, in particular, how the quality assurance and accreditation will be handled. This potential opening up of the NQF is in line with the emphasis on transparency but indicates a willingness to go beyond a mere description of existing, public provision: it points towards a more fundamental reform of accreditation and quality assurance principles and mechanisms.

Stakeholder involvement

A broad range of stakeholders have been involved throughout the development and implementation period. Various committees, consultations, seminars and conferences have participated, giving ample opportunity for those interested to voice their support or concern.

The social partners have been systematically consulted and involved throughout the process including seminars, national consultation and involvement of relevant education councils and training committees, as have representatives of the different education and training institutions. The role of the social partners is being described as constructive but critical and their support to developments

is seen as a precondition for successful implementation and referencing in 2011. Some social partners have seen the NQF as an instrument for national reform; its European and international implications have been less emphasised. Other social partner representatives, notably employers, have questioned the direct added value for companies. Some concerns have been expressed by the social partners as regards the possible impact on curriculum development and existing governance structures and practises.

Levels and descriptors ⁽⁷⁹⁾

The eight-level structure adopted for the Danish NQF is defined by knowledge (*Viden*), skills (*Færdigheder*) and competences ⁽⁸⁰⁾ (*Kompetenser*). The 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 qualifications, 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 the situation is 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;

⁽⁷⁹⁾ See Annex 3 for complete descriptors.

⁽⁸⁰⁾ Note that the Danish NQF, in contrast to the EQF, uses the plural 'competences'.

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

Table 2. **Level descriptor in the Danish NQF for lifelong learning**

Knowledge/<i>Viden</i>	Skills/<i>Faerdigheder</i>	Competence/<i>Kompetenser</i>
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 the adult education sector and for continuing vocational education and training. A supplementary qualification can either be a supplement (addition) to a qualification; it can be a part (module) or it can be an independent entity not related to any other qualification.

The Danish NQF for LLL and its link to higher education

Denmark approved its qualifications framework for higher education in 2008-09, following a long preparatory period dating back to 2003. The country has generally played a very active role in promoting the framework concept in the Bologna cooperation, the first comprehensive report on the framework for qualifications in the EHEA being published by the Danish Ministry of science, technology and innovation in 2005.

Although applying the general descriptor approach outlined above at all levels, the new Danish NQF draws a clear distinction between levels 1-5 and levels 6-8. The latter are identical with the levels descriptors in the Danish QF for HE (Bologna) 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 1-5 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 6-8, as is the case for the Danish QF for HE, 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 HE for qualifications at these levels.

This distinction, which is not used by other countries, implies that all qualifications at levels 6-8 need to be defined and accredited according to the QF for HE. For the moment there are no public recognised qualifications in the Danish education system at level 6-8 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.

Discussions on the best/full fit principle were quite intensive in the period leading up to the 2009 proposal. While the distinction between best and full fit makes it clear that the Danish NQF consists of two clearly distinct elements, and thus will avoid any confusion, it may also be argued that it will prevent development of higher level qualifications outside the strict cycle approach, for example in the form of part-qualifications addressing particular, knowledge, skills or competence dimensions.

Use of learning outcomes

The learning outcomes approach is widely accepted in all segments of the education and training system 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 (The Danish Evaluation Institute, 2011)

(⁸¹). The result of this process is shown below, showing a strong convergence between the Danish Framework and the EQF but a linking of Danish level 1 to EQF level 2.

Table 3. **Levels correspondences 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, the Danish Agency for International Education.

Important lessons and the way forward

Denmark has made rapid progress in developing and now implementing a national qualifications framework for lifelong learning. This success has largely been achieved by accepting that not all problems can be solved immediately and a NQF will also need to develop beyond 2012.

The distinction between levels 1-5 and levels 6-8 is seen as a compromise solution to establish an overall coherent qualification framework also including the levels and the qualifications of the Danish 'Bologna' qualification framework. Another issue which has been raised, but not solved, is the potential inclusion of certificates and diplomas awarded outside the public domain. This issue will be considered on the basis of the evaluation of the framework and further work on how inclusion of non-public certificates and diplomas can be including in the future development of the framework. An important lesson to be drawn from the Danish case is the need for a pragmatic, step-by-step approach.

(⁸¹) Available from Internet:
http://www.iu.dk/dokumentation/kvalifikationsrammer/National_report_Referencing_DK_Qualifications_Framework_to_EQF.pdf [cited 13.10.2011].

Main sources of information

A web-site for the Danish qualifications framework is available on

<http://en.iu.dk/transparency/qualifications-frameworks>

The web page of the Danish NCP (IU) is available from Internet:

<http://www.udiverden.dk/Default.aspx?ID=3771>

ESTONIA

Introduction

Estonia is implementing a comprehensive national qualifications framework for lifelong learning, the Estonian Qualifications Framework (EstQF) ⁽⁸²⁾. It includes all state recognised qualifications ⁽⁸³⁾ including general, vocational and higher education as well as professional qualifications.

The framework initiative is based on the amended Professions Act which came into force in September 2008 ⁽⁸⁴⁾ and supports the transition from the present competence-based five-level qualification system to a new eight-level framework. It is a bridging framework which brings together sub-frameworks for HE qualifications ⁽⁸⁵⁾, VET qualifications ⁽⁸⁶⁾, general education ⁽⁸⁷⁾ and

⁽⁸²⁾ The implementation of the EQF and the NQF has broad political support. The Government of the Republic adopted a Development plan for Estonian vocational education and training system 2009-13, with focus on the implementation of the EQF, raising quality, updating curricula, and recognition of prior learning.

Development plan for Estonian vocational education and training system 2009-13. Available from Internet:

http://www.jkhk.ee/orb.aw/class=file/action=preview/id=6092/EN_KH_arengukava_181109.pdf [cited 7.7.2011].

⁽⁸³⁾ 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.

⁽⁸⁴⁾ Amended Professions Act (English version) is available on the website of the Estonian Qualifications Authority <http://www.kutsekoda.ee/en/kutsesysteem/oigusaktidkutseseadus> or on the website of the Ministry of Education and Research, <http://www.hm.ee/index.php?1510018>, [cited 7.7.2011].

⁽⁸⁵⁾ Referred to as standard of higher education.

⁽⁸⁶⁾ Referred to as vocational education standard.

⁽⁸⁷⁾ Referred to as national curriculum for basic schools and national curriculum for upper secondary schools.

professional qualifications ⁽⁸⁸⁾ with their more detailed and specific descriptors and rules for designing and awarding qualifications.

The sub-framework for higher education, reflecting the principles of the European higher education area, was adopted in August 2007 and described by the higher education standard. It has three levels. The first level contains two qualification types assigned to the sixth level of the NQF: a bachelor's degree and applied higher education diploma. The second level contains a master's degree and is referenced to the seventh level, while the third level contains a doctorate degree assigned to the eighth level of the NQF. General descriptors follow the logic of Dublin descriptors, but are adjusted to national needs. (Cedefop ReferNet Estonia, 2010) ⁽⁸⁹⁾

Qualifications at level 5 of the NQF are subject to intensive discussions. The main question asked is whether VET or HE legislation should govern these types of curricula and qualifications (there are differences in theory/practice proportions, teacher's qualifications, financing mechanisms). Some post secondary technical education programmes have been upgraded into applied higher education programmes according to the needs of the labour market. (Neudorf, 1996) ⁽⁹⁰⁾. Estonia does not yet have short cycle higher education qualifications. (Kirsch, Beernaer, 2011) ⁽⁹¹⁾ Developing qualifications at this level is seen crucial to improving permeability between different sub-systems (especially VET and HE).

Rationale, main policy objectives and scope of the framework

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;

⁽⁸⁸⁾ Level descriptors for professional qualifications were drafted.

⁽⁸⁹⁾ *VET in Europe country report Estonia 2010*. Available from Internet: http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_EE.pdf [cited 11.7.2011].

⁽⁹⁰⁾ *Survey on tertiary professional/vocational education*. Available from Internet: http://www.innove.ee/orb.aw/class=file/action=preview/id=5644/Tertiary_education_1997.pdf [cited 7.7.2011].

⁽⁹¹⁾ Kirsch, Magda; Beernaer Yves; EURASHE (2011). *Short cycle higher education in Europe level 5: the missing link*. Available from: <http://eurashe.innovationpros.net/wp-content/uploads/2011/11/SCHE-in-Europe-long-version-with-cover140311.pdf> [cited 19.12.2011].

increase the understanding of Estonian qualifications in the country and abroad;

- introduce common quality assurance criteria;
- support validation of non-formal and informal learning;
- monitor the supply and demand for learning.

More specifically, one of the main goals of the eight-level NQF is to improve comparability between formal school-leaving certificates/diplomas and professional competences and qualifications, which support entrance to the labour market. In Estonia, the graduation certificate from a VET or HE institution alone does not give the graduate a professional qualification. The primary professional award (qualification) can be obtained by passing a professional examination by awarding bodies in the professions. Currently, only one third of VET graduates take this exam. According to the Professions Act from 2011 onwards, VET and HE institutions, which have curricula based on professional standards and are accredited against quality standards, could apply to become an awarding body for professional qualifications together with the school leaving diploma or certificate. (Gross, 2010, p. 5) ⁽⁹²⁾

In recent years, different sectoral approaches to understanding and using the previous five-level qualifications framework were developed; consequently, occupational standards and educational programmes were relatively weakly linked.

It is expected that development of the NQF will increase the coherence of the education and training system and help to introduce coherent methods for standard-setting. The NQF is also seen as an instrument for broader involvement of stakeholders in education and training, potentially strengthening ownership and mutual trust.

Stakeholder involvement

The Ministry of Education and Research has coordinated the development of the Estonian Qualifications Framework together with the Estonian Qualifications Authority.

The Qualification Authority (QA) (Kutsekoda) was established in 2001 with the aim of developing the competence-based professional qualifications system,

⁽⁹²⁾ *European inventory on validation of non-formal and informal learning 2010, country report Estonia*, p. 5. Available from <http://libserver.cedefop.europa.eu/vetelib/2011/77456.pdf> [cited 7.7.2011].

which was put in place in parallel to the existing formal education system under the Ministry of Education and Research. Based on the Professions Act of 2001 professional qualifications were referenced to the five-level professional framework where level I was the lowest and level V the highest.

The amended Professions Act of 2008 provides the legal basis for the transition to the eight-level comprehensive framework, which also includes qualifications from formal education and training (HE, VET and general education qualifications).

The Ministry of Education and Research and the Estonian Qualifications Authority are the main bodies involved in developing and implementing the comprehensive NQF. However, other ministries, institutions and social partners are involved: the Ministry of Social Affairs; the Ministry of Economic Affairs and Communications; the Chamber of Commerce and Industry; the National Examinations and Qualifications Centre (REKK); the Qualifications Authority; the Confederation of Estonian Trade Unions; the Estonian Employers' Confederation; and the Estonian Employees' Unions' Confederation).

The Qualifications Authority coordinates 16 professional councils and provides technical support to the Board (see below); it cooperates with other institutions, e.g. the national Examination and Qualifications Centre and Quality Agency for higher education.

The Chamber of Commerce and Industry, the Estonian Employers' Confederation and the Central Federation of Trade Unions participate in professional councils which are responsible for preparing, amending, renewing or validating professional standards. The National Examination and Qualification Centre is responsible for preparing, registering and developing national VET curricula.

A board of chairmen of professional councils has been introduced by the amended Professions Act to improve cross-sectoral cooperation and coherence in the qualification system.

Establishing a permanent steering committee, which will oversee the NQF implementation, is being discussed.

Levels and descriptors

The NQF is based on eight levels. Level descriptors of the NQF for LLL are identical to the 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⁽⁹³⁾. More detailed descriptors are developed in four sub-frameworks for general education, initial vocational education, higher education and professional qualifications.

Two types of qualifications are included:

- formal education qualifications, which are awarded after completion of educational programmes at all levels (general, vocational, higher) and
- professional qualifications⁽⁹⁴⁾, where individuals are issued a certificate of knowledge, skills and competences required for working in a specific occupation or profession.⁽⁹⁵⁾

There is currently a discussion about also including partial qualifications in the NQF, which should have value on the labour market; and using units in the qualifications design.

Use of learning outcomes

There is strong will and support for introducing the learning outcomes approach as a part of the national reform programme for general education, VET and HE. Linked to this is an increased focus on recognition of prior learning. Teacher training is seen as a necessary part in realising this strategy, which also is supported by research projects.

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 II to IV of the NQF and are described at minimum level. 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.

Programmes in VET are modularised and outcome-based. All the programmes will be reassessed in the future, taking into consideration possible

⁽⁹³⁾ Amended Professions Act (English version) is available on the web site of the Estonian Qualifications Authority. Available from Internet:
<http://www.kutsekoda.ee/en/kutsesysteem/oigusaktidkutseseadus> [cited 24.6.2011].

⁽⁹⁴⁾ Professional qualifications may be viewed as qualifications of in-service retraining. There are currently more than 700 of them, based on occupational standards, which can be placed on all 8 levels of the NQF. Information obtained from Draft referencing report, 8.10.2010, p. 8.

⁽⁹⁵⁾ These qualifications are based on professional standards and examinations. Their development and administration is the responsibility of the Estonian Qualifications Authority (Kutsekoda). Applying professional qualifications is voluntary, except for regulated professions; (e-mail correspondence with Ministry of Education).

changes in the occupational (professional) standards, aiming at increased compatibility of educational and professional (occupational) qualifications. This will be step-by-step development in each sector. All initial VET study programmes will be learning outcomes based by 2014.

As a result of a previous project, more than 700 professional standards, defined in terms of knowledge, skills and competence, have been detailed. A new model of occupational standards is to be gradually developed in the period 2008-13 as an obligatory basis for curriculum development.

New learning programmes have been implemented in HE institutions as from September 2009. The Universities Act and Applied Higher Education Institutions Act now allow for accreditation of prior and experiential learning in HE curricula. (Gross, 2010, p. 1) ⁽⁹⁶⁾

Similar amendments to the VET Institutions Act came into force in November 2009 and allow for validation of non-formal learning in initial VET. Recognition of prior learning is also used in the system of awarding professional qualifications. Recognition of prior learning has not yet begun in general education.

The adopted Estonian lifelong learning strategy emphasises the principle that all strategic national, regional and local documents should pay attention to the development of the lifelong learning system, including the recognition of prior learning and work experience.

Referencing to the EQF

One referencing report has been prepared to link national qualifications levels to the EQF and self-certify to QF-EHEA; it was presented to the EQF AG in October 2011. The steering committee consisted of representatives of ministries, state chancellery, employer and employee organisations and student and pupil representatives. Discussions on aligning qualifications to levels 3 and 4 were intense. Some initial concerns were expressed over the alignment of the upper secondary education certificate, giving access to higher education to level 3. After broad consultation a decision was taken to align both upper secondary qualifications (general and VET) to level 4.

⁽⁹⁶⁾ Except of final thesis or examination all other part of higher education programmes can be proved through recognition of prior learning.

Table 4. **Levels correspondences 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

Important lessons and the way forward

One of the key objectives of the EstQF is to improve comparability between formal school leaving certificates and professional qualification. 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’.⁽⁹⁷⁾ EstQF regulates key quality criteria for qualifications to be included in the framework (e.g. on learning outcomes-based qualifications standard, curriculum or professional standard), be awarded by institution (educational institution, professional associations), to be accredited by the State and be quality assured. Level 5 seems a grey area as no formal qualifications are aligned to this level. Important discussions on how to fill this gap and provide for better progression and access possibilities to higher education are continuing.

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

Main sources of information

The Estonian Qualification Authority is designated as EQF national coordination point (NCP) <http://www.kutsekoda.ee> [cited 7.7.2011]

Information on NQF development is available from Internet:

<http://www.valew.eu/project-valew/project-partners/6-estonian-qualification-authority> [cited 7.7.2011]

⁽⁹⁷⁾ Draft referencing of the Estonian qualifications and qualifications frameworks to the European qualifications framework. 2011. Internal.

Information about national VET curricula is available from Internet: <http://www.ekk.edu.ee/valdkonnad/kutseharidus/kutseoppe-riiklikud-oppekavad> [cited 7.7.2011]. Information about accreditation of HE institutions is available from Internet: <http://www.ekak.archimedes.ee/en> [cited 7.7.2011].

FINLAND

Introduction

The work on the Finnish framework started in August 2008. A national committee consisting of all main stakeholders presented a first proposal in June 2009 (a 'national framework for qualifications and other competences'). This was followed by two public consultations in the autumn of 2009 and in summer 2010 and the presentation of a government proposal in August 2010.

The new NQF covers officially recognised qualifications (general, vocational education and training and higher education) at all levels, and can be described as comprehensive. The adoption of the NQF by Parliament was delayed due to elections in spring 2011. The current Government plans to submit the same proposal to the Parliament (proposal for an Act and the National framework for qualifications and other learning) in September/October 2011 and it is planned that the legislation will come in to force in January 2012.

A qualification framework for higher education, in line with the Bologna process, was developed in 2005 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 (possibly by the end of 2011).

Rationale, main policy objectives and scope of the framework

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 of an NQF

in Finland, pointing to the transparent character of the existing education and training system and the possibility to refer directly to the EQF.

This scepticism has largely been replaced by broad agreement that the framework has a long-term role to play in helping to improve education and training and its links to the labour market and to society in general.

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.

The most important objective of the NQF, however, is to increase the emphasis on the level of knowledge, skills and competences required by different qualifications. This will assist education and training institutions in further developing their curricula and their programmes; it will also pay more attention to learning objectives and learning outcomes. More visible descriptions of what is expected from a qualification will, it is emphasised, improve the overall quality of Finnish education and training.

The framework covers, as already mentioned, all officially recognised qualifications (general, vocational education and training, and higher education) at all levels. It will also cover official qualifications awarded outside the remit of the Ministry of Education and Culture, for example related to the armed services, police, prison and rescue sector. The framework introduces the concept of 'extensive competence modules' (in Swedish *samlade kompetenser*) 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. Examples are the continuing training offered to graduates from universities and polytechnics, for example doctors and nurses, and the occupational certificates and licenses required by divers and welders.

While the plan is that these 'extensive competence modules' will be covered only gradually by the framework, the aim to open up the framework towards the labour market, the private sector and lifelong learning in general is important. It remains to be seen how this will be dealt with in practices, not least with respect to quality assurance arrangements.

Stakeholder involvement

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 concerning the level descriptors were made. The decision to give the framework a legal basis approved by the Finnish Parliament further strengthens the legitimacy and visibility of the initiative.

The Finnish NQF for LLL and its link to higher education

A qualification framework for higher education, in line with the Bologna process, was developed in 2005; this forms an integrated part of the new comprehensive NQF. Higher education has generally supported the development of the NQF and has contributed actively to the framework design. This seems to reflect the existing Finnish education and training system where the 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 traditionally strong role played by non-university higher education (promoting vocational training at bachelor and master level) and by the increasingly

important competence-based qualifications approach applied for vocational qualifications at levels corresponding to 4, 5 (and possibly 6) 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.

Broad acceptance of the competence-based approach, and its expansion into new areas, may underpin the consensus in Finnish NQF developments and the, relatively speaking, lack of conflict over linking general, vocational and higher education qualifications.

Levels and descriptors

An eight-level framework described through knowledge, skills and competence is suggested ⁽⁹⁸⁾. 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. The inclusion of 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 6-8 use the same basic approach but also largely reflect the descriptors of the earlier proposal for higher education qualifications framework. Table 5 shows the components used for levels to define and describe levels in the Finnish NQF.

Table 5. **Level descriptor in the Finnish NQF**

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

⁽⁹⁸⁾ See proposed level descriptors in Annex 3.

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

The background document for the Government proposal and draft Decree illustrate the main principles for placing qualifications at particular levels, and how the learning outcomes approach has been applied. Qualifications of the same type have generally been placed at the same level. This applies also to the majority of vocational qualifications (level 4), 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. This applies, for example, to vocational qualifications in construction (speciality in production). It 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 type of qualifications. Another interesting example is the specialist vocational qualification for riding teachers which is placed at level 6. The placement has been based on a best-fit judgement of the learning outcomes required for this particular qualification.

Use of learning outcomes

The use of a learning outcomes based approach is not new in Finland; VET, for example, has used a competence based approach since the early 1990s. This approach has made it possible to integrate validation of non-formal and informal learning into the system, allowing for flexible access, progression and certification. Learning outcomes are increasingly used to define qualifications in other areas of education and training. This is illustrated in higher education, where extensive work is currently being carried out.

Learning outcomes approaches are determined in different ways, for example by the national core curricula, by national requirements for vocational qualifications and in the laws and decrees regulating higher education. Higher education institutions also enjoy substantial autonomy in the way learning outcomes are applied in their programmes, leaving room for substantial differences in approach and quality.

Several of the stakeholders interviewed in connection to with report see the NQF as an instrument for improving the coherence of learning outcomes. The NQF levels and descriptors introduce a new reference-point which can be used

for comparing institutions and sectors. However, this will require the NQF to be actively marketed as an instrument relevant for curriculum and programme development.

Validating non-formal and informal learning (Nevala, 2010) ⁽⁹⁹⁾

According to the European inventory on validation (Nevala, 2010), 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 the education and training system 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.

The European inventory also considers that NQF development has made a positive contribution to the development of validation of informal and non-formal learning in Finland. First, it has led to new and intensified discussions about validation of prior learning in the country. Second, NQF development has meant that learning outcomes (in terms of knowledge, skills and competences) have been defined for all levels (Blomqvist, 2010) ⁽¹⁰⁰⁾. It is expected that the elaboration of learning outcomes for each level will make it easier than before to assess prior learning, as it can be assessed against the learning outcomes described in the NQF. So far no common standards or requirement have been introduced for validation that would include all different levels of education (Cedefop, 2010b) ⁽¹⁰¹⁾. The National Board of Education has drafted national

⁽⁹⁹⁾ *European inventory on validation of non-formal and informal learning 2010, country report Finland*. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77460.pdf> [cited 7.7.2011]

⁽¹⁰⁰⁾ Finland: Recognition and international comparability of qualifications. In Madhu, S. & Duvekot, R. (2010). Benchmarking national learning cultures on linking recognition practices to qualifications frameworks. Unesco International Meeting 'Linking recognition practices to qualifications frameworks: North-South collaborative research' UNESCO Institute for lifelong learning, Hamburg, Germany. 11-12 March 2010.

⁽¹⁰¹⁾ *The development of national qualifications framework in Europe (August 2010)*. (Working Paper; No 8). Available from Internet: http://www.cedefop.europa.eu/EN/Files/6108_en.pdf [cited 7.10.2011].

qualification requirements for each competence based qualification ⁽¹⁰²⁾. The documents specify the 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 HE, 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 the validation of informal and non-formal learning in Finnish higher education

Referencing to the EQF

The Finnish National Coordination Point for EQF (which is the National Board of Education) was appointed already in June 2008 (before the work on the NQF started). Referencing of national qualifications levels to the EQF has started along with the work of the committee which has prepared the proposal for the national framework of qualifications. The referencing report is expected to be presented to the EQF AG mid-2012.

Important lessons and the way forward

This Finnish NQF is interesting as it is presented as a tool for long-term development. The introduction of learning outcomes based levels is seen as instrumental for increasing qualifications consistency in Finland. While learning outcomes are used widely in almost all the education and training sectors, their interpretation varies, thus risking unacceptable differences in quality 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 very much 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

⁽¹⁰²⁾ 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.

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 approval of the NQF by the Parliament expected in late 2011 only marks the start of a long-term development; the success of the Finnish NQF depends on it becoming a living framework further promoting dialogue and debate.

Main sources of information

Finnish Ministry of Education: <http://www.minedu.fi/OPM/?lang=en>

Finnish National Board of Education: <http://www.oph.fi/qualificationsframework>

FRANCE

Introduction

The setting up, in 2002, of the National Committee on Vocational Qualifications (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'expérience*), 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.

Taking into account experiences since 2002, and in particular the impact of the EQF, a revision of the original framework is now under way. The five-level structure dating back to 1969 will (probably) be changed and replaced with a seven- or eight-level structure. A note on this revision, and on the referencing to the EQF, was sent to the Prime Minister in early autumn 2009. Based on this note, the framework was (on a preliminary basis) referenced to the EQF in October 2010, using the original 5-level structure as reference point.

The proposed revision is still being considered and a final decision is expected in 2012. When accepted this will pave the way for a second generation French qualifications framework.

Rationale, main policy objectives and scope of the framework

The French NQF, as defined by the national register of vocational qualifications (RNCP), covers all vocationally or professionally oriented qualifications, including all higher education qualifications with a vocational and professional orientation and purpose ⁽¹⁰³⁾. The framework covers three main types of qualifications:

- those awarded by French ministries (in cooperation with the social partners through a consultative vocational committee, 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.

Compared to the majority of other European NQFs, the French framework differs in two important respects:

- 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 using the Europass tools in an integrated way), the framework directly influences participation, funding and quality assurance issues;

⁽¹⁰³⁾ The RNCP currently covers 6440 published (in the Official Journal) certificate (qualifications) 'fiches'; 1260 of these are 'old' certificates not awarded any more. Certificates in higher education grades are as follows:

- 512 masters have been published
- 258 titres d'ingénieurs (grade of master)
- 88 licences
- 1431 licences professionnelles
- Short HE certifications (level 5 EQF):
- 117 brevet de technicien supérieur (BTS)
- 29 BTSA (same thing in the field of agriculture)
- 43 DUT (diplomes universitaires technologique)

- the French NQF has a 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 general upper secondary qualifications (the Baccalaureate).

The French NQF is defined by its labour market focus. The framework responds to a situation where an increasing number of students 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.

Stakeholder involvement

CNCP 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 the coordination of 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 existing in France, but also for reasons of credibility and ownership.

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. In principle including qualifications awarded by ministries as well as chambers and private enterprises, the French framework can be described as more open and inclusive than many other European NQFs. This openness is also reflected in the steady increase in the number of qualifications registered, currently more than 5 000.

A new law in November 2009 requires the CNCP to give advice prior to any creation of a new qualification by public institutions, including higher education institutions. 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.

Levels and descriptors

The original five-level structure introduced in 1969 was used as 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 and the development and introduction of a more detailed structure is seen as critical. These descriptors will furthermore have to be consistently based on the learning outcomes approach; differentiated through the concepts of skills, knowledge and competence.

The national council on statistics (CNIS) commented on the debate on a new level structure (CNCP, The French national Committee for vocational certification, 2011) ⁽¹⁰⁴⁾ by stressing that it '... would like to see these reflections lead to a new classification of certifications that takes into account changes in the structure of qualifications and the links set up within European higher education.' A draft 8-level structure will probably be ready in December 2011. This draft will take into account the input given by the national council on statistics. A particular issue in the French case is how the new structure will link to the standard classification for occupations (ISCO). Also, the current level 5 (the lowest) is correlated to minimum wages, which complicates any change.

⁽¹⁰⁴⁾ Referencing of the national framework of French certification in the light of the European framework of certification for lifelong learning. Paris: CNCP. Available from Internet: <http://ec.europa.eu/eqf/uploads/file/Report-FR-NQF-EQF-VF.pdf> [cited 10.10.2011].

Table 6. **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 one 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 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 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 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.

Use of learning outcomes

In contrast to the use (as for 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 education and training system, including initial, compulsory education. This approach is broadly accepted within initial vocational education and training and gradually so in other areas 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 is still only partially introduced in higher education. According to an overview from 2008, only a minority of the existing 83 universities has fully implemented this approach. 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 universités*) 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 the students.

The learning outcomes descriptions form the basis on which higher education qualifications are approved, a process which has to be renewed every four years. The Bachelor Follow up Committee has produced very detailed papers on the way bachelor degrees should be designed. There are also many inter-university 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 meetings have been/are being held at regional level 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. We can speak of four main approaches:

- qualifications based on training modules, the learning outcomes of each module being assessed separately;
- qualification based on a two-block approach, theory + practical experience, the learning outcomes of the two blocks being assessed separately;
- qualification linked to a single, coherent block of learning outcomes/competences requiring a holistic approach to assessment of learning outcomes;
- qualification 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 the competence/learning outcomes dimension. 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.

Referencing to the EQF

Work on the 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 has involved all ministries, social partners and other stakeholders (represented in the CNCP). Approximately 25 persons meet on a regular basis, also including representatives of the regions, statisticians, etc. 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 Table 7:

Table 7. Levels correspondences established between the French qualifications framework and the EQF

French 5-levels 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 5 level-structure in terms of specificity and ability to reflect the diversity of qualifications covered by the French framework. This is exemplified by level I (highest) which covers both master and doctorate, and by level V (lowest) which covers all initial qualifications.

Referencing the lowest level of French qualifications to the EQF has posed a particular challenge. Looking at the qualifications covered by the current level V, these could be expected (based on a consideration of learning outcomes) be expected to cover 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 don't exist in the French system.

Representatives of the CNCP have indicated that a revised and updated referencing report may be presented to the EQF AG in 2012-13. This depends on the adoption of the revised level-structure and clarification of how it will influence the October 2010 referencing.

Important lessons and the way forward

The French NQF operates with less clear distinction between VET and higher education than many other European countries. Since the 1970s, vocational courses and programmes have been an important and integrated part of traditional universities and both bachelor and master degrees (with a vocational profile) are awarded. Outside the universities we find specialised 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. The *Ingénieurs* coming out of these institutions or students in business schools hold qualifications at a high level, equivalent to those coming out of universities with a master degree. It is the Ministry of HE that 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 somewhat lessened, in particular as a key-qualification like the general Baccalaureate is kept outside the framework. The same applies to important parts of general higher education,

The introduction of a new level structure to replace the 1969 structure could help to move the French NQF further forward. For non-French observers the situation today is confusing and lacking in transparency; the following questions need to be answered:

- what is the relationship between the RNCP and other (general education) certificates in France;
- why are there no qualifications at a lower level than EQF 3 in France;

- what is the consequence of excluding the main University entrance exam (the general Baccalaureate) from the framework?

Main sources of information

Information is available on the web site of the National committee on vocational qualifications (CNCP) <http://www.cncp.gouv.fr/gcp/pages>

GERMANY

Introduction

A final proposal for a comprehensive national qualification 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 and *Kultusministerkonferenz*, 2011) ⁽¹⁰⁵⁾. It was submitted to the Federal Ministry of Education and Research and the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Republic of Germany for approval and formal adoption. It will include qualifications obtained in general education, higher education and vocational education and training. Implementation has started. In the first phase, only full formal qualifications will be referenced to the DQR. In a later phase, informally and non-formally acquired qualifications and competences will also be included.

The DQR proposal 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* 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 an extensive testing phase to be followed by full scale implementation. The piloting stage (May-October

⁽¹⁰⁵⁾ The German qualifications framework for lifelong learning adopted by the 'German qualifications framework working group' (AK DQR), 22 March 2011. Available from Internet: <http://www.deutscherqualifikationsrahmen.de/de?t=/documentManager/sfdoc.file.supply&s=Ps4JMwXnVSyF11k70&fileID=1306419029291> [cited 20.5.2011].

2009) used qualifications from selected sectors (IT, metal, health and the trade sector) as 'testing ground' to link exemplarily qualifications to the level of DQR. A broad range of stakeholders, experts from school-based and work-based VET, continuing education and training, general education, HE, trade unions and employers collaborated in testing the proposal. Four working groups produced reports with detailed presentation of methodology used, qualifications taken into consideration, and open questions⁽¹⁰⁶⁾. Following the evaluation of the testing phase, some amendments were included in the final proposal (e.g. in the level descriptors). Implementation includes first preparing a guide to aid alignment of qualifications across the German education system in cooperation with all stakeholders (in preparation) and then the actual alignment of qualifications to the DQR levels.⁽¹⁰⁷⁾ In the next stage, the criteria to connect non-formal and informal learning to the DQR will be developed. (Dehnbostel et al. 2010; Gutschow, 2010)⁽¹⁰⁸⁾ A report exploring legal consequences of the DQR including setting up a national coordination point has been prepared. (Herdegen, 2009)⁽¹⁰⁹⁾

An NQF for the higher education sector (related to QF-EHEA) was established in 2005 and then put in place. In January 2010, the self-referencing report on the compatibility of NQF for HE with the QF-EHEA was published (Federal Ministry of Education and Research (BMBF) and Standing Conference of the Ministers of Education and Cultural Affairs of the Länder of the Federal Republic of Germany (KMK), 2008).⁽¹¹⁰⁾ The DQR for lifelong learning is compatible with NQF for HE and levels 6, 7 and 8 correspond to levels 1

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- ⁽¹⁰⁶⁾ Reports are available from Internet:
<http://www.deutscherqualifikationsrahmen.de/SITEFORUM?t=/documentManager/sfdoc.file.contentType&e=UTF-8&i=1215181395066&l=1&pathID=1282918786834> [cited 20.5.2011]
- ⁽¹⁰⁷⁾ Three issues, namely inclusion of the secondary school leaving certificate, giving access to universities, inclusion of qualifications acquired in dual system and validation of non-formal learning are in the centre of the current discussions.
- ⁽¹⁰⁸⁾ Two surveys have been prepared.
Kurzexpertise Einbeziehung von Ergebnissen informellen Lernens in den DQR, Bonn, Hannover März 2010.
Expertise zur Anerkennung von nicht formal und informell erworbenen Kompetenzen. Bonn: BIBB.
Available from Internet:
<http://www.deutscherqualifikationsrahmen.de/SITEFORUM?t=/documentManager/sfdoc.file.contentType&e=UTF-8&i=1215181395066&l=1&pathID=1288605955587> [cited 10.10.2011]
- ⁽¹⁰⁹⁾ Der Europäische Qualifikationsrahmen für lebenslanges Lernen – Rechtswirkungen der Empfehlung und Umsetzung im deutschen Recht. [unpublished].
- ⁽¹¹⁰⁾ The compatibility of the qualifications framework for German higher education qualifications with the qualifications framework for the European higher education area, 18 September 2008. Available from Internet:
http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qualifications/documents/NQF_Germany_self-certification_English.pdf [cited 19.4.2011].

(bachelor level), 2 (master level) and 3 (doctorate level) of the QF for HE. The NQF for HE is likely to remain the main reference for higher education as its descriptors are more detailed than those in the proposed NQF for LLL and it is designed to suit the specific needs of HE. QF for HE has a strong emphasis on knowledge component and development of competences such as responsible citizenship, cultural awareness, etc. However, both frameworks share common principles and the proposed DQR for lifelong learning aims at integrating all areas of learning.

Rationale, main policy objectives in scope of the framework

The work on the DQR responds to the EQF initiative which Germany has actively supported from the start of the work in 2004-05. The extensive effort put into developing the DQR reflects this. From an international perspective, the EQF and its insistence on the learning outcomes perspective is seen as an important opportunity to classify German qualifications adequately and to use it as tool to improve opportunities for German citizen in the European labour market. (Hanft, 2011, p. 50) ⁽¹¹¹⁾

The DQR developments have increasingly provided an opportunity and platform for addressing broader education and training issues and challenges. Government uses European initiatives and DQR discussions as an impetus for further reforms, e.g. appropriate recognition of the real value, what somebody knows, understands and can do, not where he/she has learned, or improving progression across sub-systems.

The learning outcome approach is seen as a catalyst for strengthening the coherence of the whole education and training system by linking and integrating various subsystems and improving progression possibilities. ⁽¹¹²⁾ DQR provides the opportunity to map all obtainable qualifications, present them in relation to each other, and make them easily understood and comparable. Making equivalences and differences between qualifications visible is seen as a vehicle

⁽¹¹¹⁾ The changing relevance of the Beruf. In Brockman et al. *Knowledge, skills and competence in the European labour market*. London; New York: Routledge.

'.../ 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.'

⁽¹¹²⁾ One important principle of DQR is that each qualification level should always be accessible via various education pathways.

for supporting permeability in the system and creating pathways across sub-systems. VET sees a more active role for the framework than general and academic higher education. (Annen and Bretschneider, 2010) ⁽¹¹³⁾

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) ⁽¹¹⁴⁾

These main objectives have been translated into detailed aims, with the DQR expected to:

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

A national steering group (*Bund-Länder-Koordinierungsgruppe*) was jointly established by the Federal Ministry of Education and Research and the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* (Regions) 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.

⁽¹¹³⁾ *European inventory on validation of non-formal and informal learning 2010, country report Germany*, p. 2. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77458.pdf> [cited 20.8.2011].

⁽¹¹⁴⁾ One of the main concerns in the last 15 years in Germany is increased enrolment into the so-called 'transition system', where students stay for about 1.5 years; this includes different training schemes, which do not lead to recognised qualifications. 70-80% of students move into the dual system or full-time vocational schools afterwards.

Decisions are based on consensus and each of the members works closely with their respective constituent institutions and organisations.

On behalf of the Federal Ministry of Education and Research (BMBF) a *DQR Büro* (DQR office) has been set up to provide technical and administrative support to the process.

The governance structure of the DQR is being discussed.

Levels and descriptors

An eight-level structure has been adopted to cover all main types of German qualification. This is the first comprehensive use of a matrix for alignment of qualifications across education in Germany.

Level descriptors describe the competences required to obtain a qualification. The overall structure is guided by the *Handlungskompetenz*. The proposed 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. ⁽¹¹⁵⁾

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 proposal of DQR.

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.

⁽¹¹⁵⁾ *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.

Table 8. **Level descriptor in the German qualifications framework for lifelong learning**

<i>Level indicator</i> ⁽¹¹⁶⁾			
Structure of requirements			
Professional competence		Personal competence	
<i>Knowledge</i>	<i>Skills</i>	<i>Social competence</i>	<i>Autonomy</i>
Depth and breadth	Instrumental and systemic skills, judgment	Team/leadership skills, involvement and communication	Autonomous responsibility, reflectiveness and learning competence

Each reference level maps equivalent qualifications rather than homogenous qualification. 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.’ (Bundesministeriums für Bildung und Forschung und der Kultusministerkonferenz, 2011, p. 6) ⁽¹¹⁷⁾

Use of learning outcomes

Strengthening of the learning outcomes approach is supported by all major stakeholders, which agree on the importance of its transparency function. One important aim of the DQR is to support further use and development of learning outcomes in standard-setting, curricula and assessment and validation of non-formal learning.

Learning outcomes are expressed in the various formulations of standards of *Kompetenz* developed, in particular, for VET, where a concept of *Handlungskompetenz* (action competence) has gradually assumed a key role in qualifications definition, alongside clear input requirements about place, duration and content of learning. The comprehensive action competence is described in terms of a typology of competences: *Fachkompetenz* (professional competence), *Personalkompetenz* (personal) and *Sozialkompetenz* (social) and *Selbstständigkeit* (autonomy).

⁽¹¹⁶⁾ This is just the analytical differentiation; the interdependence between different aspects of competence is emphasised. See final proposal, p. 5.

⁽¹¹⁷⁾ The German qualifications framework for lifelong learning adopted by the ‘German qualifications framework working group’ (AK DQR), 22 March 2011. Available from Internet: <http://www.deutscherqualifikationsrahmen.de/de?t=/documentManager/sfdoc.file.supply&s=Ps4JMwXnVSyF11k70&fileID=1306419029291> [cited 20.5.2011].

In general education no specific action competence for qualifications are provided. Curricula are often not written with a specific focus on learning outcomes. The recently introduced national *Bildungsstandards* could be taken as a first attempt to define a minimum set of learning outcomes for school subjects for primary education (*Hauptschule*), the intermediate leaving certificate (*Realschule*) and for the upper secondary school leaving certificate (*Abitur*). ⁽¹¹⁸⁾ It is expected that DQR will activate reforms for this sector as well.

In higher education, the shift to learning outcomes took place in a broader sense when introducing bachelor and master studies in recent years. Module handbooks are defined in terms of learning outcomes.

Validating non-formal and informal learning

DQR with its clear learning outcomes approach also aims at improving opportunities for recognising informally acquired learning outcomes and strengthening lifelong learning. There is currently no legal framework and no standardised system for validation of non-formal and informal learning in Germany. However, two examples of legislative provisions for validating non-formal learning in VET should be mentioned:

- the external student's examination under the Vocational Training Act and Crafts Code, which leads to the award of a full qualification in the recognised apprenticeship trade (there is no difference between this qualification and one acquired normally);
- from 2009, access for qualified workers to HE is regulated by the decision of the Standing Conference of the Ministers of Education and Cultural Affairs of the German Länder.

Apart from the above arrangements, many local and regional approaches have been developed. (Annen and Bretschneider, 2010) It is expected that DQR with its learning outcome orientation will further strengthen validation of non-formal learning. Two studies have been prepared to pave the way for further developments in this area. (Dehnbostel et al., 2010; Gutschow, 2010)

⁽¹¹⁸⁾ See: <http://iea-dpc.de/bildungsstandards000.html?&L=1> [cited 19.7.2011].

Referencing to the EQF

The joint steering committee set up by the Federal Government and the Länder in 2007 is in charge of the referencing process, advised and coordinated by the DQR office. The draft referencing report is expected to be prepared by 2011 and the final report is to be submitted by 2012.

Important lessons and the way forward

The development of the DQR is embedded in the broader context of reforms to strengthen the outcome-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⁽¹¹⁹⁾ involves all relevant stakeholders from VET and HE to support recognition of learning outcomes.

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. To develop a permeable system with better horizontal and vertical progression possibilities is at the heart of DQR developments.

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 expressed 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, p. 736-754)

The 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*.

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 certain reference level of the DQR does not provide automatic entitlement to access the next level. The achievement of the

⁽¹¹⁹⁾ For more information see: <http://ankom.his.de> [cited 15.9.2011].

reference level has also not been considered in conjunction with the implications for collective wage bargaining and the law on remuneration. (Bundesministerium für Bildung und Forschung und Kultusministerkonferenz, 2011, p. 5-6) These are certainly issues to be discussed in the coming years.

The main current challenges are referencing of qualifications to the DQR and quality assurance of this process and drafting referencing report, agreeing on the (legal) status of the DQR and responsibilities of the national coordination point.

Main sources of information

The national steering group (Bund-Länder-Koordinierungsgruppe) is designated as EQF national coordination point (NCP).

The information on the DQR development is available from Internet:

<http://www.deutscherqualifikationsrahmen.de> [cited 23.8.2011].

GREECE

Introduction

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

A working paper on HQF containing the main principles, levels and general descriptors was prepared by a high level committee in 2010 and presented for open public consultation, which was carried out between March and September 2010. All interested stakeholders were invited to submit comments on the working paper as well as answers to 23 guiding questions, through the web-site⁽¹²⁰⁾ The main issues raised by stakeholders were linked to permeability between vocational education and training and higher education and between universities, as well as the impact validation might have on rights in accessing professions. (Manoudi, 2010, p. 1-2)⁽¹²¹⁾

⁽¹²⁰⁾ See <http://www.opengov.gr/ypepth/> [cited 5.5.2011].

⁽¹²¹⁾ Greece does not have a system or procedures in place for validation of non-formal learning. There are two main reasons: formal education attainment, especially at university level, holds

The new law on lifelong learning (Law 3879/10) was adopted in September 2010, providing the legal framework for HQF development and implementation. Preparatory actions have started. A new institution – National Organisation for the Certification of Qualifications (EOPP) – was set up in December 2010 to develop and to put the HQF into practice. A qualifications register is being developed, which will include formal and non-formal qualifications and providers. This is supported by methodological instruments (e.g. methodological guides for referencing learning outcomes to the 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.

Rationale, main policy objectives and scope of the framework

Apart from responding to the EQF initiative, the work on the NQF is directly linked to country's efforts to develop a framework for further improving lifelong learning policies and practices, which will allow for recognition and certification of all kind 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 in EU ⁽¹²²⁾ 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 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 this developments. There is also a 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

strong esteem in society and many professional organisations fear that a validation system might threaten their professional rights.

European inventory on validation of non-formal and informal learning 2010, country report Greece, p. 1-2. Available from Internet:

<http://libserver.cedefop.europa.eu/vetelib/2011/77459.pdf> [cited 7.10.2011].

⁽¹²²⁾ In 2008 only 2.9% of adults (25-64) participated in lifelong learning compared to European average at 8.5%.

attainment in formal education and training (Manoudi, 2010, p. 5) 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;
- the need to have a solid basis for the development of 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 further pursued:

- to improve 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.

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

Stakeholder involvement

The Ministry of Education, Lifelong Learning and Religious Affairs is the main national body in charge of developing and implementing the HQF. The work began in 2008, when a high-level committee to develop HQF was initially established in the framework of the Operational programme for employment and training (2007-13), chaired by the General Secretary for LLL (Ministry of Education and Religious Affairs). A high-level advisory board to the Minister for Education has been nominated and will monitor forthcoming developments within the framework of the HQF; it will also be in charge of the referencing process and the general implementation of the HQF. The advisory board will involve all relevant stakeholders; representatives of the Ministry of Education, Lifelong Learning and Religious Affairs, the National Accreditation Centre of Lifelong

Learning Structures (EKEPIS), the National Organisation for the Certification of Qualifications (EOPP), the Hellenic Accreditation System S.A. (ESYD), the National Centre for Public Administration and Local Government (EKDDA), the Rectors' Conference, the technical universities, social partners and external experts. However, the Ministry of labour has not been involved so far.

The Ministry of Education, Lifelong Learning and Religious Affairs organised 11 conferences and technical seminars on issues related to the development of HQF that were held throughout Greece (February 2010-June 2011) with the involvement of all relevant stakeholders. ⁽¹²³⁾

Two institutions are foreseen by the law on lifelong learning to put the HQF and procedures for validation of learning outcomes into practice and assure quality in lifelong learning: (Manoudi, 2010, p. 1)

- the National Organisation for the Certification of Qualifications (EOPP) has been set up, responsible for the implementation of HQF and its correspondence with the EQF as well as for establishing procedures for validating and recognising non-formal and informal learning;
- the existing EKEPIS, renamed National Accreditation Centre of Lifelong Learning Structures, will be responsible for certifying the input to lifelong learning (occupational profiles, training programmes, training material, etc.).

Levels and descriptors

According to the law on lifelong learning and the working paper, 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 for further developments. Levels are defined in terms of knowledge, skills and competence. Work on level descriptors 6-8 and a qualifications framework for HE takes place separately, but the final objective is to have a comprehensive framework, covering all levels and types of qualifications.

Use of learning outcomes

A system for occupational standards is currently being developed. Initiated by EKEPIS in 2007, so far 202 occupational profiles in different economic sectors have been developed in cooperation with social partners. This is seen as a

⁽¹²³⁾ See: <http://en.nqf.gov.gr/Home/Events/tabid/111/Default.aspx> [cited 25.10.2011].

precondition for setting up a system for validating non-formal learning. (Manoudi, 2010, p. 6) 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 to foster 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, Lifelong Learning and Religious Affairs to draft the outcomes of qualifications provided in sub-systems of formal education and to suggest their allocation to the 8 levels of the HQF. This work continues on a technical level.

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 LLL 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 under the Ministry of Education; previously this was under the remit of the Ministry of Employment. (Manoudi, 2010, p. 6) Further work needs to be done to put the new legal framework into practice. For this purpose, a coherent system for the accreditation of the bodies, which will be responsible for certifying the qualifications awarded outside formal education, is planned. This work is led by the National Accreditation Centre of Lifelong Learning Structures. Methodology for validating and recognising non-formal and informal learning, based on learning outcomes and job profiles, is currently being developed with the social partners. These must be underpinned by rigorous national quality measures and criteria to establish trust in the new processes and qualifications.

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

Development works on the QF for HE have started. It is expected that this work will reinforce the learning outcome approach in HE.

Referencing to the EQF

The referencing of the national qualifications system levels to the EQF is scheduled to take place in the third quarter of 2012.

Important lessons and the way forward

The involvement of a broad range of stakeholders in HQF development and implementation is seen as crucial, but also a challenge. All sub-systems 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 been involved so far.

Other challenges ahead are among others the referencing to the HQF of international sectoral qualifications, as well as of those qualifications acquired through programmes run by 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 HE 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 in the use of learning outcomes for defining and describing qualifications. Therefore, 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 (EOPP) is designated as the NCP.

<http://www.nqf.gov.gr/ΑρχικήΣελίδα/tabid/36/Default.aspx> [cited 20.7.2011].

HUNGARY

Introduction

A comprehensive national qualifications framework (NQF) for LLL is currently under development in Hungary. It will embrace national qualifications that can be acquired in general and higher education and those vocational qualifications registered in the national qualifications register. All subsystems are involved in accordance with the broad (general) national level descriptors which will allow subsystems to adopt more specific descriptors. These developments are designed to be open to validation and recognition of non-formal and informal learning. (Tót, 2010) ⁽¹²⁴⁾

The national register of VET qualifications (NQR) 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, are elements contributing to the establishment of a single NQF.

The conceptualisation of an NQF started in early 2006 under the responsibility of the Ministry of Education and Culture (now part of the Ministry of National Resources) and the Ministry of Social Affairs and Labour (whose relevant 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 ⁽¹²⁵⁾. The decision was the legal basis and policy framework for the development of the NQF. 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 ESF and ERDF. (The Government of the Republic of Hungary, 2011) ⁽¹²⁶⁾ A comprehensive NQF proposal encompassing all subsystems of education and training (school-based general education and VET, higher education, adult education) was submitted to the government by the two

⁽¹²⁴⁾ *European inventory on validation of non-formal and informal learning 2010, country report Hungary*. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77461.pdf> [cited 7.10.2011].

⁽¹²⁵⁾ 2069/2008. (VI. 6.) Korm határozata az Európai Képesítési Keretrendszerhez való csatlakozásról és az Országos Képesítési Keretrendszer létrehozásáról [Government Decision (No 2069/2008) on the development of an NQF for lifelong learning]. Available from Internet: <http://www.okm.gov.hu/kozoktatas/2069-2008-kormhat> [cited 25.7.2011].

⁽¹²⁶⁾ *Social renewal operational programme 2007-13*. Available from Internet: http://www.nfu.hu/umft_operativ_programok [cited 25.7.2011].

responsible ministries. 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 and assigned the task of negotiation about and finalisation of the draft NQF. Based on the Government decision, the relevant ministries will work together to create – in their respective fields of competence – the necessary legal, financial and institutional conditions for implementing the NQF.

The first meeting, involving ministerial representatives and delegates from other relevant institutions, gave its consent to the fundamental principles of the draft NQF.

According to the decision on the establishment of the NQF, formal referencing to the EQF is planned to be taken place by the second half of 2013 at latest.

Rationale, main policy objectives and scope of the framework

The development of an NQF will address the following issues:

- (a) facilitate the harmonisation of the different subsystems, help the national qualification system to become more coherent, and support national policy coordination; ⁽¹²⁷⁾
- (b) support lifelong learning and enable stronger links between adult learning and formal education, make easier the recognition of a broader range of learning forms (including non-formal and informal learning);
- (c) improve transparency, transferability and comparability of national qualifications by showing the relationship between qualifications (there are many qualifications at levels 4, 5 and 6);
- (d) consolidate and reinforce the use of learning outcomes in standard-setting, curricula and assessment ⁽¹²⁸⁾ and establish a common approach for describing learning outcomes in different subsystems (currently there are different approaches in HE, general education or VET);

⁽¹²⁷⁾ 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.

⁽¹²⁸⁾ 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.

- (e) 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;
- (f) introduce common national quality standards; improve the relevance of qualifications in the labour market; and support the career orientation and counselling system.

Stakeholder involvement

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

A working group 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 Institute of Vocational and Adult Education, the Hungarian Rectors' Conference, the Higher Education and Research Council, representatives of the Hungarian Chamber of Commerce and Industry.

Administrative support to the working group is provided by the Department of International Relations in Education in the Ministry of National Resources. Currently the same Department plays the role of the National Coordination Point in Hungary. Jointly financed by the European Commission, it organised a sequence of events to disseminate the idea of the national qualifications framework in Hungary. The first meeting was organised to provide the two international experts with information on the Hungarian system of education and state of play of the NQF; there was also a seminar involving social partners which gave an opportunity for discussions, while the third meeting for decision-makers in the relevant ministries aimed at identifying the tasks in connection with the establishment of the NQF.

Levels and descriptors

Three projects were launched in 2009 to develop NQF levels and descriptors and to indicate how they can be applied in the different subsystems of education and training: higher education, general education and VET.

In early October 2009, experts and stakeholders in these projects, plus members of the high-level inter-ministerial committee, reached a tentative agreement regarding the levels and descriptors of the NQF. It is proposed to describe the levels in terms of knowledge, abilities, attitudes, autonomy and responsibility. The descriptors were based on studies and analysis of different topics (e.g. approaches in different subsystems, previous legal arrangements) and further, subsector-specific interpretation of the descriptors is planned.

An eight-level structure is suggested, with the final decision to be based on in-depth analysis of each level. Particular attention will be paid to the ordinary and advanced level of school leaving exam ⁽¹²⁹⁾, higher VET levels, post graduate specialist training and profession-specific post-graduate examinations.

The learning outcome based first levels are considered very important for adults, for reintegration of dropouts and for migrants.

Use of learning outcomes

In recent years, the conditions for a qualification system based on learning outcomes in education and training, especially in VET, have been put in place. Focus on learning outcomes has strong support among different stakeholders and is the subject of research studies in different subsystems of education and training. An assessment and evaluation system is being developed.

A number of steps have been taken towards a 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.

In the VET sector, in 2004-06, the national qualifications register (NQR) was reformed and 425 competence-based vocational qualifications (plus partial qualifications) referenced into a five-level structure were developed.

The shift to learning outcomes in post-secondary VET took place through 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.

⁽¹²⁹⁾ There are debates about two-tier upper secondary school leaving examination. From 2012 onwards, changes are planned; any student applying for entrance to a university will have to pass an advanced level examination in at least one subject relevant to their choice of study field.

In HE, learning outcomes have appeared in qualifications requirements through regulatory measures and acts. All first and second cycle HE 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.

Validating non-formal and informal learning

Hungary is in the first stages of introducing the validation of informal and non-formal learning into its education system. Sporadic and fragmented, many times experimental practice appears in different fields and institutions of the education sectors. Although legislative provisions are in place, implementation has not been yet developed. An important project, within the framework of the New Hungary development plan's SROP (¹³⁰) was launched in 2009 to develop a validation model that can be implemented in higher education. The NQF and the validation developments are interconnected. (Tót, 2010, p. 2) In VET, supported by another ESF (SROP) project, methodology and assessment tools were developed to measure the competence of prospective (adult) learners set against the entrance requirements.

Referencing to the EQF

The referencing process will start in the first quarter of 2012. The draft referencing report is expected to be prepared by 2013.

Important lessons and the way forward

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 relevant stakeholders on board. It is expected that the NQF will create a common language and improve communication and responsiveness of education and

¹³⁰) Social Renewal Operational Programme

training to new needs of the labour market and individuals and also promote widely the concept of lifelong learning.

Main sources of information

The Department for International Relations in Education in the Ministry of National Resources acts as EQF National Coordination Point (NCP). Final decision on the tasks, composition and location of the NCP will be taken in 2011.

ICELAND

Introduction

Iceland is currently developing and implementing a comprehensive national framework covering all levels and types of qualifications. The framework will consist of seven, learning outcomes based, levels. Work on the framework started in 2007 and all main elements are expected to be in place during 2011. The comprehensive framework is an addition to the qualifications framework for higher education put in place (and self-certified to the EHEA) in 2007-08.

Rationale, main policy objectives and scope of the framework

The Icelandic national qualifications framework is assumed to encompass all education and training offered in the country: general education, academic studies, VET, art studies, special education or adult education. The Ministry of Education, Science and Culture is presently engaged in creating a qualifications framework for lifelong learning in Iceland. This task follows the decision of the Icelandic Parliament when adopting a new Act on Upper Secondary Education in 2008 and on Adult Education in 2010, both of which point to the future role of a national qualifications framework. The Ministry of Education, Science and Culture is leading this work and serves accordingly as the National Coordination Point.

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. The Act on Upper Secondary Education

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 of curricula in general education and VET. They will do this using an outcomes based approach where learning outcomes are presented in terms of a new credit system which measures the workload of the learner. The social partners have started to play a crucial role in informing providers about the need for knowledge and competences in the labour market to make study programmes relevant and useful. All qualifications will be assigned levels through an accreditation process by the Ministry of Education, which will assure system quality. The accreditation will apply to all education at upper secondary level and higher education, and to arts education and adult education in the future. Regulations were published in the national curriculum guide for upper secondary school, May 2011.

There is a discussion whether there is a need for separate legislation on the NQF but no decision has been made. The NQF developments are firmly integrated in the national lifelong learning strategy currently being implemented on the basis of the new laws. Both contain provisions on the use of learning outcomes for defining and describing qualifications as well as for the use of validation of non-formal and informal learning. Recently published curricula for upper secondary education (May 2011) illustrates how the NQF is envisaged for those levels relevant to upper secondary education (general and vocationally oriented). These qualifications are placed at four different levels, defined by learning outcomes based descriptors reflecting the EQF.

Stakeholder involvement

The Ministry of Education is responsible for overall coordination of the work on the NQF.

In 2008 the Ministry set up nine working groups covering the entire scope of qualifications and all areas of education and training. These working groups have been instrumental in developing the new learning outcomes based curricula. Providers are looking to the results of this work when planning and reviewing their study programmes. Social partners are represented in the VET working groups along with teacher representatives.

Since 2010, a total of 12 occupational councils have been actively involved in reviewing qualifications in their respective areas. Being coordinated by the Ministry of Education, these councils cover all the important occupational areas and have played a key role in placing existing qualifications (in their respective

areas) to the relevant EQF levels (1-5) of the framework. This process has been important in clarifying the potential of the NQF – and the learning outcomes perspective – to stakeholders in the labour market.

The NCP, together with occupational councils, is developing a list of all active qualifications at upper secondary level and offering reasoned support for assigning levels to them. The aim of the list is not only to gain united comprehension of placement of qualifications on NQF levels, but also to implement the learning outcome thinking and verify whether recommended amount of NQF-levels and the descriptors are adequate for Upper secondary formal education. The results are very promising. In June 2011 a draft of the list was prepared. The occupational councils will now proceed to write descriptions of competence/skills needs for individual professions. To begin, these descriptions will refer to all qualifications in the present system, but later they will also include new qualifications developed to meet new skills needs suggested by the labour market, so broadening the education offer in line with labour market development. They will be useful for education providers responsible for writing aims for study programmes and they will, from the beginning, be assigned levels in the NQF. The councils are expected to play a key role in the identification of existing and future skills and competence needs. In this respect the learning outcomes approach has proved useful and makes it possible to see the relationship between the skills and competence needs at work and the provisions offered by education and training.

The relationship to higher education

The Icelandic higher education sector started work on linking to the QF-EHEA in 2007, thus 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.

Higher education has decided to adopt the EQF concepts knowledge, skill and competence as basis for their descriptors. The sector has now been asked, in the same way as the occupation councils, to write descriptions of competence needs for individual fields of study. The descriptions will be useful for education providers responsible for writing aims for study programmes; from the beginning they will be assigned levels in the NQF. The higher education sector has only partly been involved in developing the comprehensive NQF. The consequence of this is that the relationship between (in particular) vocational and academic

qualifications (and levels) has not been fully discussed and articulated. Future developments of the NQF might very well have to look closer at this relationship between levels to ensure increased permeability and allow for more flexible progression routes. The higher education community has, however, been actively involved in the development of learning outcomes based course descriptors. Inspired by the 'Tuning' approach, two institutions are currently involved and a proposal is due to be presented in 2011.

The framework has general 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.

Levels and descriptors

The NQF descriptors for level 1 to 4 were published in the National curriculum guide for upper secondary school in May 2011. At the higher education sector descriptors for three levels were published as part of the self-certification process to the QF-EHEA in 2011. Both descriptors use the terms knowledge, skills and competence. Combined, these two-level approaches add up to a seven-level NQF.

A previous proposal to introduce a 10-level framework (seven core levels supplemented by three entry levels) has not been taken forward. The terms knowledge, skill and competence are introduced in the newly published National curriculum guide for primary school. They will be used as key terms in the National curriculum guide for subjects to be published in 2011-12. Following the abandonment of the entry levels it has been discussed whether a seven-level structure (where the Icelandic level 1 covers EQF levels 1 and 2) will be sufficiently 'fine-grained' to be of relevance to individuals entering the system with few or no formal qualifications. The debate on the lower levels of the framework underlines the importance attributed to an inclusive framework, able to address the (diverse) education, training and learning needs of the entire population.

Compared to the EQF descriptors, the Icelandic national descriptors are more detailed and specific. Particular emphasis has been given to connecting the key terms of the descriptors, knowledge, skill and competence, to the Icelandic version of the European key competences, underlining that this is an aspect not only relevant to VET but also to general and higher education. There are several reasons for operating with detailed and specific descriptors: Not only does the reformed Icelandic education system for upper secondary school demand that

every study-programme is assigned – through an accreditation process – an NQF-level, it also requires that every course unit is assigned a level. There is one ordinary set of descriptors for placing the qualifications and additional descriptors for placing the courses. The Ministry, in collaboration with social partners, has published descriptors for vocational education and occupation-specific training, arts studies, mathematics, Icelandic, and foreign languages. Many upper secondary schools have published descriptors in other subjects. The actual descriptors for placing qualifications are published in the National curriculum guide for upper secondary school and in the national qualification framework for higher education in relation to the self-certification process to the EHEA 2011. The other descriptors are meant to be for guidance.

The emphasis of the descriptors on key competences is of particular interest. All study programmes in upper secondary schools include the Icelandic version of key competences to ensure that students are motivated to be actively engaged in learning to learn, health, creative thinking and application of knowledge, equality, democracy and human rights, education for sustainability, literacy, expression, and communication in Icelandic, literacy, expression, and communication in foreign languages, numeracy and information literacy, expression, and communication.

Use of learning outcomes

The shift to learning outcomes is seen as an important part of continuing education and training reform. A systematic use of learning outcomes, referring to a national set of descriptors, is seen as important for the future design of qualifications. It will help to clarify the balance of knowledge, skills and competences for different programmes at different levels, and bring added value to current practices where each school contributes to the form and content of the programme or course. It is also envisaged that the use of learning outcomes based levels and descriptors will make it easier to assess whether schools operate at the same level of learning outcomes or whether there are major differences between them.

The emphasis on shift to learning outcome can be seen in the newly published curriculum guides for primary and upper secondary school, in publications related to the self-certification process to the EHEA 2011 at the higher education level, and by the request to the occupational councils and the higher education sector to make a learning outcome based description of

required competence. Every course description on upper secondary and higher education level is required to be learning outcome based.

Validating non-formal and informal learning

The introduction of a system for recognising non-formal and informal learning is an integrated part of the effort to establish a 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 in cooperation with lifelong learning centres, upper secondary schools, labour associations and other stakeholders linked to sectors. From 2007-09 close to 500 individuals had their skills and competences validated within the certified trades.

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 competence 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 and a draft referencing report is expected by the end of 2011. The work of the occupational councils during 2010-11 forms an important part of this process.

Important lessons and the way forward

The experiences linked to the introduction of a learning outcomes-based approach are being summarised as very positive and stimulating for the overall reform of education and training. This process, however, is also challenging in the sense that many stakeholders have little experience in applying a learning outcomes-based approach in practice. The novelty of the approach, and the uncertainty this causes, has required the Ministry to provide guidance and pay particular attention to the development reflecting the Icelandic situation.

The experiences of the occupational councils in using a learning outcome based approach for identifying skills needs in their sectors and for placing

qualifications to levels have proved very positive. The involvement of occupational councils was important for several reasons: Not only was it helpful for preparing the placing of qualifications on NQF-levels; it also supported the shift to a learning outcomes oriented thinking and helped to verify whether the recommended levelling is adequate or not. The results were promising and no major disagreements occurred.

The most important lesson is that the involvement of stakeholders (practitioners, leaders and teachers in schools, providers, social partners and learners) is critical to the success of the process. They must, however, be given time.

The main challenge now is to continue the process of dialogue and information and gradually increase understanding of the framework, its impact on quality assurance and the performing of quality assurance and how it facilitates the linking of the Icelandic qualifications to the EQF.

Main sources of information

Information and documents covering the Icelandic developments can be found at <http://namskra.is/> and <http://eng.menntamalaraduneyti.is/Acts>

IRELAND

Introduction

The comprehensive national framework of qualifications of Ireland (NFQ) was proposed through the Qualifications (Educations and Training) Act 1999 and launched in October 2003 after broad consultation with different stakeholders. 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 are included. It is a comprehensive and learning outcomes based framework.

The majority of 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), the universities and the Dublin Institute of Technology (DIT).

The NFQ has reached an advanced stage of implementation, in particular by promoting more consistent approaches to the use of learning outcomes across different subsystems, especially in the sectors led by FETAC (Further Education and Training Awards Council) and HETAC (Higher Education and Training Awards Council) ⁽¹³¹⁾. In universities and the school sector, implementation was voluntary and impact smaller. (Allais et al., 2009) ⁽¹³²⁾. Credit transfer and recognition of non-formal learning are pursued and cooperation with different stakeholders in education and training is being strengthened.

In July 2006 the National Qualification Authority of Ireland (NQAI) published policies and criteria on inclusion of the awards of certain international and professional awarding bodies in the NFQ (National Qualifications Authority of Ireland, 2010a) ⁽¹³³⁾. A number of awards made by professional and international awarding bodies are now also included in the NFQ.

The national framework of qualifications has been developed and is being maintained by the National Qualifications Authority of Ireland, which was set up in 2001 by the Department of Education and Science and the Department of Enterprise, Trade and Employment. The amalgamation of FETAC, HETAC, NQAI into a new institution – Qualifications and Quality Assurance Ireland – is underway which is an important step in consolidating the governance structure for implementation of comprehensive NFQ.

Ireland was the first EU member state to reference its national framework of qualifications to the EQF. The final referencing report was adopted by the National Qualifications Authority of Ireland on the 28 May 2009 and is available on http://www.nqai.ie/interdev_eqf.html [cited 28.06.2010]. The report was adopted by EQF Advisory group in September 2009.

⁽¹³¹⁾ HETAC is the qualifications awarding body for higher education and training institutions outside the university sector.

⁽¹³²⁾ *Researching NQFs: some conceptual issues*. Geneva: ILO. (Employment working paper No 44). Available from Internet: http://www.ilo.org/skills/what/pubs/lang--en/docName--WCMS_119307/index.htm [cited 28.6.2011].

⁽¹³³⁾ Group D – Draft policies and criteria for the alignment with the National framework of qualifications (NFQ) of the awards of certain international sectoral certifying bodies which issue certification and in some cases provide programmes in Ireland. Available from Internet: <http://www.nqai.ie/documents/AlignmentofIntSectoralAwardswiththeNFQPolicyApproach-FINAL08.0610.pdf> [cited 30.5.2011].

Rationale, main policy objectives and scope of the framework

The national objective of moving towards a 'lifelong learning society' in which learners can avail of 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 accommodate all shapes and sizes of education and training in Ireland. The policy goals of the NQF are to:

- (a) 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;
- (b) ease access, transfer and progression opportunities for learners within and across the different levels and subsystems of education and training;
- (c) increase mobility through understanding and recognition of Irish qualifications abroad and fully participate in the Bologna and Copenhagen processes.

The process was strongly supported by major stakeholders in the country. In the meantime the NFQ has become widely known and is used as a tool for supporting evolutionary changes in education, training and qualification system (National Qualifications Authority of Ireland, 2009) ⁽¹³⁴⁾.

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, 2010)

The implementation of the NFQ has been monitored by the National Qualifications Authority (NQAI) which published the Framework implementation and impact study report, prepared by an external team of national and international experts. The study aimed at assessing the extent to which the NFQ is being put in place and to support further implementation. The study concluded

⁽¹³⁴⁾ *Framework implementation and impact study, Report of study team.* Available from Internet: <http://www.nqai.ie/documents/FIISreportFINALsept2009.pdf> [cited 7.10.2011].

The Framework implementation and impact study emphasised 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.)

with 19 recommendations concerning the further implementation of the framework and access, transfer and progression possibilities ⁽¹³⁵⁾.

Stakeholder involvement

The development of the NFQ was initiated by the Department of Education and Science and the Department of Enterprise, Trade and Employment and developed and implemented in the extended consultation period with a range of stakeholders. The Bologna process has been an important part of NFQ development on a voluntary, but strong, partnership basis.

Broad cooperation with different stakeholders is ensured through the Authority and the Consultative Group of the National Qualifications Authority of Ireland.

The design and implementation of the NFQ has been supported by different research studies within the country and the process also has a strong external dimension through interactive research with non-European countries (e.g. Australia, New Zealand).

The visibility and currency of the framework inside and outside the education and training environment has increased. The Framework implementation and impact study (National Qualifications Authority of Ireland, 2009, p 40-47) has analysed the use of the framework in the labour market (recruitment and access to work and training), the alignment of public funding mechanisms to the framework, qualifications of professional, regulatory and international bodies, and the alignment of the framework to the international developments.

The Irish NFQ and higher education

The Irish NFQ is 'the single, nationally and internationally accepted entity through which all learning achievements may be measured and related to each other in a coherent way and which defines the relationship between education and training awards' (National Qualifications Authority of Ireland, 2003b) ⁽¹³⁶⁾. This statement underlines that the aim of the NFQ is to be inclusive to all learning including the highest levels learning achievements. In this sense it is a comprehensive and

⁽¹³⁵⁾ See: http://www.nqai.ie/framework_study.html, p. 51-55 [cited 28.6.2010].

⁽¹³⁶⁾ *Policies and criteria for the establishment of the NFQ*. Available from Internet: <http://www.nqai.ie/docs/framework/policies/polandcrit.pdf> [cited 10.10.2011].

integrating framework. The Qualifications Authority has determined that all qualifications at levels 7 to 10 are higher education and training awards ⁽¹³⁷⁾. At level 6, further education and training awards (regulated by FETAC) and higher education awards (regulated by HETAC) are differentiated.

Self-certification of the compatibility of the Irish NFQ with the QF-EHEA was completed in 2007 ⁽¹³⁸⁾. This included all qualifications at levels 7 to 10 of the NFQ, as well as vocationally oriented higher qualifications and HETAC qualifications at level 6 (i.e. higher certificate).

The implementation of the framework in HE is based on the partnership between the Qualifications Authority and awarding bodies (i.e. HETAC, Dublin Institute of Technology (DIT) and universities). The framework has a regulatory role in respect of qualifications awarded by HETAC and DIT as it regulates the design and award of qualifications and sets standards. Universities participated in the process voluntarily. They set standards for their awards which are broadly compatible with the level descriptors and awards-types descriptors. Therefore, the inclusion of universities awards is based on the understanding that the standards of these were consistent with those in the framework. Substantial progress has been made in relation to the inclusion of major university diplomas at levels 8 and 9 and their non-major awards. It will take time to include the full range of awards including those of associated colleges ⁽¹³⁹⁾.

Referencing of the NFQ to the EQF, completed in 2009, built on the experiences and conclusions of the self-certification. The referencing report emphasised the different nature of these two processes. The self-certification was concerned with verifying the extent to which particular qualification marks, or does not mark, the completion of the Bologna three cycles. The EQF referencing, in contrast, establishes transparent links between national qualifications levels and EQF levels and does not concern a particular qualification.

Levels and descriptors

The NFQ is based on three building blocks; the 10 levels, the learning outcomes based level descriptors, and the award-types. The 10 levels of the framework capture all learning, from initial stages to the most advanced; qualifications

⁽¹³⁷⁾ See: http://www.nqai.ie/interdev_eqf.html, p. 11 [cited 28.6.2011].

⁽¹³⁸⁾ Bologna process, *The report certifying the compatibility of the NFQ and the QF-EHEA*. Available from Internet: <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/qf/national.asp> [cited 28.6.2011].

⁽¹³⁹⁾ See http://www.nqai.ie/framework_study.html, p. 13 [cited 28.6.2011].

achieved in schools, further education and training and higher education 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 holder of the qualification.

The NQF comprises levels, award-types and named-awards. Four classes of award-type have been determined: major, minor, special-purpose and supplemental. This is to ensure that the framework can capture all types and sizes of learning undertaken by a learner.

Use of learning outcomes

The learning outcomes approach was central to the establishment of the NFQ and associated legislation and system reform. It uses principles, aims, and elements of implementation relating to learning outcomes, expressed as knowledge, skills and competences intended to apply to all qualifications. The outcomes are indicators of what a person knows, can do and understand, rather than time spent on a programme. The new regulation for awards in the NFQ states that new awards are made on the basis of learning outcomes. The principles for all curriculum development leading to qualification now derive from the NFQ. The framework implementation and impact study (National Qualifications Authority of Ireland. 2010c) ⁽¹⁴⁰⁾ 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. Implementation was slower than expected: ‘There may still be a gap between redesigned and rewritten programmes and actual delivery and perception of these on the ground’ ⁽¹⁴¹⁾.

The NFQ allows for the recognition of formal, non-formal and informal learning and there is legislation in place which means that any individual has the right to apply for recognition of prior learning. As stated by the European

⁽¹⁴⁰⁾ *The framework implementation and impact study, Executive summary*. Available from Internet: <http://www.nqai.ie/documents/AuthorityresponsestotheFrameworkImplementationandImpactStudyfinal.pdf>

⁽¹⁴¹⁾ See: http://www.nqai.ie/framework_study.html, p. 39 [cited 28.6.2011].

inventory on validation of non-formal learning (Coughlan, 2010) ⁽¹⁴²⁾ the development of the practice has been significantly enhanced though the work undertaken within the development of NFQ and related policies, e.g. on access, transfer and recognition. National principles and guidelines for recognition of prior learning were developed. However, the Framework implementation and impact study (National Qualifications Authority of Ireland, 2010) 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 implementation of 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 NQF to the EQF has been completed. The referencing process was assisted by a national steering committee, composed of representatives of major stakeholders from education and training as well as international experts.

The following link between the NFQ and the EQF was established:

Table 9. **Levels correspondences 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

The final referencing report was adopted by the National Qualifications Authority of Ireland on the 28 May 2009 and is available on http://www.nqai.ie/interdev_eqf.html [cited 28.6.2010].

⁽¹⁴²⁾ *European inventory on validation of non-formal and informal learning 2010, country report Ireland*, p. 4. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77464.pdf> [cited 25.7.2011]

Important lessons and the way forward

The implementation of the NQF very much 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 ⁽¹⁴³⁾:

- 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;
- 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 websites of the National Qualifications Authority of Ireland, which is also the national coordination point (NCP): <http://www.nqai.ie> [cited 18.7.2011] and <http://www.nfq.ie> [cited 18.7.2011].

⁽¹⁴³⁾ See: http://www.nqai.ie/framework_study.html, p. 50 [cited 10.10.2011].

ITALY

Introduction

Italy does not yet have an NQF. However, work to establish an Italian national qualifications and certification framework has been going on since 2003. 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 absence of an explicit and adequately regulated national system of qualifications’ (even if there are regional qualifications systems) is regarded a barrier to taking forward coherent lifelong learning policies and validation of non-formal and informal learning and making learning pathways for lifelong learning more visible. (Perulli and di Francesco, 2010) ⁽¹⁴⁴⁾

The process is complex due to shared responsibilities for education, training and certification of knowledge and skills between State, regions and social partners and due to diverse approaches to certification and acknowledgement of acquired skills developed at regional level. However since 2004, many national agreements have been signed between the state, regions and social partners which can be regarded as steps toward the establishment of an NQF. In February 2010, an agreement between Ministry of Labour, Regions and Social Partners was signed in relation to the training policies to be jointly implemented. This agreement called Guidelines for training in 2010 ⁽¹⁴⁵⁾ sees the national qualification system in a wider European context and underlines the key role to be played by a learning outcomes approach in aiding individual learning. Also, recognition of non-formal and informal learning has been mentioned within these guidelines as a strategic focus in the perspective of human capital competitiveness and lifelong learning aims.

Recent reform in upper secondary education ⁽¹⁴⁶⁾ also points in this direction, introducing new levels defined by learning outcomes and reflecting the EQF level

⁽¹⁴⁴⁾ *European inventory on validation of non-formal and informal learning 2010, country report Italy*. p. 1-3. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77467.pdf> [cited 7.7.2011].

⁽¹⁴⁵⁾ Available from Internet: http://www.governo.it/GovernoInforma/Dossier/formazione_2010 [cited 7.7.2011].

⁽¹⁴⁶⁾ 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/> [cited 7.7.2011].

descriptors. 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. Vocational education and training – managed by regions – will operate according to agreed national standards (consistent with the EQF levels). Three-year vocational qualifications and four-year vocational diplomas will be awarded. The implementation started in September 2010 and will continue up to 2013. Levels and level descriptors are seen as important for placing programmes in a more coherent way and to show progression routes between programmes.

The work on the QF for HE has been under way since 2005. The first draft was prepared in 2008 and broad consultation with the main stakeholders of the university sector (Rector's conference, academic community and students) was organised. The English version of the QF for HE is available. ⁽¹⁴⁷⁾ Cooperation between NQF development and the Bologna process is ensured through the participation of the Bologna representative in the national committee.

Rationale, main policy objectives and scope of the framework

Development of an Italian NQF should respond to several needs:

- the NQF is a national structure that 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 the dialogue between educational systems and the labour market;
- it should also make geographic and professional mobility of individuals easier, both at national and European levels;
- it should also help individuals, along the course of their life, in capitalising 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 the different stakeholders, is the precondition for validating non-formal and informal learning.

⁽¹⁴⁷⁾ See proposal of the qualifications framework for higher education. Available from Internet: <http://www.quadrodeititoli.it/Index.aspx?IDL=2> [cited 7.7.2011].

Many national agreements were signed in the period 2004-05, which aimed at developing steps towards the establishment of the NQF (Perulli and di Francesco, 2010, p. 3):

- the definition of national standards of competences (basic and transversal competences in initial vocational training);
- the definition of national criteria for certification of competences and qualifications;
- the adoption of common format for national certificates in initial and continuing vocational training.

In 2006, ISFOL – the National Institute for the Development of Vocational Training for Workers – started a complex process aimed at preparing a common general methodology, including a national learning outcomes approach, providing the basis for closer integration of the different parts of the qualification system. This work will help driving the system toward a national framework. In 2008, an inventory of regional standards of competences was prepared and methodology successfully tested in tourism and the mechanical sector. Other sectors (e.g. chemical, food and agriculture) are about to be mapped with the same methodology. Some regions adopted regional standards using the same methodology. ISFOL worked to support the Ministry of Labour in creating a national database of job descriptions and standards (occupational and training standards) developed in Italy in recent years; these are clustered in 24 economic and professional areas ⁽¹⁴⁸⁾. This is embedded in the more general process of setting up a national system of professional and training and certification standards.

Stakeholder involvement

The Ministry of Education, University and Research and the Ministry of Labour and Social Policies are leading the developments related to the NQF and EQF implementation, in agreement with the regions and autonomous provinces and the social partners as laid down in many agreements. The National Table (committee), established in 2006 by the Ministry of Labour and composed of representatives of the Ministries of Education, Universities and Research and Labour, the regions and social partners plays an important role in developing the national qualifications framework and system.

⁽¹⁴⁸⁾ See: <http://www.nrpitalia.it> [cited 7.7.2011].

At the technical level, ISFOL (the national institute for development of vocational training) set up the national methodologies and coordinates sectoral and professional expert groups involving social partners.

Levels and descriptors

The structures of the NQF levels and level descriptors have not yet been defined, although there are components in place, e.g. QF for HE ⁽¹⁴⁹⁾ and more recently at upper secondary level. Italy uses a learning outcomes approach and the EQF level descriptors as a basis for further developments. The national coordination point is currently working on this topic.

Eight EQF levels have been used directly in the Italian referencing process to link all national qualifications to the EQF.

In the QF for HE, 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 sub-descriptors taking into account differences in specific elements of qualifications (e.g. workload, length, access).

Use of learning outcomes

Italian education and training has introduced the learning outcomes approach at national and regional levels, with each subsystem having its own characteristics. Upper secondary education has recently aligned qualifications and curricula to the EQF learning outcomes structures. In February 2010, the reform regulation of the upper secondary education system was adopted ⁽¹⁵⁰⁾.

In vocational training, where the regions have the main responsibility, according to 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 indicator and

⁽¹⁴⁹⁾ See proposal of the qualifications framework for higher education. Available from Internet: <http://www.quadrodeititoli.it/Index.aspx?IDL=2> [cited 7.7.2011].

⁽¹⁵⁰⁾ 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/> [cited 20.7.2011].

descriptors. Three-year vocational qualifications and a four-year vocational diploma will be awarded.

The higher (non-academic) professional education and training pathway (IFTS) uses 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; however, they will be implemented in accordance with local needs. The two-year courses will soon be based on learning outcomes standards.

In academic education (universities) the 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. The enterprises involved in reforming the university system agreed on the learning outcomes approach, considering it very close to the labour market.

Referencing to the EQF

ISFOL has been designated the national coordination point (NCP) by the Ministry of Labour and the Ministry of Education. It formed a technical group to plan actions aimed at referencing the qualifications system to the EQF.

The draft referencing report has been prepared and sent to the national authorities with open issues to be discussed in the consultation. As Italy does not have a formally adopted NQF, agreement on and shared understanding of these issues is the precondition for the wider consultation on the referencing report with all important stakeholders at national and regional level and international experts. Some of these open issues are:

- the need, opportunity and challenges of aligning different types of qualifications to the same EQF level (the qualifications differ in terms of length and progression possibilities);
- the possible inclusion of professional qualification (i.e. regulated professions) in the framework;
- the opportunity and modalities to extend the referencing process to the regional part of the VET Italian systems and to its qualifications.

Important lessons and the way forward

The first lesson learned is that establishing the NQF is a very important national issue, offering individuals a transparent way to obtain qualifications and to progress in their careers. However, it is very complex and ambitious.

The law that reformed Title V of the Constitution (2001) made this process even more complicated in the complexity of the relationships between the State and the Regions (some regions are working to establish their own regional qualifications systems).

This reform created a difficult situation when combined with the autonomy of several stakeholders: autonomy of the regional authorities in regulating training; autonomy of universities and schools; and autonomy of the enterprises in offering 'qualifications' in the workplace.. Those involved are aware of the fundamental importance of a national system that should constitute the 'real infrastructure' for different educational and labour market policies.

Language differences and use of coherent concepts across sectors and stakeholders cause some challenges.

Recently introduced education and training reforms gave an indication that Italian VET and HE systems are increasingly being aligned with the European objectives on transparency and comparability expressed by Bologna process and the EQF (Cedefop Refernet Italy, 2010) ⁽¹⁵¹⁾.

Main sources of information

For policy-related information the Ministry of Labour and Social Policies, for the technical level, ISFOL, which acts as national coordination point (NCP):
<http://www.isfol.it> [cited 7.7.2011].

⁽¹⁵¹⁾ *VET in Europe country report Italy 2010*. Available from Internet:
http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_IT.pdf [cited 7.7.2011].

LATVIA

Introduction

Latvia has introduced an eight-level classification. All nationally recognised education programmes from primary, secondary and higher education are referred to a Latvian qualifications framework level (LQF) and linked to the EQF level.

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 the Latvian education stages and the respective programmes and referencing each education programme to the LQF/EQF level. The Regulations also contain eight level descriptors, based on learning outcomes, developed in line with the EQF descriptors.

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 8-level national qualifications framework.

Rationale, main policy objectives and scope of the framework

Several policy documents support the development and implementation of the Latvian Qualifications Framework (LQF). For example, Amendments in the guidelines for lifelong learning policy 2007-13 (2009) states that a national framework based on learning outcomes has to be introduced.

The development of a national qualifications system and LQF is one of the activities within the concept Raising the attractiveness of vocational education and involvement of social partners in vocational education quality assurance, approved by the Cabinet of Ministers in 2009. (Cedefop Refernet Latvia, 2010) ⁽¹⁵²⁾

⁽¹⁵²⁾ *VET in Europe country report Latvia 2010*, p. 22. Available from Internet: <http://www.cedefop.europa.eu/EN/Information-services/vet-in-europe-country-reports.aspx> [cited 7.7.2011].

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.

More specifically, the development and implementation of a comprehensive LQF should aim:

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

The qualifications framework is based on the classification of educational programmes in the formal education system, i.e. programmes from primary, secondary general and VET, with higher education included as well as programmes for students with special needs. ⁽¹⁵³⁾ It is based on current education provision. Implicit levels of education have been made explicit and linked to level descriptors, which describe expected levels of learning outcomes. Master of crafts, journeyman and qualifications acquired in non-formal and informal learning will be placed to respective levels in the second phase of the development of the Latvian qualifications framework and consequently referenced to the EQF.

Stakeholder involvement

The Ministry of Education and Science has the leading role in developing and implementing the LQF. In September 2009, the Ministry set up a working group 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 performed the tasks of a consulting and supervisory group, reviewing and approving materials prepared by the experts (for example, the level descriptors of the LQF).

⁽¹⁵³⁾ See Annex 1 to Cabinet of Ministers Regulations on the classification of Latvian education, No.931 of 5 October 2010.

Latvian process can be characterised as technically oriented. Consultation on the self-assessment report was organised and results presented to the national conference. However, a key question is how ownership and commitment can be developed in the coming period, especially involving social partners, who have been weakly involved in the development of qualifications so far.

Levels and descriptors

The Cabinet of Ministers Regulations on the classification of the Latvian education (2008, amendments in October 2010) outlines an eight-level framework with level descriptors based on learning outcomes. In the regulations all nationally recognised education programmes from primary, secondary and higher education are referred to a certain LQF level and linked to the EQF level. 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).⁽¹⁵⁴⁾ When developing the level descriptors, relevant state education standards, the EQF and Dublin level descriptors and Bloom's taxonomy were used to provide evidence.

The level descriptors were used to place formal education programmes on a certain level of the qualifications framework regarding education and occupational standards that stipulate content and outcomes of education.

Use of learning outcomes

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. The draft legislation for HE is expected to introduce some terms related to learning outcomes.

Subject-based outcomes have been defined in general education 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) and Regulations on the state general secondary education standard and standards of general secondary education study subjects (2008).

⁽¹⁵⁴⁾ See Annex 3 for complete descriptors.

The content of vocational education is regulated by state education standards, occupational standards and vocational education programmes. 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, as determined by the Cabinet of Ministers Regulations Procedure of developing occupational standards (2007). By August 2011, a total of 466 occupational standards had been approved and been included in the register supervised by the State Education Content Centre, a national agency under the direction of the Ministry of Education and Science. The ministry is responsible for professions of the LQF/EQF levels 5-7 and the centre for professions of the LQF/EQF levels 3-4. They arrange cooperate with the social partners designing and drafting occupational standards, engaging representatives from sectoral ministries and professional organisations, and providing organisational and methodological support.

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 education standards are regulated by the Cabinet of Ministers Regulations on the state vocational secondary education standard and the state vocational education standard (2000).

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 education and occupational standards.

The framework for higher education is founded upon three Bologna cycles, based on learning outcomes. They are defined as results of study programmes expected from an average student in the programmes. (Latvian Academic Information Centre, 2011) ⁽¹⁵⁵⁾ The academic higher education programmes are implemented in compliance with the state academic education standard stipulated by the Cabinet of Ministers Regulations on the state academic education standard (2002). The content of professional higher education programmes is determined by the relevant occupational standards and education

⁽¹⁵⁵⁾ 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. Available from Internet: <http://www.nki-latvija.lv/wp-content/uploads/2011/06/Latvian-education-system-referencing-to-EQF-Self-assessment-Report.pdf> [cited 25.08.2011].

standards, which are outlined in the Cabinet of Ministers Regulations on the state first level professional higher education standard (2001) and Regulations on the state second level professional higher education standard (2001).

Validating non-formal and informal learning

A system of validating knowledge and skills acquired outside formal education has been a of political priority. The Amendments of July 2010 to the Vocational Education Law (1999) stated the rights of a person to acquire knowledge and skills assessment with the aim of obtaining a vocational qualification document. The Law defines the term 'professional competence', which includes the totality of knowledge, skills and responsibility for performing professional activities in a concrete working situation. The responsible body for the process is the Ministry of Education and Science.

The system on validating professional competence obtained outside formal education legally was established by adopting the Cabinet of Ministers Regulations Procedure by which professional competence obtained outside formal education system is assessed (February 2011). The regulations stipulate the procedure by which professional competence (except for regulated professions) that corresponds to the EQF level 3-4, obtained outside formal education, is assessed. The institutions assessing professional competence may be accredited education establishments or examination centres, which have been assigned by the State Education Quality Service. The procedure on validating professional competence obtained outside formal education is as follows:

1. individual application for assessment of professional competence;
2. professional qualification exam;
3. awarding document certifying a professional qualification.

The first qualifications using this procedure were awarded in June 2011.

Referencing to the EQF

The Academic Information Centre was appointed as the national coordination point in Latvia in February 2008.

In August 2011, the Academic Information Centre, in cooperation with the Lifelong Learning Development Division of the Policy Coordination Department of the Ministry of Education and Science, prepared the National Self-Assessment Report, which describes the referencing process of the Latvian formal

qualifications to the EQF and QF-EHEA. It was presented to the EQF Advisory Group in October 2011. The Report has been published and is available both in Latvian and in English at the National Coordination Point (NCP) website (¹⁵⁶).

Table 10. **Levels correspondences 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

The referencing process included the following activities:

- setting up of the referencing working group (September 2009) by the Ministry of Education and Science; this comprised all main stakeholders (ministries, national agencies, quality agencies, employers' organisations, trade unions, students' organisations and other NGOs); it mostly performed the tasks of consulting and supervision, reviewing and approving materials prepared by the experts;
- establishment of expert working groups to devise national level descriptors;
- drafting and approving the Cabinet of Ministers Regulations on the classification of Latvian education;
- arranging an advisory conference; the Academic Information Centre organised a national conference to present experience of other countries and open discussion on linking Latvian qualifications to the EQF; this, started public consultation, which was then continued virtually via the Latvian NCP website (<http://nki-latvija.lv/>);
- writing the self-assessment and referencing report;
- consultation on the self-assessment and referencing report.

Referencing will be carried out in two stages:

- Phase I (2009-11), referencing existing Latvian formal education to the EQF for lifelong learning and the QF-EHEA.
- Phase II (2013-15), review of the national self-assessment report, on the basis of the new Vocational Education Law, Higher Education Law and the results of several projects, e.g. ESF project Development of sectoral qualifications system and increasing the efficiency and quality of vocational education (2010-13).

(¹⁵⁶) See: <http://nki-latvija.lv>

A topic of discussion in the referencing process was placing different VET programmes (labelled as vocational education, vocational secondary education and continuing vocational education programmes) to the same LQF/EQF level 4. These programmes differ in terms of length and progression possibilities. It was argued by national experts that vocational education programmes better correspond to LQF level 4 than 3; the argument was that the main difference between vocational education and vocational secondary education is the number of hours devoted to general subjects and state final exams and that relevant professional knowledge and skills are the same. 'Placing both vocational secondary education and vocational education programmes on the same level helps to avoid existing disparities and artificially made differences' (Latvian Academic Information Centre, 2011, p. 42).

Important lessons and the way forward

European initiatives have provided an important impetus for reform in Latvia. The referencing has initiated public discussions between various stakeholders. The present referencing report outlines the referencing of formal qualifications; in the 2nd phase, the referencing exercise will be enlarged to include other qualifications accommodating the new legal regulations.

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 of HE, a ESF project for evaluating higher education programmes and developing recommendations has been launched within ESF activity Improvement of study programme content and implementation and development of academic personnel competence. (Latvian Academic Information Centre, 2011)

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> [cited 25.8.2011].

LIECHTENSTEIN

Introduction

In February 2011, the government took the decision to develop a national qualifications framework (NQF) for lifelong learning for Liechtenstein.

This decision was part of a process under way since Liechtenstein committed to the EQF/NQF in 2008. In December 2010, a proposal for qualifications framework for higher education, in line with the QF-EHEA, was prepared (NQF.li-HE, 2010) ⁽¹⁵⁷⁾. It will constitute an integral part of the NQF for lifelong learning.

It is expected that the NQF will be established by December 2012.

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

Rationale and main policy objectives

NQF development will be 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.

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 and enhance 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, achieved in formal, non-formal and informal settings.

⁽¹⁵⁷⁾ *Qualifikationsrahmen für den Hochschulbereich im Fürstentum Liechtenstein, NQF.li-HE, December 2010.* Available from Internet: http://www.llv.li/pdf-llv-sa-nationaler_qualifikationsrahmen_entwurf_2011_12.pdf [cited 24.8.2011].

Stakeholder involvement

The work on the national qualifications framework has been initiated by the government. On behalf of the Ministry of Education, an expert from the National Agency of International Education Affairs (AIBA) has been appointed to provide technical and administrative support to the process.

It is planned to set up a steering group 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.

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.

Main sources of information

Ministry of Education, <http://www.4icu.org/institutions/177.htm> [cited 24.8.2011].
National Agency of International Education Affairs (AIBA) in Liechtenstein.

LITHUANIA

Introduction

An 8-level Lithuanian qualifications framework was adopted in 2011. The framework is based on a Government Decree specifically addressing the qualifications framework and its functions. It covers all officially recognised (full) qualifications in primary general education, vocational education and training and higher education. The 'matura attestation' (university entrance qualification) is part of the framework (at level 4).

Lithuania started the work on a NQF in 2006 with the launch of the project Creation of the national system of qualifications of Lithuania, supported by the European Social Funds (ESF). Extensive work was carried out between 2006 and 2008, addressing the main conceptual and methodological challenges involved in setting up an NQF. Important outcomes of this work were the design of NQF level-descriptors, the preparation of a methodology for the design of

learning outcomes based sectoral-occupational standards ⁽¹⁵⁸⁾, and the preparation of pilot models of sectoral-occupational standards in the construction and hospitality sectors. Based on this preparatory work, the Lithuanian government is preparing to reference to the EQF late 2011.

Rationale and the main policy objectives

One main reason for developing an NQF is to ensure better correspondence between labour market needs and provision of qualifications (in vocational, higher and continuing education and training). The NQF is expected to improve the links and increase the transferability from vocational education and training to higher education, from initial VET to continuing vocational training, and to establish links to non-formal and informal learning. The NQF is also seen as an important in increasing the attractiveness and value of vocational qualifications in society, improving the image of VET and fostering the valuing of vocational knowledge, skills and competences at the same level as academic knowledge and credentials. The NQF is finally seen as a way of ensuring quality assurance in qualifications. To realise this vision, a series of short-, medium- and long-term objectives have been identified and agreed on.

Stakeholder involvement

Work on the NQF was initiated by the Labour Market Training Authority of Lithuania, which took the initiative to launch the ESF funded project for the design of the NQF. This work has been widely supported by the Ministry of Education and Science, the Centre for Methodology of Vocational Education and Training, Centre for Quality Assessment in Higher Education, Centre for Vocational Education and Research at Vytautas Magnus University.

There has been considerable involvement of VET and higher education representatives in the design stage. Qualifications providers, and especially higher education institutions, were very important contributors to this process,

⁽¹⁵⁸⁾ Sectoral-occupational standards describe the qualifications typical for the occupations in the whole sector, for example, currently designed samples of these standards are the sectoral-occupational standard of construction and the sectoral-occupational standard of hospitality sector. These sectoral-occupational standards provide the 'maps of qualifications' (list of qualifications structured according to typical occupations) in the sectors and the descriptors of the contents of these qualifications. The sample of such standard are available from Internet: <http://www.lnks.lt>

because their representatives were the majority in the group of experts which developed NQF descriptors and their impact on descriptor design was the most important. However, employers, employees and learners (student organisations) were less involved. This seems not to be related to any opposition to the idea of an NQF but rather due to lack of resources and expertise, particularly noticeable in complicated design and development process like this. Development of the NQF, and the discussions following from it, led to growing awareness of trade unions to take active part in the implementation of the NQF. They see the NQF as an instrument for protecting the rights and status of employees.

The Ministry of Education and Science took over the main coordination and governing of the NQF in 2009. This included coordination of all processes related to the design, provision and awarding of qualifications. A National Authority of Qualifications was established in 2008 to coordinate implementation of the NQF. This authority was abolished in 2009, following revised priorities of the Parliament elected late 2008.

All national quality assurance bodies have been involved in developing the NQF (National agency for schools assessment, qualifications and VET development, Centre for quality assessment in higher education). The Central Professional Committee has acted as an advisor in referencing national qualifications to the EQF. The committee is composed of representatives from employer associations, trade unions, educational institutions and ministries (18 members in total).

A national conference was organised in 2011 to discuss the findings of the referencing process, with more than 100 participants.

The Lithuanian NQF for LLL and higher education

Development of the Lithuanian NQF relates back to the reforms of the vocational education and training sector, starting as early as 1997 (VET level descriptors). This is reflected in general approval of the NQF idea by VET-stakeholders. To take on the role of comprehensive framework, however, the Lithuanian NQF must be 'owned' by other parts of the qualifications system, notably higher education. The fact that EQF levels 6-8 in principle correspond to the Bologna cycles supports the link to the QF-EHEA and does not seem to represent a serious obstacle. This is reflected by the fact that the referencing to the EQF in 2011 also will function as self-certification to the QF-EHEA.

Tutlys et.al. (2010, p. 52) ⁽¹⁵⁹⁾ points to other factors which may influence the attitudes of higher education institutions to the NQF and decide the extent which the framework will strengthen the overall permeability of the Lithuanian qualifications system. It is expected that the non-university part of higher education will be more supportive of NQF implementation than universities. The lack of clear division of roles and functions between the universities and the non-universities may, however, create a problem when implementing the NQF and will raise issues regarding learning pathways and progression routes. Overall support from higher education, including universities, will largely depend on the quality of the dissemination of information on the NQF and whether universities can be convinced that the framework provides added value and is not just a new and limiting bureaucratic structure.

Levels and descriptors

The Lithuanian NQF has 8 levels. The number of levels reflects both the realities of the Lithuanian qualifications system and the implications of the EQF. The group of experts established to design the NQF has analysed the existing levels of education and qualifications provided by VET and higher education, finding two existing levelling: five vocational education levels introduced in 1997 and updated in 2001 and the three levels of higher education introduced in 1992. Considering this existing structure of qualifications levels, and degrees and the need to adjust the NQF levels to the EQF, it was decided that eight is the optimal number of levels for the NQF of Lithuania.

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

The descriptors for the qualification levels distinguish between specific typical functional, cognitive, and general competences, and reflect the evolution of competences on the route from a lower to higher qualification. The full range of qualifications is a hierarchy of levels from general secondary schools, vocational secondary schools, and labour market training institutions to the higher education. The level reference structure is also designed to capture learning acquired through non-formal and informal learning and through lifelong learning opportunities

⁽¹⁵⁹⁾ ILO research programme on implementation and impact of NQFs: qualifications frameworks: implementation and impact – background case study on Lithuania. Available from Internet: http://www.ilo.org/skills/what/projects/lang--en/WCMS_126588/index.htm [cited 25.5.2010].

Table 11. **Level descriptor in the Lithuanian NQF**

Parameters		
	Characteristics of activities	Types of competences
Criteria	<ul style="list-style-type: none"> - complexity of activities - autonomy of activities - variability of activities 	<ul style="list-style-type: none"> - functional competences - cognitive competences - general competences

The Lithuanian NQF uses transversal descriptors. The challenge of balancing sector specific descriptors on the one hand and general, transversal descriptors on the other hand was quite acutely felt by the experts involved. They decided to apply the logic of transversal descriptors, stressing the specific requirements of the structuring of qualifications at national level. It is important to add, however, that the transversal descriptors are relevant reference points for sectors by articulating general competences as well as addressing aspects like complexity and autonomy of activities.

The Lithuanian NQF is based on complete (full) qualifications. However, the NQF will, in the medium- and long-term, 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 by the legal documents.

Use of learning outcomes

The learning outcomes approach is used for defining and describing qualifications and setting standards; it is accepted in vocational education and training. Existing VET standards which describe the qualifications provided by initial VET institutions are based on competences. The definition of competence in the NQF corresponds to the definition of learning outcomes (used by the EQF). The university sector is still at an early stage in using of 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.

VET uses a learning outcomes (competences) approach in curriculum design. The training curricula are described in terms of competences according

to the VET standards. However, VET curricula also provide the indications of the corresponding subjects, which provide the knowledge and skills related to the outlined competences. University curricula largely refer to subjects (input) and are oriented to time and/or credits. A redefinition of university curricula using learning outcomes is still at a very initial stage.

Assessment of learning in VET and vocational higher education is based on learning outcomes because the VET standards prescribe the assessment specifications. However, assessment of learning outcomes in VET still requires new approaches to assessment, especially for practical skills. Assessment of learning in the universities is based on subjects and credits.

The current learning outcomes situation reflects the 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 thus only partly able to tailor their own learning programme or pathway. It is expected that the shift to learning outcomes will be reinforced by the national introduction of modular training, as well as by introducing recognition of non-formal and informal learning.

Referencing to the EQF

The Lithuanian NQF will be referenced to the EQF in late 2011. One integrated report covering both the EQF and QF-EHEA has been prepared. With the exception of levels 1 and 2, the report outlines a one-to-one relationship between the LQF and EQF levels. The Lithuanian level 1 (certificate of VET level 1) is referred to EQF level 2 while the Lithuanian level 2 (basic, primary education) is referred to level 1 of the EQF.

Main sources of information

More information to be found at <http://www.lnks.lt>

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. Work has continued on this basis, resulting in agreement (March/April 2010) on a set of descriptors covering all levels and types of education and training. Following a new presentation to, and discussion in, the Council of Ministers, a public consultation was launched by the end of 2010, the results of which are currently being analysed. This process is foreseen to be concluded by the adoption of the Framework – and the referencing to the EQF – in the second half of 2011.

The new Law on vocational education and training adopted autumn 2008 provided the basis for the NQF, in particular for the learning outcomes approach which is now being applied more generally to other parts of education and training.

Rationale, main policy objectives and scope of the framework

Development and implementation of the EQF is seen as an opportunity to make explicit the existing (implicit) 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 (as a reference point for quality assurance and reform). Increased transparency of qualifications is a key objective underpinning the Luxembourg national framework. The NQF is not seen as an instrument for reform, but as an important additional 'piece of the puzzle' contributing to the overall modernisation of national education and training.

In the longer term, the NQF is seen as potentially helpful in opening up towards and including qualifications awarded outside the existing, official system. This reflects that a high number of citizens hold these kind of unofficial and non-recognised certificates and diploma. An NQF with clear, learning outcomes-based levels and descriptors could support their inclusion. Examples of this are

found in important sectors like construction and banking and may, in a worst case scenario, prevent learning progress. To accomplish this, concrete approaches to accreditation and quality assurance of these new qualifications have to be put in place.

While procedures for inclusion of these non-traditional qualifications will be necessary as a part of the new framework, the emerging system for validating non-formal and informal learning can aid a more open and flexible approach. It is the intention to integrate the validation system fully into the NQF, stating that any qualification at any level can be achieved either through school or by having prior learning assessed and validated (this includes higher education qualifications, the only exception for the moment being the Baccalaureate).

There are some discussions still pending on the final legal status to be attributed to the NQF. One option is (eventually) to pass a national law on the framework; another is to use an administrative approach referring to existing laws (for general, VET and HE education).

Stakeholder involvement

The NQF process is being coordinated by the Ministry of Education. In a first step representatives (administrative as well as pedagogical) of the different education and training subsystems (general education, vocational education, higher education), discussed the framework (descriptors and linked qualifications). The next step was characterised by consultation with other ministries following the Council of Ministers in 2009. This inter-ministerial group, involving all relevant ministries (education, labour market, etc.) addressed mainly the legal and financial implications of the framework.

Following further discussion in the Council of Ministers, consultation was launched towards the end of 2010. This addressed all relevant stakeholders including the social partners (Chamber of Commerce, Chamber of Crafts and Chamber of Employees), the main sectoral organisations (crafts, bank, industry, Horeca) as well as professional bodies like architects, medicine, etc. 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 compared to those of neighbouring countries.

The Luxembourg NQF for LLL and higher education

The attitude of higher education towards the NQF was originally somewhat sceptical. Stakeholders from this sector argued that EQF levels 6-8 should be mainly based on the Dublin descriptors of the EHEA. Following discussions during 2009 and early 2010, and fine-tuning of descriptors at level 6-8, a common set of descriptors have been accepted by everybody.

Level 5 is now seen as the bridging level between both subsectors: in this level we find VET qualifications as well as higher education qualifications. This means that the Meister qualifications (Master craftsman) will be placed at level 5, beside the higher technician certificate (BTS).

Levels and descriptors

Luxembourg has decided to introduce an eight-level reference structure. While the number of levels corresponds with the EQF, the descriptors reflect experiences gained over several decades. At each level, descriptors are differentiated according to knowledge, skills and attitude (*connaissances, aptitudes, attitudes*). 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 the German tradition in this field. The 'Siemens method' for developing 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 the countries with a dual VET system (Austria, Denmark, Germany, and Switzerland). Links to France are also strong, to a certain extent influencing the way qualifications are designed and described. The descriptors will be formally approved during autumn 2011. Existing drafts show that the principles of EQF have been taken fully into account: 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 in EQF.

Use of learning outcomes

The learning outcomes approach is increasingly influencing Luxembourg education and training, in particular following the adoption of the 2008 Law on VET reform. This has made it possible, already in the proposal presented to the Parliament in early 2009, to indicate how single qualifications and qualifications types will be placed in the national framework. It has, for example, been indicated (although to be decided in autumn 2011) that traditional VET qualifications (professional diploma) could be placed at the national level 3. A baccalaureat diploma (general upper-secondary) could be placed at level 4, as will the diploma of a technician (post-secondary VET). The Meister could be placed at level 5, together with the higher technician qualification, the BTS. Stakeholders, including social partners, agree that the new profiles developed from the 2008 VET reform make referencing possible.

While the learning outcomes approach is firmly embedded in the VET sector, and even in primary education, current reform focuses on introducing a learning outcomes based approach at the level of secondary and upper-secondary education and training. The same is happening in higher education. Over the mid-term, the whole Luxemburgish system will be based on learning outcomes.

Problems are still faced over the extent to which learning outcomes influence teaching and assessment. Efforts are being made by the ministry to provide more information to schools and teachers on this.

Validating non-formal and informal learning (Oberheidt, 2010) ⁽¹⁶⁰⁾

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 vocational education and training, recently complemented by the *Règlement grand-ducal du 11 janvier 2010*, is a strong signal in this respect. Other laws concerning validation at university level (12 August 2003) and for the BTS (19 December 2008) have been adopted, signalling that validation is applied to the entire formal education and training system with the exception of the Baccalaureate).

⁽¹⁶⁰⁾ *European inventory on validation of non-formal and informal learning 2010, country report Luxembourg*. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77470.pdf> [cited 7.10.2011].

The concept of validation is clearly referred to in the forthcoming NQF, mainly because of the influence of the 2008 law on vocational education and training which has provided the basis for NQF development. This is particularly noticeable with regard to the learning outcomes approach which is now increasingly applied on a more general basis for other sectors of education and training.

Referencing to the EQF

Luxembourg is expected to reference to the EQF by the end of 2011, following the adoption of the NQF.

MALTA

Introduction

Malta has been putting its comprehensive national qualifications framework for lifelong learning (NQF) in place since June 2007, encompassing all levels of formal, informal and non-formal education and training.

The framework is governed by Legal Notice 347 of October 2005⁽¹⁶¹⁾ which will be subsequently amended to reflect the development of the Malta Qualification Framework (MQF). Basic elements of the MQF have been put in place by establishing the Malta Qualifications Council (October 2005) and a proposal for preparing an eight-level framework. The proposal was supported by the main stakeholders (employers, trade unions, major public and private education and training providers) in a broad consultation process ending in June 2007. In May 2007, four working documents on the MQF were published, focusing on the conceptual framework, a reform strategy for VET, a quality assurance policy for VET, and level descriptors for key competences at levels 1, 2 and 3 of the MQF.

Malta was the first member state to prepare one single, comprehensive report which references the MQF simultaneously to both the EQF and the QF-

⁽¹⁶¹⁾ See: <http://docs.justice.gov.mt/lom/legislation/english/subleg/343/26.pdf> [cited 17.8.2011].

EHEA in 2009 (Malta Qualification Council and Ministry of Education, Culture, Youth and Sport, 2009) ⁽¹⁶²⁾. 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 of this, in February 2011, an updated version of the report published in December 2010 was presented to the EQF AG.

The updated version sought to cover changes in policy and reflects the results of the referencing process. This consisted mainly of three innovations: the first is an elaboration of the role of stakeholders; the second a proposal for a national awards system based on the MQF; and the third the introduction of validation of informal and non-formal learning in the school leaving certificate being awarded following completion of compulsory education. Malta shall also be compiling and setting up a National database of regulated national qualifications and recognised awarding bodies.

Rationale, main policy objectives and scope of the framework

The MQF addresses the following issues:

- (a) transparency and understanding of qualifications;
- (b) level rating of qualifications within an awards system;
- (c) valuing all formal, informal and non-formal learning;
- (d) consistency and coherence in relating to different qualifications frameworks in European and international cooperation;
- (e) parity of esteem of qualifications from different learning pathways, including vocational and professional degrees and academic study programmes ;
- (f) access and progression;
- (g) lifelong learning and mobility;
- (h) the shift towards learning outcomes-based qualifications;
- (i) a credit structure and units as building blocks of qualifications;
- (j) the concept of mutual trust through quality assurance mechanisms that cut across all levels of the framework.

⁽¹⁶²⁾ 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) Available from Internet: <http://www.mqc.gov.mt/referencingreport?l=1> [cited 17.8.2011].

Stakeholder involvement

The Malta Qualifications Council (MQC) initiated the work on the MQF following Legal Notice 347 of 2005.

The main objective of the Malta Qualifications Council (MQC) is to steer the development of the MQF and to oversee the training and certification leading to qualifications within the framework which is not already provided for by compulsory education institutions or degree awarding bodies ⁽¹⁶³⁾. Other tasks are to establish policies and criteria for the MQF, to approve and ensure the publication of national standards of knowledge, skills and competences and attitudes, endorse and ensure the publication of procedures to be implemented by training providers, endorse vocational education and training programmes, endorse certificates awarded, and keep and issue official records of certification awarded.

The MQC works with all stakeholders including the National Commission for Higher Education (NCHE). It is planned that by amendments to the Education Act in autumn 2011 the MQC and the National Commission for Higher Education will be merged into a new body – the National Commission for Further and Higher Education – which will provide strategic policies for further and higher education. The agencies have been working in tandem since January 2011.

The design and set up of the MQF happened through broad consultation to create a framework which truly reflects Malta's needs. The role of stakeholders, even in the implementation phase, is crucial in ensuring success, sustainability, application and employability. MQC acknowledges the necessary commitment and involvement of stakeholders to share ownership with those that will be affected by its implementation. Implementation reflects their realities expressed in consultation.

MQC addresses three types of stakeholder: public and private education and training institutions; social partners, and stakeholders. This last group includes individuals or organisations who will be affected by the measures and policies. It is more of an extensive notion of the term including all members of civil society not necessarily forming part of an organisation. Social partners are also stakeholders but this refers to representative organisations such as unions and employer associations, among others. The role that public and private education and training institutions play in the referencing process is instrumental in achieving results which promote greater transparency of qualifications,

⁽¹⁶³⁾ Higher and further education institutions use MQF on a voluntary basis by tuning their programmes to the MQF using learning outcomes descriptors.

permeability between VET and HE, and mechanisms to quality assure teaching and learning.

Levels and descriptors

The Maltese NQF has eight qualification levels. It is compatible with the higher education qualifications framework as agreed in the Bologna process for the European higher education area (QF-EHEA) and the Dublin descriptors. The same level descriptors cover all levels and types of education and training. They are based on those published by the Government in Legal Notice 347/2005 and those of June 2007. A new Legal Notice will be published in October 2011 to establish the Malta Qualifications Framework as referenced to the EQF and the QF-EHEA.

The MQF has been influenced by the eight-level classification of the EQF but it responds directly to the long-standing Maltese qualifications system. The MQF level descriptors are more detailed than those of the EQF and contextualised to the national culture and social, economic and political priorities.

Each level descriptor is defined in terms of knowledge, skills, competences and, thus, learning outcomes. Learning outcomes summarise the knowledge, skills and competences and highlight specific attributes such as communications skills, judgemental skills and learning skills which progress throughout the MQF. The level descriptors measure complexity, volume and the level of learning expected for the particular qualification. They give a broad profile of what an individual should know and be able to do with varying degrees of autonomy and responsibility.

Progression in the MQF is recorded in terms of:

- (a) knowledge and understanding;
- (b) applying knowledge and understanding;
- (c) communication skills;
- (d) judgemental skills;
- (e) learning skills;
- (f) autonomy and responsibility.

Use of learning outcomes

Strengthening the learning outcomes approach has become fundamental to reforms across education and training in Malta. One of the tasks of the Malta Qualifications Council, therefore, is to introduce national standards of knowledge,

skills and competences and attitudes 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 has been 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 level of the MQF, this initiative is intended to instil a culture of acknowledging learning achievements irrespective of the context within which the learning process occur, from the very early stages of education.

For VET, 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. At level 3 of the MQF the learner should have achieved the key competences which would lead the individual to access and progression into further and higher education. Sector skills units (within the context of the validation of informal and non-formal learning) will be established through a new Legal Notice in October 2011 and occupational standards for the different sectors will be developed.

A variety of assessment methods is used in VET and general education. Assessment for VET is based on standards. Learners at upper-secondary level are also expected to undertake an independent cross-curricular study.

Informal and non-formal education and training, and recognition of prior learning, are an important part of the Malta Qualifications Framework for lifelong learning purposes. The MQC published a series of working documents entitled Valuing all learning in 2008. Volume 4 of these documents acknowledges the country's legislative gap in validation of non-formal and informal learning and states that legislation is the first step required to take forward implementation of the system of validation in Malta. Following consultation with the general public, the draft legal framework for validation of non-formal and informal learning is now available and will be adopted by the amendments to the Education Act in autumn 2011. (Mantouvalou, 2010) ⁽¹⁶⁴⁾

⁽¹⁶⁴⁾ *European inventory on validation of non-formal and informal learning 2010, country report Malta*, p. 1-2. Available from Internet:
<http://libserver.cedefop.europa.eu/vetelib/2011/77472.pdf> [cited 17.7.2011].

Referencing to the EQF

Malta was the first member state to prepare one comprehensive referencing report to relate its qualifications to the EQF and the QF-EHEA. It was presented to the EQF AG in September 2009 and officially launched by the Minister for Education in November 2009. The direct correspondence with the EQF levels was established.

Table 12. **Levels correspondences 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

To inform the international audience on the major developments in the post-referencing period (mainly in 2010) an updated version was prepared and presented to the EQF advisory group in February 2011.

The revised version of the referencing report is available from Internet: <http://mqc.gov.mt/revisedreferencingreport> [cited 10.10.2011].

Important lessons and the way forward

Development of the MQF has served as a catalyst for education reform, addressing key challenges in education, training and labour market in Malta. ⁽¹⁶⁵⁾ The consultation on the development of the MQF and the preparation of the referencing report of the MQF to the EQF and the QF-EHEA were two 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

⁽¹⁶⁵⁾ For example, high school leaving from education and training, in 2008, 39% of young people aged 18-24 left school.

system, and introducing validation of non-formal learning into compulsory secondary education. ⁽¹⁶⁶⁾

Eight different award types have been proposed to build the widest possible award system that best fits the Malta Qualifications Framework for Lifelong Learning. It is expected that all formal, non-formal and informal learning experience will be classified under one of these awards. These awards are:

1. academic higher education awards, higher vocational education and training awards;
2. vocational education and training awards;
3. continuous professional developments awards;
4. customised awards;
5. work-based-awards;
6. school-awards;
7. higher and general education legacy awards;
8. VET legacy awards.

These will be linked to workload to give clearer picture of achievements: 'Qualifications at the same level of difficulty vary in duration, size, input, output, intensity and outcomes'. ⁽¹⁶⁷⁾ The main challenges in introducing the new award system are linked to:

- (a) the adoption of the award system by all stakeholders including public training providers;
- (b) the application of the credit system to any award granted which is referenced to the Malta Qualifications Framework;
- (c) the application of the award system by the sector skills units, particularly in the formulation and validation of non-formal and informal learning
- (d) the recognition of the Maltese award system by other member states in job-seeking situations (for workers and students) and on mobility programmes for teachers and students.

An important further change is ensuring quality and standards. It is proposed that qualifications standards should be established by MQC in consultation with all relevant bodies.

A major and important development will take place in autumn 2011 with amendments to the Education Act to merge the Malta Qualifications Council and the National Commission for Higher Education into a new body called the National Commission for Further and Higher Education (NCFHE) as well as the

⁽¹⁶⁶⁾ 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 Standards and Quality in Education (Ministry of Education).

⁽¹⁶⁷⁾ See: <http://mqc.gov.mt/revisedreferencingreport>, p. 125 [cited 10.10.2011].

publication of three Legal Notices on quality assurance, and licensing of further and higher education, the validation of informal and non-formal learning, and the establishment of the Malta Qualifications Framework for lifelong learning.

Main sources of information

The Malta Qualifications Council is the designated national coordination point (NCP). Information is available on <http://www.mqc.gov.mt> [cited 17.7.2011].

MONTENEGRO

Introduction

Montenegro has developed a comprehensive national qualifications framework for lifelong learning, based on learning outcomes. It includes all formal education qualifications (from general education, VET and HE) as well as a system of labour market oriented national professional qualifications.

In December 2010, The Parliament of Montenegro passed the national qualifications framework law (Zakon o nacionalnom okviru kvalifikacija, 2010) ⁽¹⁶⁸⁾. The law defines the principles and objectives of the NQF, the structure of levels and sub-levels, qualifications types to be included and the governance structure.

Rationale and main policy

The Government sees the NQF development and alignment to the EQF as an important political priority. The adopted law on NQF defines the principles and main policy objectives of the NQF.

Among the principles the focus is on learning outcomes defined as knowledge, skills and competences, the importance of quality assurance in all

⁽¹⁶⁸⁾ Available from Internet:
http://www.skupstina.me/cms/site_data/SKUPSTINA_CRNE_GORE/ZAKONI/ZAKON%20882.pdf [cited 15.9.2011].

phases of qualifications development, and establishing cooperation among all important stakeholders and creating conditions for transfer of credits.

The main goals of the NQF as defined by Law are:

- clear definition of learning outcomes;
- evaluation of different skills within the overall qualifications system;
- supporting lifelong learning;
- making connections between various education and training sub-systems;
- making progression possibilities (vertical and horizontal) within the system of education and training visible;
- improving international comparability of qualifications;
- ensuring quality of qualifications.

Stakeholder involvement

The Ministry of Education and Sports has the overall responsibility for developing and implementing the NQF.

A working group, established in 2008, comprised representatives of the key institutions involved in developing and awarding qualifications: representatives of the Ministry of Education, Ministry of Labour, Health and Social Care, Bureau of Education Services, Centre for Vocational Education, Examination Centre, University of Montenegro, Chamber of Economy, trade unions and employers' union. The draft document Development of the national qualifications framework in Montenegro was developed.

Work continued, supported by the IPA project (2007) and resulted in the adoption of the national qualifications framework law in 2010.

There are different institutions involved in developing and awarding qualifications at different levels in Montenegro. According to the adopted law a new cross-sectional body – The Council for Qualifications – has to be appointed. The members of this council are ministries, institutions involved in the development of qualifications, employment services, university and representatives of employers and trade union.

The main tasks of this new body are:

- 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.

Levels and descriptors

The Montenegrin national qualifications framework has eight levels, based on learning outcomes with sub-levels at levels 1, 4 and 7. They cover all types of qualifications in formal education (in general education, VET, HE).

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 (a post-secondary VET qualification). Levels 6 to 8 include qualifications awarded in higher education.

It is important to note that all levels are open for professional qualifications as defined by the Law on national professional qualifications adopted in 2008.⁽¹⁶⁹⁾ This law defines procedures regulating validation and recognition of qualifications, acquired outside formal education and training through non-formal and informal learning. The law also refers to 'other qualifications'.

Use of learning outcomes

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.

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.

⁽¹⁶⁹⁾ *Zakon o nacionalnim strucnim kvalifikacijama*. Available from Internet:
<http://www.iccg.co.me/ispitni/images/Razno/Regulativa/Zakon%20o%20nacionalnim%20i%20strucnim%20kvalifikacijama.pdf> [cited 15.9.2011].

Occupational standards were developed for a number of occupations in cooperation with international partners. This was the basis for developing new curricula based on occupational standards for the first time.

Much needs to be done in developing qualifications based on learning outcomes, which will allow them to be aligned to the NQF.

Validating non-formal and informal learning

In 2008, the law on professional qualifications was adopted, which provides the legal basis for the validation and recognition of non-formal and informal learning. The law describes the procedures for validation, development of occupational and assessment catalogues, and examinations commissions. Assessment will be carried out by the Examination Centre.

It is planned, that qualifications acquired in this way can be taken into account when entering the formal education system. It will also permit students who have left school to gain qualifications for parts of programmes they have passed. The Examination Centre is preparing examiners and it is expected that first candidates will receive national certificates by the end of 2011.

Referencing to the EQF

It is planned to reference the NQF to the EQF.

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) are among the most important tasks in the near future.

Much needs to be done in developing or redefining qualifications to allow alignment to the NQF. Work on five new qualifications is planned.

An important activity is also raising awareness among different stakeholders. ⁽¹⁷⁰⁾

⁽¹⁷⁰⁾ For more information see: <http://www.mpin.gov.me/en/ministry>.

Main sources of information

Ministry of Education and Sports, <http://www.mpin.gov.me/en/ministry>

THE NETHERLANDS

Introduction

A comprehensive NQF covering all levels and types of qualifications was adopted in by the Dutch Government in September 2011 (the Dutch qualifications framework, the NLQF). This provides the basis for the referencing to the EQF which is scheduled to take place 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 adoption of the framework has been rapid: initial preparations started as late as January 2009. A first proposal (mainly on the procedures to be followed) was presented to the Ministry of Education in May 2009. While a steering group consisting of representatives from ministries involved was set up along with a small secretariat; a key role was played by the NLQF-EQF Committee (Leinse committee ⁽¹⁷¹⁾) whose responsibility it was to assure the quality, relevance and added value of the NLQF and its relation to the EQF.

The NLQF has been developed in direct response to the EQF and the timing of the initiative was directly linked to the adoption of the EQF recommendation in 2008. The idea of a comprehensive qualifications framework is largely new to Dutch stakeholders and it is doubtful whether the NLQF would have been developed without the influence of the EQF. However, many of the key principles underpinning European NQF developments, in particular the use of learning outcomes, are already extensively used in the Dutch system, possibly facilitating its implementation.

⁽¹⁷¹⁾ The Leijnse committee consisted of four members, Prof.Dr F.Leinse (chair), Prof.Dr. J.J.H van Akker, Prof.Dr H.P.M Adriaansens and Prof.Dr W.J Nijhof.

The NLQF is still at an early stage of implementation and only the coming few years will demonstrate the extent to which it will bring added value, at national and European level.

Rationale, main policy objectives and scope of the framework

The NLQF is defined as a systematic arrangement of all existing qualifications in the Netherlands. The core of the framework is based on qualifications regulated by three Ministries (the Ministry of Education, Culture and Science, the Ministry of Economic Affairs, Agriculture and Innovation, and the Ministry of Healthcare, Welfare and Sports). In addition the framework is – in principle – also open to ‘other qualifications’ for example awarded by the private sector. The scope of the NLQF is thus broader than that of several other ‘new’ frameworks currently being developed. For example the Finnish and the Norwegian framework proposals have been limited to publicly recognised and accredited qualifications. While both countries indicate that this might change in the future, concrete arrangements to make this possible have yet to be identified.

The ‘other qualifications’ addressed by the NLQF are, in particular, those awarded by enterprises, sectors and professional bodies but hitherto not regulated or accredited by Ministries or other public qualifications authorities. The inclusion and classification of these qualifications will take place at the request of the bodies responsible for awarding the diplomas and certificates, generally the body which provides the learning programme leading to the qualification. By bringing Ministry-regulated and ‘other qualifications’ together in one framework, it is envisaged that 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, 2011) ⁽¹⁷²⁾ 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 in order 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;

⁽¹⁷²⁾ The referencing of the Dutch national qualifications framework to the EQF.

- showing how the different qualifications contribute to improving workers' skills in the labour market.

In short, the main objectives of the NLQF are:

- increase transparency within the Dutch education system;
- increase the understanding of qualifications within Europe;
- increase the comparability of levels of qualifications;
- 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.

The purely European (mobility) related objectives are clearly outnumbered by those addressing national level policies and practices. In the Dutch report on referencing to the EQF (op.cit. p.25) some space is used to clarify what the NLQF report does not do or aim at. First it is stated that the framework is not a revision of the Dutch education and training system and that it gives no entitlements to a degree or title. Further, the right to transfer and progress between levels is not regulated by the framework. Existing laws and decrees define the scope of education and training and regulate the practices within its institutions. The framework is merely a systematic arrangement of the existing qualifications aiming at transparency and increased comparability.

There is tension between the descriptive and the normative role of the Dutch framework. While stakeholders stress that revision and reform is out of the question – transparency is the *raison d'être* of the framework – at the same time they outline an ambitious list of objectives very much requiring change.

The question – to be answered in the coming years – is whether this new comprehensive NQF will become something more than just the sum of its separate parts; whether it will be able to promote communication across existing sectors and institutions, bringing added value to the education and training systems as a whole?

Stakeholder involvement

The Ministry of Education, Culture and Science has been responsible for the development and implementation of the NQF. A project plan was developed during spring 2009 and resulted in the setting up of a steering group consisting of the three main ministries directly involved; Ministry of Education (VET, HE and

Secondary education), Ministry Economic Affairs, and Ministry of Agriculture and Innovation. A small secretariat was set up in charge of the 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). The input from the secretariat and the expert group was reviewed by the so-called 'Leijnse Committee' (see above) whose work formed the basis of the final proposal presented to the Ministry of Education in May 2011. Two internet-based consultations were carried out at different stages of the process.

Seen from the outside the Dutch NQF process can be characterised as technically oriented and largely organised as a top-down process. Different from many other countries, the steering group of the project consists only of representatives of the three ministries; other stakeholders, for example social partners, are not directly involved. The Leijnse Committee is four professors recruited for of their expertise in education and training matters, not for their ability to voice different interests and positions. While the consultation has made it possible for all stakeholders to express their position on the developing framework, a key question is whether broad ownership can be developed in the coming period. This is a necessary prerequisite for it to make a difference and add value.

The Dutch NQF and higher education

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 for all 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 (¹⁷³).

¹⁷³) www.nvao.net

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 types of qualification are placed into the levels of the NLQF.

Table 13. **Types of qualifications placed into the levels of Dutch qualifications framework (NLQF)**

NLQF	Adult education	VMBO	MBO	HAVO/ VWO	Ho	'Other qualifications'
8					Doctorate/ Designer/ Medical specialist	
7					Master	
6					Bachelor	
5	VAVO-VWO			VWO	Associate Degree	
4	VAVO-HAVO		MBO-4	HAVO		
3			MBO-3			
2	VACO- VMBO tl Basic Education 3	VMBO kb, gl and tl	MBO-2			
1	Basic Education 2	VMBO bb	MBO-1			
Entry level	Basic Education 1					

The NLQF is seen as offering a new way of describing existing qualification levels in The Netherlands. 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 Table 13 illustrates, however, it has yet to be seen whether this principal opening up of the framework is also reflected in practice.

The learning outcomes approach used to describe the nine levels is based on the following elements.

Table 14. **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	<u>Applying knowledge</u> Reproduce, analyse, integrate, evaluate, combine and apply knowledge in an occupation or a knowledge domain
	<u>Problem solving skills</u> Recognise or identify and solve problems
	<u>Learning and development skills</u> Personal development, autonomously or under supervision
	<u>Information skills</u> Obtain, collect, process, combine, analyse and assess information
	<u>Communication skills</u> 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 sub-categories 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 (MB) sector in recent years.

Use of learning outcomes

The learning outcomes (or rather) competence oriented approach is broadly accepted and implemented in Dutch education and training. The Cedefop 2009

study on the shift to learning outcomes (Cedefop, 2009c) ⁽¹⁷⁴⁾ reports on a strong tradition of 'objectives-led' governance of education and training in the Netherlands, an approach which has proved conducive for a competence-based approach. Vocational education and training is probably most advanced as regards competence orientation; following extensive reform, a new VET competence-based structure has been developed and implemented. The same tendencies can be observed in general education and in 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 emerging NLQF is seen as an instrument to further 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.

Referencing to the EQF

The Netherlands referenced its NQF to the EQF in October 2011. The need to carry out the referencing to the EQF in parallel to the development of the NQF is seen as a particular challenge. Compared to the UK and Ireland, where NQFs already were in place before the referencing started, the complexity of the Dutch process was substantially increased. Whether and how this will influence the potential impact of the Dutch NQF is still too early to judge.

The Dutch referencing 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 of the EQF. This convergence reflects a broad agreement, supported by the Lisbon recognition convention, on the general levelling of qualifications; this is 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 these qualifications,

⁽¹⁷⁴⁾ *The shift to learning outcomes: policies and practices in Europe*. Luxembourg: Publications Office. (Cedefop Reference series; 72). Available from Internet: <http://www.cedefop.europa.eu/EN/publications/12900.aspx> [cited 7.9.2011].

several countries criticise the decision for not being sufficiently transparent and supported by documentation.

Table 15. **Levels 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

Validating non-formal and informal learning (Duvekot, 2010) ⁽¹⁷⁵⁾

Compared to other European countries, the Netherlands has a well established system for validating non-formal and informal learning (EVC). Specific characteristics of APL in the Netherlands are:

- validation always takes place according to a national standard and should be concluded through the award of a certificate of experience stating what the candidate knows, is able to do or understands in relation to this standard;
- 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 the employers and for 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.

⁽¹⁷⁵⁾ *European inventory on validation of non-formal and informal learning 2010, country report Netherlands.* Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77473.pdf> [cited 7.10.2011].

Important lessons and the way forward

The Dutch NQF work is now entering into its first implementation stage. The rapid development process, combined with a relatively limited involvement of stakeholder groups outside the three main ministries, may prove a challenge. Some stakeholders have questioned the added value of the initiative, pointing to the fact that the Dutch qualification system has undergone heavy reform in recent years (both for VET and HE) and that yet another reform may prove counter-productive. In contrast, others see the new NQF as able to build on and add value to these reforms.

The success of the Dutch process in the coming year(s) will largely depend on whether the last perspective comes to dominate the debate. Stakeholders close to the process see the need to develop a comprehensive communication strategy in the coming period to ensure that as many stakeholders as possible are involved in the development and implementation of the framework.

NORWAY

Introduction

The work on a comprehensive Norwegian national qualifications framework (*Nasjonalt kvalifikasjons-rammeverk for livslang læring*, NKR) has been progressing rapidly during 2010 and 2011 and is expected to become operational through the adoption of a Government Decree (*Forskrift*) in 2012. This decree will provide the basis for the referencing of the Norwegian NQF to the EQF, a process which is also expected to be completed in 2012.

While the Ministry of Education and Research started its work on the NKR in 2006 – by setting up a reference group and launching studies into different parts of the qualifications system – the work was intensified following the inclusion of the EQF Recommendation into the Treaty of the European Economic Area (EEA) in March 2009. A decision to proceed towards a comprehensive framework was made by the Ministry of Education in September 2009, resulting in a formal proposal submitted for consultation in January 2011. A draft Decree – taking into account the responses to the consultation – will be made public in late 2011.

Reactions to the consultation show that there is general support for a comprehensive Norwegian NQF among all main stakeholder groups ⁽¹⁷⁶⁾. Several stakeholders, however, stress that the 2011 proposal is too limited and that its potential for supporting lifelong learning – for example by addressing learning activities outside formal education and training and validation of non-formal and informal learning – has not been fully exploited.

Rationale, main policy objectives and scope of the framework

The NKR aims at describing the existing national education and training system in a transparent way to make it more understandable, both at national and international level, through its link to the EQF. This is expected to aid national and international mobility; contribute to more flexible learning pathways and promote lifelong learning.

The NKR is seen as a new way of describing the existing education and training system. The use of learning outcomes to describe qualifications at all levels and types is seen as particularly important and five main benefits are listed. The NKR will:

- give a comprehensive and general description of what is expected from a learner having completed a qualification;
- provide an overview of the inner logic of the education and training systems and so support educational and career guidance and counselling;
- provide a description which will make possible comparisons with qualifications in other countries;
- provide a better basis for dialogue with the labour market;
- open up towards the development of 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. The learning outcomes descriptors are supposed to clarify what is expected from any candidate having 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.

⁽¹⁷⁶⁾ All (75) reactions to the consultation are available from Internet:
<http://www.regjeringen.no/nb/dep/kd/dok/hoeringer/hoeringsdok/2011/horing---nasjonalt-kvalifikasjonsrammeve.html?id=632187>

The 2011 proposal underlines that the new NQF is not an instrument for reform. The NKR will describe the Norwegian education and training system but 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 on education and training.

The proposal concedes, however, that the longer term goal is to strengthen the use of learning outcomes in education and training and that this principle can become a 'driving force in education and training debates'.

In their responses to the 2011 proposal, several of the stakeholders, notably the Confederation of Employers in the trade and service sectors (HSH), point to what they see as tension between a descriptive and a normative role of the framework. In their opinion the framework could have been used as a basis for a broader debate and strategy on competence and lifelong learning policies. The Norwegian trade union confederation also criticises the proposal for being too narrowly defined and for missing an opportunity to pursue a more efficient lifelong learning policy. The feed-back on the need to open up the framework towards lifelong learning and the labour market may possibly influence the final proposal to be presented in 2012. The NKR will 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. This limitation is criticised by several stakeholders as being too narrow. The 2011 proposal indicates that future developments have to go in this direction but that this requires concrete solutions, not in developing quality assurance, and that this must happen in a second phase, after 2012.

Stakeholder involvement

While the work on the framework for higher education has progressed smoothly and caused little debate, the development of a comprehensive framework covering all types and levels has proved more challenging and caused debate among stakeholders. Some of the tensions can be related to the fact that qualifications frameworks had not been given much thought prior to 2005 and by some are seen as artificially imposed through the Bologna and EQF processes. Stakeholders have taken considerable time considering the implications of frameworks for Norwegian education and training, a process which continues and may even be intensifying.

Many stakeholders, including the ministry, struggled with the concept of an overarching and comprehensive framework. This was illustrated by the somewhat fragmented approach chosen from 2006 and onwards. In addition to the work on the higher education framework (completed 2009), work on a 'framework' for vocational education and training was initiated in 2008. The background for this was a request from the Ministry of Education to the Directorate for Education to prepare level descriptors for these qualifications, thus enabling a referencing to the EQF. A working group consisting of representatives from vocational education and training institutions, regional authorities and sector and branch representatives presented its conclusions at the end of 2008. In parallel, work on a 'framework' for post-secondary vocational education and training started in 2008 and aims to identify the main characteristics of this sub-sector as well as indicate how a learning outcomes based approach can be used to define and describe qualifications awarded by these institutions.

During 2008 and 2009, the social partners – taking part in the consultative group established by the ministry – criticised what they saw as a too fragmented approach to framework developments. In May 2009 they requested better coordination of various processes and activities to produce one comprehensive qualification framework. The criticism led to a major review of the process by the Ministry of Education in autumn 2009. Most important, the ministry made a clear decision to work towards one framework for lifelong learning and see the three strands of work described above as contributing to this overall approach. The result of this decision was the presentation of the NKR proposal in January 2011 and the consultation the following spring. This process, involving all the main stakeholders in education and training as well as in the labour market, demonstrates a significantly increased level of understanding of the strengths and weaknesses of a comprehensive framework. Many of those responding to the consultation also drew attention to the possible future implications of the NKR, moving the debate from a purely technical level to one of education, training and labour market policies.

The Norwegian NQF and its relationship to higher education

The NQF for higher adoption was adopted and published in 2009. The three highest levels of the proposed NKR are identical to the three cycles of the higher education framework. There is no discussion in the proposal of opening up the

three highest levels to qualifications outside the existing higher education system, as seen in countries like Germany and Belgium.

Levels and descriptors

The 2011 NKR proposal suggests a framework of seven levels, reflecting the structure of existing formal education and training in Norway (¹⁷⁷). Table 16 illustrates this.

Placing qualifications at different levels has been based on consideration of learning outcomes, not the duration of education and training. This means that education and training of different durations can be placed at the same level, as long as the overall level of learning outcomes is considered to correspond. This is exemplified by level 5 where Bachelor degrees requiring 3 or 4 years of study are placed at the same level. The framework alone cannot capture all differences between qualifications: it has to be combined with more detailed curricula and study programmes.

Table 16. **Qualifications from formal education placed into Norwegian qualifications framework**

Level 1	Completed primary education (10 years)
Level 2	Basic competences acquired through upper secondary education
Level 3	Completed upper secondary education, general or vocational
Level 4	Completed post-secondary VET
Level 5	Bachelor
Level 6	Master
Level 7	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 involved stakeholders. While the influence from EQF 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

¹⁷⁷) It should be noted that several of these qualifications can also be acquired through validation of non-formal and informal learning. See: *European inventory on validation of non-formal and informal learning 2010, country report Norway*. Available from Internet <http://libserver.cedefop.europa.eu/vetelib/2011/77474.pdf> [cited 7.10.2011].

different situations by demonstrating ability to cooperate, by showing responsibility and ability to reflect, and ability to 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, demonstrating both the influence of the EQF and also their Norwegian interpretation.

Table 17. **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 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 proposed structure differs from other European NQFs by splitting levels 3 and 4 into parallel descriptors. At level 3 this reflects that Norwegian upper secondary education is clearly distinguished into general and vocational strands. These two strands are suggested to be referred to the same EQF level. At level 4 two sets of descriptors are suggested to capture the diversity of current post-secondary VET programmes (Fagskole). The distinction in part refers to the duration of the courses: Fagskole 2 refers to a two year programme, Fagskole 1 to a diversity of shorter programmes.

The splitting of level 3 is illustrated in table 18 which shows how the skills dimension is dealt with.

Table 18: **Skills at level 3 of the Norwegian qualifications framework** ⁽¹⁷⁸⁾

Level 3A – Vocational upper secondary education. <i>The candidate:</i>	Level 3B – General upper secondary education. <i>The candidate:</i>
Can systematise, present and report planned and completed work	Can express him or herself orally and in writing in varied subject areas and can read, calculate and use digital tools and media
Can carry out professional calculations and consider their implications	Can solve subject related challenges in a critical and creative way, alone and in cooperation with others
Can solve professional challenges in a critical and creative way, alone and in cooperation with others	
Can use relevant concepts, principles, materials and equipment in the work	Can apply subject related terminology in communication and cooperation
Can communicate in at least one foreign language in own field of work	Can communicate in at least two foreign languages
Can judge and choose working methods to solve field/profession specific tasks	Can apply relevant methods, principles and strategies to solve subject specific tasks
Can show creativity in planning and execution of work	Can research, analyse, develop and discuss different problem-complexes
Can carry out work in accordance with existing rules, standards, agreements, and quality requirements	

It is interesting to note that the Confederation of Norwegian Trade Unions (LO), in principle, is of the opinion that one set of descriptors should have been used and that the split at level 3 and 5 should have been avoided. This could have promoted parity of esteem between general and vocational qualifications. However, in practice, the trade unions fear that one single set of descriptors would reduce the overall visibility of vocational training. For this reason they support the proposed split at the two levels.

Many stakeholders disagree on the choice of a 7-level framework. The Confederation of Norwegian Employers (NHO) suggests instead an 8-level framework, where level 1 is split in two and where level 1 would address those with 7 years of primary education or equivalent. Level 1 would thus function as a sort of entry-level. The University of Oslo argues for an 8-level structure to ensure direct compatibility with the EQF.

⁽¹⁷⁸⁾ Note that translation into English has been carried out by authors of this report and only for illustrative purposes. Official translations will only be available following official adoption of the decree.

Use 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 introduction of 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 consistency of curricula 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.

The adoption of 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 only partly applied the learning outcomes principle in the description of their programmes. The NKR developments are directly influencing this and the proposal for learning outcomes descriptors for level 4 can be seen as an important starting point for this process. The priority given to validation of non-formal and informal learning has also increased awareness on 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.

Validating non-formal and informal learning

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 upper secondary education and study programmes in higher education are used as references for the validation. This means that the shift towards learning outcomes, promoted indirectly, will influence the way validation is carried out. The NKR proposal lists five areas where it will influence validation:

- The introduction of learning outcomes as the underpinning principle for all qualifications;
- increased transparency of qualifications 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.

Referencing to the EQF

Norway expects to finalise the referencing to the EQF in early spring 2012. The University of Oslo has already carried out a study on the level of correspondence between the NKR and the EQF. Intended as an input to the reference group and the ministry, the report provides a technical analysis of the correspondence between the two frameworks (University of Oslo, 2011).

Information sources

<http://www.regjeringen.no/nb/dep/kd/dok/hoeringer/hoeringsdok/2011/horing---nasjonalt-kvalifikasjonsrammeve.html?id=632187> [cited 10.10.2010].

POLAND

Introduction

A proposal for a comprehensive Polish qualifications system based on the Polish Qualifications Framework (PQF) was approved and adopted in mid-2011 by the Intra-ministerial Taskforce for lifelong learning and national qualifications framework, which comprises all relevant Ministries ⁽¹⁷⁹⁾. The framework consists of eight learning outcome based levels applicable to all types of qualifications

⁽¹⁷⁹⁾ Including most importantly: Ministries of Education, Labour and Social Policy, Science and Research and Economy.

including those which will be obtained in general education, vocational education and training, as well as higher education.

The work on the Polish Qualifications Framework was officially started in August 2008 by the appointment of a working group responsible for the project: this was named Stocktaking of competences and qualifications for the Polish labour market and the development of a national qualifications framework. The working group submitted its first proposal in December 2009. During 2010 and 2011 the work has been intensified and been taken forward as an important building block in general reform of the Polish qualifications system. This second stage of the work has been taken forward within the project The development of terms of reference for the implementation of the national qualifications framework and the national qualifications register for lifelong learning: this is run by the Educational Research Institute (IBE).

The decision of the Intra-ministerial Taskforce (which adopted the time frame for the preparation of the PQF) paves the way for a referencing of Polish qualifications to the EQF by mid 2012. The new PQF builds on, takes into account and integrates the work on a qualification framework for higher education linked to the Bologna process.

Rationale, main policy objectives and scope of the framework

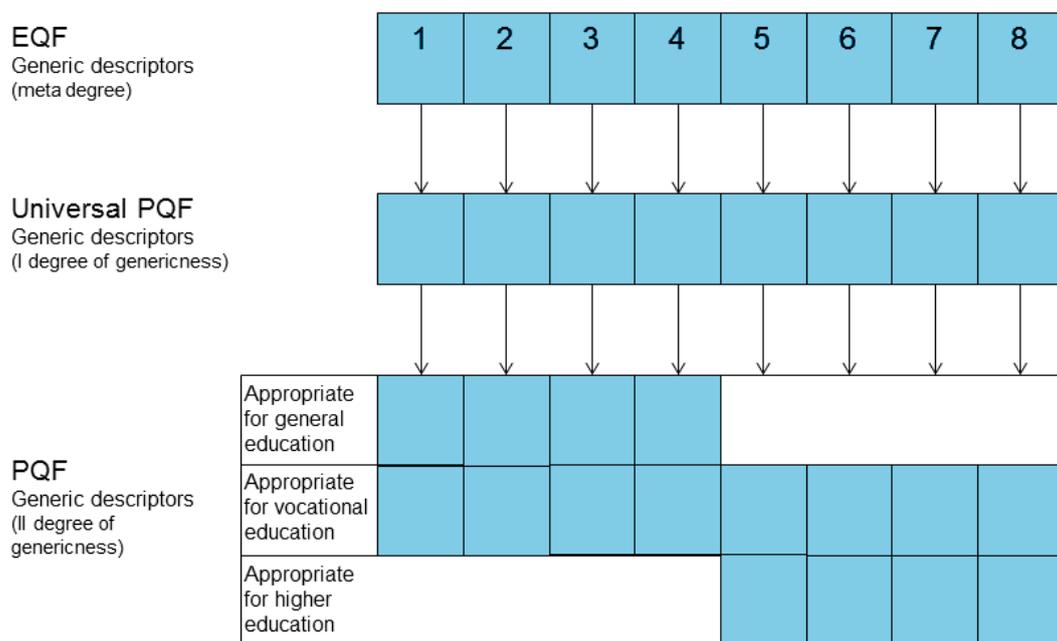
The preparation of PQF was originally initiated in direct response to international developments, the Bologna process and EQF. This reflects that Poland supports the European objectives on transparency and comparability expressed in these processes. While the European dimension still is important, the potential of the framework as an instrument for national reform is increasingly being appreciated and realised.

From 2010 the work on the qualifications framework has become part of a broader reform of Polish qualifications, seeking to modernise them at all levels and in all sub-systems. An important part of this reform is an overall shift to learning outcomes – requiring redesign of all programmes, standards and curricula – in general, higher education, vocational education and training. The role of the framework is to promote this shift and to ensure that is consistent. The direction chosen for the PQF is interesting in a wider European setting. First, it is part of the wider context of the shaping of modern qualifications in Poland, which aims at integrating formal, non-formal and informal learning, including transparent and clear validation mechanisms and quality assurance. While this

reduces the PQF to one out of several elements in a wider strategy, it fits the objectives of the life-long learning strategy in Poland and stresses that isolated development of the framework must be avoided.

Second, while the structure of the framework covers a coherent set of national levels and descriptors, it will also address the different sub-systems specifically, in particular higher education and vocational education and training, as shown below.

Figure 1. **Three sets of level descriptors in Polish qualifications framework**



Source: Instytut Badań Edukacyjnych (IBE), September 2011

The PQF 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 address the main sub-systems of education and training (higher education, vocational education, general education). The last of these can be further developed through a third set of descriptors, for example oriented towards specific fields of higher education (subject areas) or for VET in different economic sectors.

While the coexistence of several qualifications sub-frameworks is common in most European countries, the PQF takes one step further and tries to embed these separate developments within an agreed conceptual (learning outcomes)

approach. This means that when, for example, the 'financial sector' wants to establish a specialised sectoral qualifications framework, it can use learning outcomes descriptors clearly communicating with all other level descriptors at all other levels specific for the sector (including EQF). Third, while moving beyond the general, national level descriptors, (see below) the PQF is better able to link to the concrete reform taking place in relation to standards and curriculum development and eventually linked to learning and assessment.

Stakeholder involvement

The Ministry of National Education initiated the work on the PQF. The original working group responsible for developing the draft framework (delivered in 2009) covered a broad range of stakeholders, representing higher education, general education, vocational education and training, and employers, as well as institutions directly concerned by the setting up of the framework. To take forward the overall reform of the Polish qualification system, and the development and implementation of the PQF, the Prime Minister appointed two bodies:

- an Intra-Ministerial Taskforce for Lifelong Learning Strategy, including the Polish Qualifications Framework consisting of all institutional stakeholders. (Ministry of National Education, Ministry for Research and HE, Ministry of Economy, Ministry of Labour and Social Policy, Ministry of Health). This team is led by the Ministry of National Education;
- a sub-group of the Taskforce: the PQF Steering Committee consisting of all key institutional stakeholders (Ministry of National Education, Ministry for Research and HE, 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 HE and 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 work of the formal bodies has been supported by 'social dialogue'. In the first half of 2011, intensive social debate was conducted under the auspices of the PQF project, involving a broad range of stakeholders, notably social partners, employers, education and training institutions, teachers, employment offices, etc. The debate covered three topics: the structure and level descriptors of the PQF; the role of the PQF in overcoming barriers in LLL; and validation process and quality assurance. The involvement of a broad range of stakeholders from the

early stages of the work is deemed important as it has allowed everybody to make active contributions and to influence the process.

While the work on the Polish QF is characterised by active involvement of stakeholders from all areas of education and training, the role of higher education is of particular interest. In contrast to some other countries, the higher education sector has been instrumental in arguing for a comprehensive framework addressing the permeability of the system.

The authorities decided in 2009 that the development and implementation of the PQF will require additional administrative and research support. Two external institutions have been involved in the first stage of preparation (The Educational Research Institute and the Cooperation Fund foundation). In the second stage, the Educational Research Institute has the main responsibility for coordinating the designing of the PQF, including relevant research, conceptual work and consultation.

In mid 2011 the Steering Committee for the PQF and Intra-ministerial Taskforce adopted the documents that establish the foundations for the development of the PQF and qualifications system in Poland, including the general assumptions and work plan for the development of the qualifications system in Poland and *The glossary of concepts related to the national qualifications system*.

Levels and descriptors

The PQF introduces a level approach where descriptors have to be consistent and communicate across the following levels:

- European meta-level descriptors, EQF;
- Polish universal descriptors (first degree of 'genericness'⁽¹⁸⁰⁾, The Polish (comprehensive) Qualifications Framework, PQF;
- Polish descriptors at second degree of 'genericness', sub-frameworks for general, vocational and higher education;

⁽¹⁸⁰⁾ The term 'genericness' is not commonly found in English but is used by the Polish experts developing the NQF to express that the three different sets of descriptors operate at different levels of complexity and institutional specificity. The national descriptors must be sufficiently general to capture the qualifications of a very diverse group of institutions and sub-systems; the two other sets of descriptors address a more limited, and thus homogeneous, set of qualifications and institutions.

- Polish descriptors at third degree of ‘genericness’, sector frameworks for professional or subject areas (which were developed for eight broad subject areas for higher education).

The potential of this approach is illustrated by higher education where descriptors at the second degree of ‘genericness’ are addressed by the work related to the Bologna process and where descriptors at third degree of ‘genericness’ are developed and supported by the ‘Tuning project’ and its learning outcomes approach for academic subject areas.

Originally the experts’ proposal in 2009 envisaged PQF as a seven-level framework, closely resembling existing qualifications and degrees in the Polish system. In August 2010, the Steering Committee decided to introduce a new level 5 in the framework. While still empty, this will allow for a more appropriate placing of certain ‘short cycle’ and partial ⁽¹⁸¹⁾ qualifications as well as being used for the Master Craftsman (Meister).

The Polish QF is now based on an eight-level framework described according to the following 3 key categories ⁽¹⁸²⁾:

Table 19. **Level descriptor in the Polish qualifications framework**

Knowledge	Scope
	Depth of understanding
Skills	Problem-solving and practical use of knowledge
	Learning
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 thus the common reference point for developments at sector (second generic degree) and sub-sector (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 sub-sector PQF at second generic degree, but will differ in terms of specificity. This is exemplified by the proposal

⁽¹⁸¹⁾ A distinction between ‘full’ and ‘partial’ qualifications is being drawn throughout the Polish qualifications system.

⁽¹⁸²⁾ Note that official translations of these categories were lacking at the time of writing; exact wordings may therefore change slightly.

for vocational education and training ⁽¹⁸³⁾ 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 and further elaborated. The Ministry of Higher Education and Research is finalising the work on the descriptors for eight areas of education which will be published in a decree supporting the Law on higher education in Poland. These descriptors will be the basis for the formulation of curricula.

In vocational education, some early experience has been gained in relation to the financial sector; under the Leonardo da Vinci project First, attempts have been made to develop a targeted sectoral framework. Developments in this area have focused on qualifications at levels 4-7 and demonstrate that we are speaking of partial frameworks with more narrowly defined objectives.

Use of learning outcomes

One of the main objectives of current work is to undertake a complete 'stocktaking of qualifications and competences' in the existing Polish education and training system. This activity responds to the relatively limited use of the learning outcomes approach in the Polish system so far, as reported on in the 2009 Cedefop study on the shift to learning outcomes (Cedefop, 2009c). ⁽¹⁸⁴⁾. Development of the PQF and its focus on framework developments at different levels is very much about systematically promoting a learning outcomes approach in all sectors and at all levels.

⁽¹⁸³⁾ No official translation is available and final version may contain slightly different terms.

⁽¹⁸⁴⁾ *The shift to learning outcomes: policies and practices in Europe*. Luxembourg: Publications Office. (Cedefop Reference series; 72). Available from Internet: <http://www.cedefop.europa.eu/EN/publications/12900.aspx> [cited 7.9.2011].

In higher education, in the period 2009-11, approximately 100 training sessions on learning outcome oriented curriculum design have been planned and are currently being carried out, mainly as part of the activities of the Bologna Expert Team and the 'building good practices' movement initiated by the Ministry for HE. In general education a process linked to the learning outcomes oriented revision of all curricula is currently under way. This is also the case in vocational education and training, where redesign of curricula and standards has already taken place and is currently being reviewed by the relevant professional bodies.

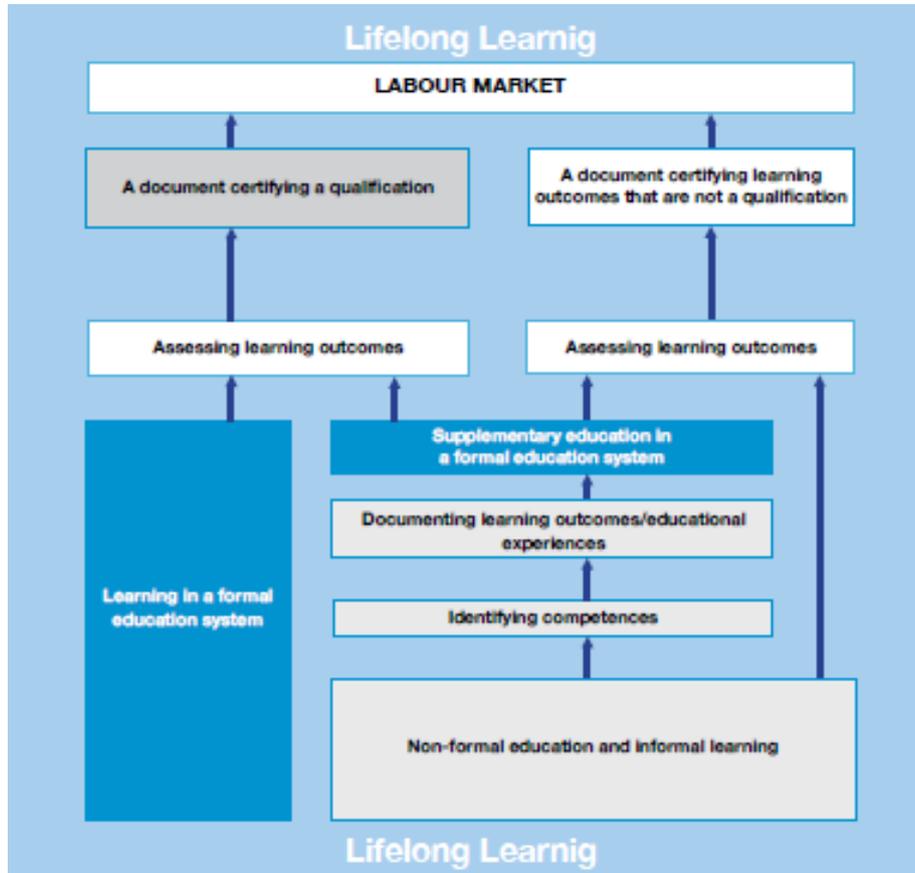
A key principle underpinning the design of the PQF is the need for consistency in the learning outcomes based redesign of programmes, standards and curricula. The process, in particular since 2009, demonstrates the way the PQF now intervenes in the concrete redesign of the Polish qualification system, mainly by stressing the need for a consistent and quality assured learning outcomes approach.

Validating non-formal and informal learning (Duda, 2010) ⁽¹⁸⁵⁾

In Poland, there is currently no system for validating and recognising learning outcomes acquired through informal or non-formal learning. The current education legal framework does not include the concept of validation so there are no central regulations addressing validation of learning outcomes achieved other than in formal education. Exams and certificates confirm the acquisition of knowledge in formal education, understood as school and university, and non-formal learning, understood as learning through courses and other forms of training. The introduction of validation has been seen as important for, and consistent with, the development of the PQF and steps have now been taken to concretise such an approach. Such validation was one of the topics of the social debate in 2011. As a result of this discussion, supported by the experts' work, the following general scheme of validation for Poland was developed:

⁽¹⁸⁵⁾ *European inventory on validation of non-formal and informal learning 2010, country report Poland.* Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77475.pdf>

Figure 2. The general scheme of validation in Poland



The proposal is based on the actual developments and practices identified in Poland. These include the certificates of securities broker (developed by the Institute of Capital Market) and certificate of IT skills (European-wide certificate granted in Poland by the Polish Information Processing Society). The proposal also covered experiences gathered under the following projects:

- 'Validation of competences acquired in informal and non-formal system in the construction industry': Conference of Construction and Real Estate;
- 'System of journeyman and master craftsmen exams as an example of good practice': Polish Craft Association;
- 'Trans-VAE Project (validation of competences acquired through professional experience)': Vocational Development Institution in Bydgoszcz.

It is envisaged that an institution for the qualifications system will be established. Its main goal will be the implementation of the qualifications system based on the Polish Qualifications Framework. As emphasised by the experts, this is the one of the key conditions of proper implementation of the PQF and comparability of qualifications. The main tasks and responsibilities of such an institution would include:

- maintain and update the register of all qualifications: qualifications from the formal system will be automatically covered by the register (following the appropriate changes in legislation); qualifications from the non-formal system (including labour-market based) will be included based on the appropriate procedure of approval and assignment of the qualification to the level. There will be a standard format of qualification description, including learning outcomes and validation procedure;
- introduce/remove qualifications to/from the register;
- maintain and update register of validating institutions;
- monitor institutions involved in validation, including quality monitoring.

Qualifications based on the learning outcomes achieved in the non-formal education or informal learning will be validated in the validation institutions either from formal or non-formal education, as envisaged for the specific qualifications. This list illustrates that the question of validation is very closely linked to the overall issue of developing and approving learning outcomes based qualifications, standards and curricula. The above discussion on the need for a central body acting as a 'gatekeeper' echoes the solutions chosen by France and carried out by the national committee for vocational/professional qualifications (CNCP).

Referencing to the EQF

A draft referencing report has been prepared and Poland will reference to the EQF in mid-2012. Though not finalised, it seems clear that general school leaving certificates will be referenced to level 4.

Important lessons and the way forward

The Polish Qualifications Framework developments are interesting in the broader international context, as they represent an effort to combine the introduction of a comprehensive national framework with the parallel development of sector and sub-sector frameworks. While this diversity 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 POF 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.

The PQF work has provided a platform for dialogue between stakeholders (in particular education and training and the labour market) normally working in separate bureaucratic and institutional segments. The PQF introduces an instrument for coordination which so far has been lacking.

PORTUGAL

Introduction

A comprehensive national qualifications framework (NQF) (*Quadro Nacional de Qualificações – QNQ*) has been in force since October 2010 as a single reference for classifying all the 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) ⁽¹⁸⁶⁾. Higher education qualifications have been included in the more detailed framework of higher education qualifications (FHEQ-Portugal), which is part of the national qualifications framework.

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

Rationale and main policy objectives and scope of the framework

Development of the national qualification system and national qualification framework is a part of broader education and training reform initiatives and programmes in Portugal, such as 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). ⁽¹⁸⁷⁾

⁽¹⁸⁶⁾ See:

http://portal.iefp.pt/pls/gov_portal_iefp/docs/PAGE/PNRQ/RECONHECIMENTO_PROFISSIONAL/SISTEMA_NACIONAL_QUALIFICACOES/QUADRO%20NACIONAL%20DE%20QUALIFICA%C7%D5ES%20.PDF [cited 7.7.2011].

⁽¹⁸⁷⁾ Despite fact that there have been attempts to invest in the qualifications over the last two decades, the number of early school leavers (aged 18-24) is still among the highest in EU

Three main goals are emphasised:

- to reinforce vocational/technical pathways as real options for young people (Oliveira Pires, 2010); ⁽¹⁸⁸⁾
- to upgrade the education and qualification level of adult population;
- to promote attainment of secondary education as a minimum level of qualification in Portugal. (Agência Nacional para a Qualificação, I.P., 2011, p. 13). ⁽¹⁸⁹⁾

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. ⁽¹⁹⁰⁾ 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 both in the 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 step to implement 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 sub-systems (general education, professional education and training, etc.) within the scope of a single framework allowing people to combine and transfer qualifications.

Additionally, the reforms also aim to develop and integrate the system for valuing and recognising competences acquired in non-formal and informal contexts and to give new impetus to promote the attractiveness of vocational training. All of this has reinforced the principle of 'double certification' (obtaining a school level and a professional certification). All forms of VET, including

countries (in 2010 28.7%) and the total population having at least upper secondary education was 31.9% in 2010 (Eurostat data).

⁽¹⁸⁸⁾ 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*, p. 1. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77477.pdf> [cited 7.10.2011].

⁽¹⁸⁹⁾ Portugal has also raised the compulsory schooling age to 18 years. See: The referencing of [the Portuguese] National qualifications framework to the European qualifications framework, p. 13. Available from Internet: http://www.eqf-ef.eu/index.php?option=com_docman&task=doc_download&gid=100&Itemid= [cited 19.10.2011].

⁽¹⁹⁰⁾ The National Agency for Qualifications has set an objective that 50% of the cohort at upper secondary level achieves a vocational qualification.

recognition, validation and certification of competences, should serve to strengthen both the education levels and professional certification of the workforce.

In parallel, a framework for higher education (FHEQ-Portugal) was established and used as a tool to support reforms and developments. The main aims were to set up clear learning standards and identify progression routes through levels of learning (MCTES-Ministério da ciência, tecnologia e ensino superior, 2009) ⁽¹⁹¹⁾.

Apart from this national reform role of the NQF, improving comparability and transparency of Portuguese qualifications and their understanding abroad by linking them to the EQF was also emphasised. (Agência Nacional para a Qualificação, I.P., 2011, p. 19).

Stakeholder involvement

The 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 trainings 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 ⁽¹⁹²⁾. These centres provide access to processes of recognition, validation and certification of competences, to vocational training and to interrelationships between them in a lifelong learning perspective of each

⁽¹⁹¹⁾ *FHEQ- Portugal: The framework for higher education qualifications in Portugal*. Available from Internet: http://www.mctes.pt/archive/doc/FHEQ_in_Portugal.pdf [cited 10.10.2011].

⁽¹⁹²⁾ Currently there are 452 new opportunities centres covering the whole country territory.

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. The catalogue lists 253 qualifications for 39 education and training areas from mid-2011. 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, a process supported by 16 sector qualifications councils. These councils aim to encourage greater cooperation and interaction between a significant number of stakeholders, helping to ensure that the qualifications offer is adjusted to market demand. The Councils are composed of: social partners; training bodies from the national qualifications system (schools, professional training centres certified training entities); entities responsible for regulating the conditions under which professions may be accessed; public structures that oversee business sectors; technology and innovation centres; and companies that are both users of competences and suppliers of competences and training locations.

Third, the system for recognising non-formal and informal learning was further integrated into the NQF. The RVCC system refers to the qualification standards in the national qualifications catalogue, both to 'school-based competences' (four, six, nine or twelve years of school) and 'professional competences'. The key competences standards for basic and secondary level are structured into key competence areas, covering the different contents of specific subjects in these specific educational levels.

The National Agency for Qualification 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. It is the designated national coordination point (NCP) for the EQF in Portugal.

To strengthen the coherence of the national qualification system further, good cooperation with the General Directorate of Higher Education (Ministry of Science, Technology and Higher Education), which designs, implements and coordinates the policies in higher education, and the General Directorate for Curricular Innovation and Development, designing and implementing policies in general primary and secondary education, is also under development.

Levels and descriptors

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'.⁽¹⁹³⁾

The National Agency for Qualifications has developed an interpretative guide (NQF users' guide) with more detailed level descriptors to differentiate more precisely between the levels of learning outcomes, making the referencing to NQF levels easier, as well as to respond to the specificities of different economic sectors. Knowledge is subdivided into depth of knowledge and understanding and critical thinking; skills are described in terms of the depth and breadth of cognitive and practical skills and purpose, and attitudes are defined as responsibility and autonomy.

The adopted NQF does not yet allow placing of partial qualifications on the framework, but the issue is important and must be addressed by the working group.

Use of learning outcomes

The learning outcome approach plays an important role in reforming Portuguese education and training.

In general education, the national curriculum for basic education (essential competences) is a national reference document for planning learning activities at both school and class levels. It includes general and specific competences which learners are expected to develop in compulsory education. For each subject or subject area the document identifies and defines the respective profile of competences (in terms of attitudes, skills and knowledge) that all students should have developed by the end of each cycle, or for the whole of the three cycles of basic education.

⁽¹⁹³⁾ Defined by Decree Law No 782/2009 (Portaria No 782/2009) on National qualification system. [cited 1.3.2011].

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.

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. Each qualification is associated with three kinds of standard: establishing links between the labour market and the education and training system; the occupational profile training standard; and the standard for recognition, validation and certification of competences (school-based and professional).

Validating non-formal and informal learning

There have been a number of public policies and initiatives developed for validation of non-formal and informal learning in Portugal. Since 2001, a comprehensive national system for the recognition, validation and certification of competences (RVCC) has been developed, which is nowadays integrated into the national qualification system. It integrates two main processes:

- the educational 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. (Oliveira Pires, 2010).

Adults can acquire a basic or secondary level education certificate and vocational qualification. The 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.

Many people, especially since the introduction of the New opportunities initiative, have engaged in validation and recognition. This initiative gives a real 'new opportunity' to all those already in the labour market without full upper-secondary education. It operates through adult education and training courses, and the national system of recognition, validation and certification of competences (RVCC). There are 452 New Opportunities Centres throughout the country, offering integrated services to adults. The network comprises a large range of institutions (e.g. vocational training centres, basic and secondary schools, professional schools, local and regional associations).

Referencing to the EQF

Portugal presented its referencing report to the EQF AG in June 2011. Referencing to the EQF consists of two reports: the report (Agência Nacional para a Qualificação, I.P., 2011) submitted by the National Agency of Qualifications establishes referencing of levels 1-5 of the NQF to the EQF. This is complemented by the Report ⁽¹⁹⁴⁾ on the framework for higher education qualifications in Portugal. The latter is both the self-certification report against the QF-EHEA and the referencing report of higher education qualifications (levels 5-8) against the EQF.

The following links between the *Quadro Nacional de Qualificações* (QNQ) and the EQF were established.

Table 20. **Levels correspondences 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

Some issues arise from this referencing.

Secondary school leaving qualifications giving access to higher education

The inclusion of secondary school leaving qualifications giving access to higher education at level 3 of the NQF and the referencing of this level against EQF level 3 was discussed. A distinction is made between these qualifications and those referenced against level 4, which are labelled 'secondary education obtained through double certificated pathways or secondary education aimed at further study plus a professional internship of at least 6 months'. There were questions over whether the referencing of the two sets of qualifications against different levels expresses a difference in levels or whether it is rather a difference in volume: a formal education qualification alone at level 3 and a formal education qualification complemented by professional certification or a professional experience – 6 months of professional internship – at level 4. Level

⁽¹⁹⁴⁾ Ministry of Science, Technology and Higher Education, Directorate – General for higher education, The framework for higher education qualifications in Portugal, June 2011.

4 has been created with a 'distinctive identity' to give value to double certified pathways and professional certification.

Referencing of the school leaving certificate, giving access to universities, is different from most other countries in Europe and the question is whether this reflects a real difference in learning outcomes compared to those countries.

Level 5 qualifications

Level 5 is a bridging level between upper secondary and higher education. Qualifications aligned with NQF level 5 are referred to by both reports (EQF referencing and self-certification report for HE). Technological specialisation courses (Cursos de Especialização Tecnológica, CET), leading to technological specialisation diplomas are set up by the Decree-Law No 88/2006. They are provided as short-cycle HE courses by HEIs (and included in the FHEQ-Portugal) and by non-higher education providers (public and private). The technical specialisation courses aim to equip students with higher technical and vocational skills, but only those provided outside HEIs are included in the national qualifications catalogue and based on a professional profile or similar. Those awarded by HE institutions are approved by a different system from degree programmes and under a different quality assurance regime. Further collaborative work on level 5 qualifications (and how they relate to each other) among different stakeholders would thus strengthen the coherence of the national qualification system and support lifelong learning opportunities, access and progression to higher education and increase the level of higher vocational skills.

Important lessons and the way forward

In Portugal, 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 on vocational training;
- formalise the double certification at levels 2, 4 and 5.

Important work has been done by writing the NQF users' guide ⁽¹⁹⁵⁾ which provides concrete and explicit criteria to place current, and guide inclusion of

⁽¹⁹⁵⁾ See Understanding NQF: users guide support, summarised in Appendix 3 of the Referencing report.

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.

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 1-5) needs to be made explicit, especially for those level 5 programmes where different ministries are involved.

Main sources of information

The National Agency for Qualification is the NCP for the EQF in Portugal. Information is available on the ANQ website: <http://www.en.anq.gov.pt/> [cited 7.7.2011]

ROMANIA

Introduction ⁽¹⁹⁶⁾

Romania has been working on frameworks for vocational qualifications and higher education for some years. Steps towards setting up a more comprehensive framework are recent.

The comprehensive learning outcomes based national qualification framework (NQF) aims to bring together nationally recognised qualifications from both initial and continuing VET, apprenticeship at the workplace, general and higher education, and help integrate the validation of non-formal learning into the national qualification system. (Juravle, 2010, p. 4) ⁽¹⁹⁷⁾

⁽¹⁹⁶⁾ This chapter on Romania will require further elaboration in cooperation with Romanian colleagues as it was not possible to get information on the latest developments. The description and analysis should be seen as a preliminary draft reflecting the interpretation of Cedefop.

⁽¹⁹⁷⁾ The Law on National Education, approved in 2011 aims to improve the coherence between the national qualifications framework and validation of non-formal and informal learning. According to Article 308 (2) of the law, the implementation of the NQF covers the national system of

The framework builds on the reform in vocational education and training and development of competence-based qualifications since the 1990s. An NQF for VET was established in 2005, based on a tripartite agreement signed by the Prime Minister, the Employers' National Confederation and the Trade Union National Confederation. This framework was based on a five-level structure with a common register for qualifications, quality assurance arrangements and accreditation for VET qualifications. 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 also refers to parallel processes in higher education, steered by the Agency for Qualifications in Higher Education and Partnership between Universities and Representatives of the Social and Economic Environment (ACPRT). A qualifications framework for HE, in line with the Bologna process and the EQF, has been in development since 2005. In June 2009 the Methodology on the use of the national qualifications framework in HE⁽¹⁹⁸⁾ was approved by the Order of the Minister for Education. It provides the basis for implementation in higher education.

Developments so far have been fragmented. One of the main challenges is to link these two development processes, structures and stakeholders from VET, HE and the labour market in a more comprehensive framework. This is seen as very important in strengthening the overall coherence and permeability of the Romanian system.

An important step was taken in June 2011 when the National Council for Adult Training and the Agency for Qualifications in Higher Education and Partnership between Universities and Representatives of the Social and Economic Environment (ACPART) were merged into one single body – the National Qualifications Authority – responsible for developing and implementing a comprehensive NQF.

qualifications obtained in general secondary education, VET, apprenticeship and higher education; professional qualifications awarded via validation can – in principle – relate to all educational levels. See *European inventory on validation of non-formal and informal learning 2010, country report Romania*. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77479.pdf> [cited 7.7.2011].

⁽¹⁹⁸⁾ Available from Internet: www.acpart.ro

Rationale and the main policy objectives

There is a general view that the NQF could help to address some current needs in society and education and training. There is a reported lack of coherence in the qualification system and lack of progression possibilities between IVET, CVET and HE systems. There are several qualifications frameworks (notably for VET and HE) and a current lack of the recognition of validation of non-formal and informal learning within formal education needed to facilitate entry and mobility within the education system, (Juravle, 2010, p. 2). Qualifications should respond better to labour market needs and there is a need for more transparency of learning outcomes and labour force mobility. Early school leaving is still higher than the EU average. (Cedefop Refernet Romania, 2010, p. 20) ⁽¹⁹⁹⁾ National qualifications also need to be understood abroad and linked to EQF.

The development of the NQF addresses the following policy objectives:

- aiding comparability of Romanian qualifications in Europe;
- improving the transparency, quality and relevance of Romanian qualifications;
- enabling more progression and mobility:
 - between different subsystems and through the validation and recognition of non-formal and informal learning;
 - between different working areas through transparency of competences;
- better linking IVET and CVET and developing new pathways.

Stakeholder involvement

The work on the NQF for VET was initiated by the Ministry of Education, Research and Innovation and the Ministry of Labour, Family and Social Protection in cooperation with social partners in 2005. The development of the NQF for VET has been coordinated since 2005 by the National Council for Adult training (CNFPA) on two levels. The decision-making body is the board, which has 15 members: five represent ministries, five trade unions and five employers' confederations. Within the National Council for Adult training (CNFPA), there is a technical unit (about 40 staff), which provides support to the board, coordinates activities and prepares documents.

⁽¹⁹⁹⁾ It was decreased from 23% in 2002 to 15.95 in 2008. See: *VET in Europe country report Romania 2010*, p. 20. Available from Internet: http://libserver.cedefop.europa.eu/vetelib/eu/pub/cedefop/vetreport/2010_CR_RO.pdf [cited 7.7.2011]

Development in higher education has been coordinated by the Agency for Qualifications in Higher Education and Partnership between Universities and Representatives of the Social and Economic Environment (ACPRT). The Agency works closely with the main stakeholders from higher education (academic staff representatives, students, main professional organisations, employers' organisations, ministries and other public bodies).

Consolidating governance structures was regarded 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 VET qualifications and National Agency for Qualifications in HE (ACPRT), 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 necessarily for the implementation of NQFs;
- develops the instruments needed for monitoring, evaluation and control of the NQF;
- quality assures the implementation of the NQF.

Romanian NQF for LLL and its link to higher education

The work on the NQF for HE started in 2005. The ACPRT was designated the National Authority for Qualifications in HE (Government Decision No 1357/2005)⁽²⁰⁰⁾. It developed a methodology for a national register for higher education qualifications and the first proposal of the NQF, including level descriptors for higher education. The methodology was then tested in 17 selected first- and second-cycle study programmes in eight different fields of study. Based on the results of the project, and broad public debate during 2007-08, the methodology

⁽²⁰⁰⁾ See: The National report on Bologna reform, 2009. Available from Internet: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/links/National-reports-2009/National_Report_Romania_2009.pdf [cited 23.8.2011].

on the use of the national qualifications framework in HE was amended and finally approved by the Order of the Minister for Education in June 2009 ⁽²⁰¹⁾.

Learning outcomes-based level descriptors have been developed in line with QF-EHEA and EQF. They are defined in terms of knowledge, skills and competence. Competence is classified in two categories:

- professional competences ⁽²⁰²⁾;
- transversal competences ⁽²⁰³⁾.

The matrix integrates two perspectives for referencing qualifications to the NQF levels: the vertical perspective indicates progress in professional and transversal competences. Eight generic level descriptors have been identified:

- (a) knowledge, understanding and use of specific languages;
- (b) explanation and interpretation;
- (c) application, transfer and problem-solving;
- (d) critical and constructive reflection;
- (e) creativity and innovation;
- (f) autonomy and responsibility;
- (g) social interaction;
- (h) personal and professional development.

The horizontal axis presents the generic descriptors linked to three university cycles: BA, MA and Doctorate. Three levels defined in the NQF for HE (BA, MA and Doctorate) are referenced to EQF levels 6, 7, and 8.

Levels and descriptors

An eight-level reference structure reflecting EQF will be proposed. In QF for LLL, level descriptors are being developed, defined in terms of knowledge, skills and competence.

Level descriptors for HE have been already developed and approved (see above).

⁽²⁰¹⁾ The methodology on the use of the national qualifications framework in HE. Available from Internet: www.acpart.ro [cited 28.6.2011].

⁽²⁰²⁾ Professional competence is understood as 'proven capacity to select, combine adequately knowledge, skills and other attainment (such as values and attitudes) which are specific to a professional activity in order to solve successfully problem situations related to the respective profession effectively and efficiently.' www.acpart.ro (ibid, p. 10).

⁽²⁰³⁾ Transversal competences are 'those capacities that transcend a certain field or study programme, having a transdisciplinary nature: teamwork, oral and written communication in mother tongue/foreign languages /.../etc' www.acpart.ro (ibid, p. 10).

Use of learning outcomes

There is a strong commitment to strengthen the learning outcome approach as a part of the national reform programme.

Learning outcomes are already embedded in competence-based VET reform and the establishment of arrangements for validating non-formal learning. Many learning programmes developed in VET are based on competences. However, the evidence suggests that links are still not operational and two systems are not connected. The results of validation of non-formal learning are not recognised in the formal system (Juravle, 2010, p. 4).

Occupational standards are used in IVET, and are based on actual elements of competence that are to be proved in the workplace. Vocational training standards are newly-established qualification standards approved by the Minister for Education, 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. As part of the process of continuous improvement, the methodologies used in the previous Phare projects, 2004 and 2005, have been evaluated, reviewed and updated in Phare 2006. New methodologies developed in Phare project 2006 are oriented around learning outcomes. A new format for qualifications, using learning outcomes, was developed.

Validating non-formal learning

There is a legal framework in place for validation of non-formal and informal learning. (Juravle, 2010, p. 2) The Law 253/2003 defined the competences of National Council of Adult Training with regards to assessment and certification of competences acquired through CVET (organised in formal, non-formal and informal settings). This system has been set up parallel to formal VET. A legal framework was laid down for setting up validation centres ⁽²⁰⁴⁾ as institutions to conduct assessment based on occupational standards of learning outcomes. According to the report on validation of non-formal learning, the total number of certificates issued was up to 28.00 in different occupations (by October 2010).

The system of validation has been set up parallel to formal VET. The link to formal system has not yet been established and the results of validation of non-

⁽²⁰⁴⁾ In 2010, there were 52 validation centres in the national register.

formal and informal learning are not recognised in the formal system (i.e. certified competences though validation of non-formal and informal learning cannot facilitate entry or mobility in formal education).

However, the Law of National Education, adopted 2011 provides for better integration of validation and the national qualifications framework at the national level. According to this Law, (article 308 92), professional qualifications awarded via validation can be related to all qualifications levels, at least in principle.

Referencing to the EQF

Preparations for referencing to the EQF have started and a referencing report is expected in 2012

The Executive Unit of the National Council for Qualifications and Adult Vocational Training has been appointed the NCP. Since the new National Qualifications Authority has been created, this will take over these responsibilities.

Important lessons and the way forward

In the course of the work it has become clear how difficult it is for the stakeholders from IVET, CVET and HE to develop mutual understanding of learning outcome orientation in different sub-systems. However, this is an important prerequisite for increasing comparability and transfer opportunities between qualifications in the subsystems and ensuring that the comprehensive NQF can act as a bridge between education subsystems in various different ways.

It is also important to have good cooperation between different stakeholders and structures. Merging the National Council for Adult Training, in charge of VET qualifications, and the Agency for Qualifications in Higher Education and Partnership between Universities and Representatives of the Social and Economic Environment 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.

There is also the need to have sustainable financing of sectoral committees, crucial for the implementation of the NQF. In 2009 the Law 268/2009 ⁽²⁰⁵⁾ was adopted, which provides for sustainable financing. Sectoral committees will be reorganised to an institution for social dialogue and for public interest, with well-defined responsibilities for qualifications. They will be financed by the State for administrative and services costs.

Main sources of information

New National Qualifications Authority is the EQF national coordination point (NCP).

SLOVAKIA

Introduction

A set of level descriptors for a comprehensive NQF for lifelong learning was approved by the Ministry of Education, Science, Research and Sports in March 2011. It will include qualifications from all sub-systems of formal education and training (VET, general education and HE).

The work is based on the Government decision on EQF implementation in Slovakia, adopted in February 2009 ⁽²⁰⁶⁾. 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 – a 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. This will be aligned to the national system of occupations already in preparation under the surveillance of the Ministry of Labour, Social Affairs and Family. The Memorandum of Cooperation between the Ministry of Education and the Ministry

⁽²⁰⁵⁾ Available from Internet:
http://www.euroticket.ro/legislatie/lege_aprobare_oug_28_2009_reglementare_masuri_protectie_sociala_268_2009.php [cited 28.6.2010].

⁽²⁰⁶⁾ The decision is available from Internet only in Slovak language:
http://www.rokovanie.sk/File.aspx/ViewDocumentHtml/Uznesenie-5819?prefixFile=u_ [cited 20.6.2011].

of Labour, Social Affairs and Family was signed in October 2009 and should aid coordination and further developments.

The development is complemented by adoption of the following acts: the Vocational Education and Training Act No 184/2009 ⁽²⁰⁷⁾, the School Act No 245/2008 ⁽²⁰⁸⁾, and the Lifelong Learning Act No 568/2009, adopted in December 2009 ⁽²⁰⁹⁾. To apply the NQF as an integrated tool, changes in the above-mentioned legislation are planned.

It is planned that the NQF, including all formal qualifications from primary, secondary and tertiary education, will be in place in 2011. There is a special challenge in including qualifications 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 unified standards for quality assurance are seen as preconditions for including qualifications acquired through non-formal education and training into the NQF.

Rationale, main policy objectives and scope of the framework

It is agreed that the NQF could help to address some current challenges:

- ease referencing to the EQF;
- link education and labour market needs better;
- improve the transparency and consistency of qualifications;
- support validation of formal and informal learning.

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 education 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 as

⁽²⁰⁷⁾ 184/2009 Z.z. *Zakon z 23 apríla 2009 o odbornom vzdelávaní a príprave a o zmene a doplnení niektorých zákonov*. Available from Internet: <http://www.minedu.sk/data/USERDATA/Legislativa/Zakony/184-2009.pdf> [cited 20.6.2011].

⁽²⁰⁸⁾ 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.] Available from Internet: http://www.uips.sk/sub/uips.sk/images/PKvs/z245_2008.pdf [cited 10.10.2011].

⁽²⁰⁹⁾ 568/2009 Z. z. *ZÁKON z 1. decembra 2009 o celoživotnom vzdelávaní a o zmene a doplnení niektorých zákonov*. Available from Internet: http://www.minedu.sk/data/USERDATA/Legislativa/Zakony/568_2009.pdf [cited 20.6.2011].

a basis for developing new and renewing state educational programmes and study programmes for continuous training.

Stakeholder involvement

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 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 Ministry of Education of the Slovak Republic.

Levels and descriptors

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.

Use of learning outcomes

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) ⁽²¹⁰⁾ 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 the 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 the School Act No 245/2008.

In VET, the learning outcomes approach is being reinforced through the new Vocational Education and Training Act No 184/2009 and curriculum reform.

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 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. (Uličná, 2010) ⁽²¹¹⁾

Referencing to the EQF

The national steering group for referencing to the EQF was established in 2009. The referencing process will start in mid-2011 and the referencing report will be ready by the end of 2012.

Important lessons and the way forward

To establish a good partnership platform is one of the preconditions for developing NQF.

⁽²¹⁰⁾ *National reform programme of the Slovak Republic for 2008–10*. Available from Internet: <http://www.finance.gov.sk/en/Default.aspx?CatID=450> [cited 10.10.2011].

⁽²¹¹⁾ *European inventory on validation of non-formal and informal learning 2010, country report Slovakia*, p. 4. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77480.pdf> [cited 24.7.2011].

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 the NQF development process will be classified as the highest priority have fallen, so it is not possible to cooperate within the planned deadlines.

Main sources of information

Ministry of Education, Science, Research and Sports – Adult Education and Youth Division is the EQF NCP: <http://www.minedu.sk> [cited 6.7.2011]

SLOVENIA

Introduction

A proposal for a single 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) ⁽²¹²⁾. It includes qualifications from formal education and training (in VET, HE, general education, adult education) and the system of labour market oriented national professional qualifications (NVQ), which are under the remit of the Ministry of Labour. The proposal was subject to broad and inclusive consultation with all relevant stakeholders from education and labour in spring 2011.

The development builds on a series of reforms since the mid-1990s in all education and training subsystems (in VET, higher education, general education and adult education) and introduction of the certification system 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 sub-levels (Klasius) ⁽²¹³⁾ (OG, No 46/2006), which provided the basis for

⁽²¹²⁾ *Slovenian qualifications framework: proposal by the Steering committee group on the preparation of the national qualifications framework*. Available from Internet: http://www.nok.si/data/files/68_file_path.pdf [cited 7.10.2011].

⁽²¹³⁾ *Uredba o uvedbi in uporabi standardne klasifikacije izobraževanja (KLASIUS)* [Regulation on the introduction and use of the standard classification of education]. Available from Internet: <http://www.uradni-list.si/1/content?id=73174> [cited 28.6.2010].

building the national framework. It is a key national standard to collect, process, analyse and demonstrate the 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 national professional qualifications. The registers are created by the National Professional Qualifications Act (2000, amended 2003, 2006 and 2009) ⁽²¹⁴⁾. A third register, of national VET programmes, includes assessment catalogues and vocational titles of VET diplomas, governed by the Vocational Education and Training Act (2006) ⁽²¹⁵⁾ and, for higher VET, by the new Higher Vocational Act (2004) ⁽²¹⁶⁾. Higher education is governed by Higher Education Act ⁽²¹⁷⁾.

Development is supported by the Slovenian qualifications framework project (2009-13) jointly financed by the ESF and the government. The project, which falls under the competence of the Ministry of Labour, Family and Social Affairs, is managed by the National Institute for Vocational Education and Training.

Rationale, main policy objectives and scope of the framework

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, when it comes to permeability; there are almost no dead-ends at upper-secondary level and individuals will 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 coherence in lifelong learning strategy; to improve the link between education and certification and the responsiveness of qualifications to labour market and individual needs and to

⁽²¹⁴⁾ *Zakon o nacionalnih poklicnih kvalifikacijah Ur.l. RS, št. 81/2000* [National Professional Qualifications Act]. [Published in the OJ of the R of Slovenia No 1/2007 and 85/2009]. Available from Internet: http://zakonodaja.gov.si/rpsi/r06/predpis_ZAKO1626.html [cited 7.7.2011].

⁽²¹⁵⁾ *Zakon o poklicnem in strokovnem izobraževanju* (2006). [Vocational Educational Act]. [Published in the OJ of the Republic of Slovenia No 79/2006]. Available from Internet: http://zakonodaja.gov.si/rpsi/r02/predpis_ZAKO982.html [cited 7.7.2011].

⁽²¹⁶⁾ *Zakon o visjem strokovnem izobraževanju* (2006). [Published in the OJ of the Republic of Slovenia No 86/2006]. Available from Internet: http://zakonodaja.gov.si/rpsi/r03/predpis_ZAKO4093.html [cited 7.7.2011].

⁽²¹⁷⁾ *Zakon o visokem solstvu* (2007). [Published in OJ of the Republic of Slovenia No. 119/2006, amended No 59/2007 and No 86/2009]. Available from Internet: <http://www.uradni-list.si/1/objava.jsp?urlid=2006119&stevilka=5079> [cited 7.7.2011].

have a reliable tool for assessing and recognising non-formal and informal knowledge and skills. Therefore the main objective of SQF is ‘to integrate and harmonise Slovenian qualifications sub-systems and enhance transparency, accessibility, progress and quality of qualifications being responsive to the needs of labour market and civil society.’⁽²¹⁸⁾

The following policy objectives are addressed in more detail:

- improving transnational understanding and comparability of Slovenian qualifications as well as the possibilities of 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 programmes and provide better 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

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 EQF consultation process. In 2005 and 2006, several conferences on the development of the EQF were organised with all stakeholders.

In 2006, a working group with representatives of the Ministry of Education and Sport, the Ministry of Higher Education, Science and Technology, and the Statistical office of the Republic of Slovenia prepared the Klasius proposal.

In January 2009, 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 Vocational Education and Training and social partners. The group has prepared the proposal for the Slovenian

⁽²¹⁸⁾ See: Starting points for the expert group, 2010, p. 1. [unpublished].

Qualification Framework, which was broadly debated in the national consultation processes.

Administrative support is provided by the National Institute for Vocational Education and Training. The project is supported financially by the national budget and the ESF.

Levels and descriptors

The Slovenian qualifications framework has 10 levels. This proposal builds on Klasius, which has an eight-level structure with two sublevels (at levels 6 and 8). The proposal argues that 10 levels strike an appropriate balance between the education and qualification systems. Two main criteria were observed when determining the number of levels:

- every level has specific rights to employment;
- every level enjoys specific rights to pursue further education. (Institute of the Republic of Slovenia for vocational education and training, 2011, p. 6).

The level descriptors for the NQF are defined in terms of outcome criteria: knowledge, skills and competences. Competences refer to 'ability to use and integrate knowledge and skills in educational, work, personal and/or professional situations'. The proposal includes generic and vocationally specific competences. 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 HE 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 certain level of complexity; they can be achieved through recognition of non-formal and informal learning in line with the national standards.

Inclusion of supplementary qualifications acquired in further and supplementary training and not issued by the national authorities was widely debated in the national consultation process and supported by stakeholders. It was decided to deal with this issue in the second stage of the NQF implementation.

VET qualifications are defined in modules. The term 'partial qualifications' is not used, but, within the VET programmes, it is possible to exit with an NVQ as a

partial qualification, which has a clear national standard and value on the labour market.

Use of learning outcomes

The learning outcomes approach is already embedded in the Slovene education system and well accepted. The term 'educational outcomes' is used by the Decree on the introduction and use of the classifications system of education and training (Klasius) and defined as 'the set of knowledge, skills and competences for 'life and work' achieved by learners in the process of formal, informal and non-formal learning. Educational outcomes are certifiable as a rule'.⁽²¹⁹⁾

Education programmes have moved from a content-based to an objectives-based approach. The relationships between objectives and outcomes, and between learning objectives/outcomes and learning standards, are now being discussed. 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 outcome 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. Syllabuses usually follow the Bloom taxonomy/concept of learning outcomes. Broad competence in catalogues for modules/subjects is defined as ability and readiness to use knowledge, skills and attitudes in study and work contexts.

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).

⁽²¹⁹⁾ *Uredba o uvedbi in uporabi standardne klasifikacije izobraževanja (KLASIUS)* [Regulation on the introduction and use of the standard classification of education]. Available from Internet: <http://www.uradni-list.si/1/content?id=73174> [cited 28.6.2010].

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.

The National Professional Qualifications Act (2000, amended 2003, 2006 and 2009) enables validation of vocationally-related knowledge, skills and experiences acquired out of school. 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).

Referencing to the EQF

A national steering committee at government level for referencing NQF levels to the EQF was nominated in January 2010. The National Institute for Vocational Education and Training was designated EQF national coordination point (NCP) in October 2009.

One comprehensive report to reference national qualifications levels to the EQF and QF- EHEA is expected to be prepared by 2012.

Important lessons and the way forward

A broad partnership approach and commitment of all stakeholders is important. Further development of the NQF should be based on the requirements and needs of the national context and experiences gained, using the existing infrastructure and no additional bureaucracy. Developing, and ensuring consistent use of, common concepts and terminology is a challenge.

Main sources of information

National Institute for Vocational Education and Training, where qualifications registers are accessible and NQF proposal is published: <http://www.cpi.si> [cited 7.7.2011].

Statistical Office of Slovenia, where the Classifications System of Education and Training (Klasius) is available at: <http://www.stat.si/Klasius> [cited 7.7.2011].

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 qualification, obtained in compulsory education, in post-secondary and higher education (academic and VET) and integrate validation of non-formal and informal learning processes.

The draft Royal Decree on the introduction of MECU has been prepared for adoption by the Spanish Government in 2011. It defines levels and level descriptors as the basis for referencing the MECU to the EQF levels.

The development work started in January 2009 and the Ministry of Education has drawn up a first draft of the MECU. This has been presented and discussed with all relevant stakeholders, following which a revised proposal has been prepared and is now in consultation among different stakeholders.

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. ⁽²²⁰⁾ Development work builds on education and training reforms.

In March 2011 the Act 2/2011 on Sustainable Economy ⁽²²¹⁾ was published in the Spanish Official Gazette. It focuses on improving competitiveness, particularly through training, research, innovation, extension and improvement of quality education in all subsystems and the promotion of continuous education and training. The national qualifications framework is regarded as an important tool in meeting these objectives.

Rationale, main policy objectives and scope of the framework

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

⁽²²⁰⁾ See: <http://www.boe.es/boe/dias/2011/08/03/pdfs/BOE-A-2011-13317.pdf> [cited 02.09.2011]

⁽²²¹⁾ <http://www.ipyme.org/en-US/CreacionEmpresas/Simplificacion/Paginas/Simplificacion8.aspx> [cited 10.10.2011]

qualifications easier to understand by describing them in terms of learning outcomes. It is expected that this will improve the extent to which stakeholders are informed about the national qualifications, raising trust and making mobility easier. The NQF will support lifelong learning, improving access and participation for everyone, including the disadvantaged. Through the NQF 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.

One important aim is also to support transition and progression possibilities within the various subsystems of education and vocational training. The HE representative emphasised 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, p. 17-18). ⁽²²²⁾

Apart from this, the MECU should have an important communication role:

- (a) for broader society: to enable citizens to judge the relative value of qualifications. Increased transparency is a prerequisite for the transfer and accumulation of skills;
- (b) for students: to develop flexible learning pathways and to use opportunities for mobility;
- (c) for employers: to allow them to assess better the profile, content and relevance of qualifications for the labour market;
- (d) for training providers: to allow them to compare the profile and content of their learning offer with national standards.

Stakeholder involvement

The Ministry of Education is coordinating NQF development and implementation in cooperation with other ministries (Ministry for Labour and Immigration, Ministry of Science and Innovation, Ministry of Industry, Tourism and Commerce, Ministry of Defence, Ministry of Health and Social Policy, Ministry of the Treasury). The development work includes a wide range of other stakeholders such as social

⁽²²²⁾ 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%; this is much higher than EU average. See: *VET in Europe country report Spain 2010*. p. 17-18. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77419.pdf> [cited 13.10.2011].

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).

Cooperation with the Bologna process is ensured with members represented in both the Committee for NQF for LLL (MECU) and in the group for QF and HE (MECES) to achieve methodological and structural coherence, making possible the alignment of the two frameworks.

Levels and descriptors

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 HE (MECES), which is based on 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).

Use of learning outcomes

The learning outcomes approach is seen as an essential part of the development of the MECU and is supported by all stakeholders. It is expected that the development of both the NQF for LLL (MECU) and the QF for HE (MECES) will further support the strengthening of learning outcomes in all the education and qualification levels to make qualifications more readable and easier to compare.

The Ministry of Education has established national core curricula for the various levels of education: pre-primary, primary, lower secondary, upper secondary and vocational training. They are determined by the 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 after completion of the programme. These learning outcomes are closely related to work activities and required professional competences.

In HE, 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.

Spain does not have a comprehensive system for validating non-formal learning (Alonso, 2010, p. 1) ⁽²²³⁾. However, there are opportunities for validation in HE and now also as regards professional qualifications. The most important developments were related to the new Royal Decree for the recognition of professional competences (1224/2009), which was adopted in July 2009; this regulates the procedures for the validation of 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 the official diplomas on vocational training.

Referencing to the EQF

The draft referencing report is expected to be prepared by 2012. The Ministry of Education (Directorate General for Vocational Education and Training) was appointed by the government to coordinate and launch the process and act as the national contact point (NCP). The self-certification report has been prepared. Spain has not decided yet, whether there will be one comprehensive report prepared to reference to the EQF and to the QH-EHEA.

⁽²²³⁾ *European inventory on validation of non-formal and informal learning 2010, country report Spain*, p. 1. Available from Internet:
<http://www.cedefop.europa.eu/EN/bibliographies/77452.aspx> [cited 7.7.2011].

Important lessons and the way forward

The 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 all stakeholders from all subsystems.

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>

The Directorate General for Vocational Training has been designated the national contact point (NCP) ⁽²²⁴⁾

The MECU website has been launched:

<http://www.educacion.gob.es/en/mecu.html>

SWEDEN

Introduction

On 23 December 2009 the Swedish Government formally decided to develop a comprehensive national qualifications framework covering all areas of public education and training ⁽²²⁵⁾. The NQF should also be developed in such a way that it makes it possible for stakeholders outside the public system, in the labour market and sectors, to link their qualifications to the framework. Based on the involvement of a broad range of stakeholders and experts, a proposal was presented to the Government in October 2010 (*Återrapportering av regeringsuppdrag*, 2010) ⁽²²⁶⁾. This proposal, outlining an eight-level framework

⁽²²⁴⁾ The IFIIE (Institute for Teacher Training, Research and Education Innovation) depends on the Directorate General for Vocational Training.

⁽²²⁵⁾ The Swedish authority for higher vocational education (Myndigheten for Yrkeshogskolan) was given the task to coordinate the work.

⁽²²⁶⁾ *Förslag till ett svenskt kvalifikationsramverk*. Available from Internet:
http://www.eqfinfo.se/Documents/EQF/Återrapportering_2010_forslag_nationellt_kvalifikationsramverk.pdf [cited 7.7.2011].

closely aligned to the EQF-descriptors, has been used as a basis for further, extensive work during spring 2011. A final report on the referencing of the Swedish NQF to the EQF will be presented to the Government in December 2011. A decision has been made to carry out a separate self-certification of the Swedish higher education system to the European higher education area.

Rationale, main policy objectives and scope of the framework

The December 2009 decision 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, developments during 2010 and 2011 shows that the NQF is now increasingly taking on a national reform role. This is visible in three main areas.

Going beyond traditional education and training

The new NQF goes beyond existing practices by including qualifications offered by public bodies outside the education and training sector, for example police and custom 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 decision. 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 in general 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 (3-year) vocational courses, acquiring a full qualification (enabling

someone to practise a vocation), will sometimes require additional training and certification at work. The diverse and extensive system of labour market based education and training established for this purpose is not easy to summarise and a link to the NQF is seen as crucial for increasing overall transparency. A proposal on how to include these 'external' qualifications was presented to the main stakeholders in May 2011, suggesting that a National Council for Qualifications is set up. This Council – including relevant stakeholders – would become the 'gatekeeper' making sure that qualifications aspiring to be included in the framework meet nationally established quality criteria and requirements. These criteria, it is suggested, need to regulate the use of learning outcomes, to specify the links to NQF and its levels as well as document the national relevance of the qualification. A final proposal was presented in September 2011, in particular emphasising quality assurance issues involved.

Opening up levels 6-8 to non-academic qualifications

The NQF proposal presented to the Government in October 2010 states that all eight levels of the NQF – including levels 6-8 – 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 are divided into two main groups. The majority of universities and academic institutions are in favour of restricting levels 6-8 to qualifications covered by the Bologna process. The majority of public authorities, social partners and regional bodies are, however, 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 6-8 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) ⁽²²⁷⁾ and recommends levels 6-8 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 6-8 will require robust and visible quality assurance mechanisms making sure that the overall level of Swedish higher education is not negatively affected. The quality criteria to be presented in September 2011 (see above) will provide a basis for

⁽²²⁷⁾ *Avseende en nationell referensram för kvalifikationer i Sverige*. Available from Internet: http://www.eqfinfo.se/Documents/EQF/%c3%85terrapportering/yh_aterrapportering_nqf_1105.pdf [cited 7.7.2011].

developing practical solutions in this field. It will be up to the Government to decide on a final solution, reflecting the divergent opinions expressed through the consultation. One possible compromise would be to go for a solution along the lines of Austria and Flanders where academic and non-academic qualifications are separated at levels 6-8 ('Ypsilon approach')

Stakeholder involvement

The Ministry of Education and Research has overall responsibility for the work on the NQF and the 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 1 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 the public education and training system, or being 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, working groups were set up to consider how to open up the framework to external qualifications; how to use level 6-8 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 developments. Two saw no need for the framework. A slightly higher number of stakeholders responded to the 2011 consultation focusing on levels 6-8 of the framework (see above). A number of national conferences and events have also been organised.

Development of the Swedish NQF since 2009 has involved a broad group of stakeholders, from education and training system and the labour market. This broad involvement 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 6-8 to non-academic qualifications has also contributed to raise interest in the proposal.

The link to higher education

A first proposal for a qualifications framework for higher education (in relation to the European higher education area, EHEA) was presented in June 2007. While this work is integrated in the 2010 proposal for a 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 6-8 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 6-8. The consultation carried out in spring 2011 on the opening up of levels 6-8 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 opening up levels 6-8 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 2008 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

6-8. This is a challenging position as the neutrality of the authority may be questioned.

Levels and descriptors

The 2010 proposal presents 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. This reflects that the Swedish government primarily sees the NQF as an instrument making it easier for individuals and employers to compare Swedish qualifications with those in other EU member states. While the influence of the original EQF descriptors is visible, the level of detail has been increased. This partly reflects that the definitions of the three key elements – knowledge, skills and competence – have been slightly adjusted. Knowledge is defined as being either based on theory or experience; the EQF speaks about knowledge as based on theory or facts. Skills is defined as the ability to carry out tasks and to solve problems, with the EQF speaking of cognitive and practical skills, understood as intuitive, logical and creative thinking as well as ability to use tools. Competence 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.

Use of learning outcomes

The learning outcomes perspective is an important and largely accepted and 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 mostly implemented. The core curricula for compulsory education have recently been revised, further strengthening and refining the learning outcomes-based approach.

The situation in the universities on the shift to learning outcomes is mixed. 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.

Validating non-formal and informal learning

The development of the NQF for lifelong learning is seen as an opportunity to further promote the work on validation of non-formal and informal learning. While there is progress (Thomson, 2010) ⁽²²⁸⁾, not least reflecting the extensive use of learning outcomes, validation is not fully integrated into the national qualification system. The challenge is 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 national criteria for validation is also mentioned, without any further detail.

Referencing to the EQF

Preparations for formal referencing to the EQF have started and the final referencing report is expected to be ready by the fourth quarter of 2011. The basis for referencing was presented in the June 2011 report to the Government where all the main education and training programmes and their qualifications are placed according to the eight levels of the NQF. Some concern is expressed as regards the placing of the final certificate from primary education. In technical placing (based exclusively on learning outcomes) carried out by the National Agency for Education (Skolverket), primary education is placed on level 2. This is changed to level 3 in the report to the Government, based on objections made by

⁽²²⁸⁾ See: *European inventory on validation of non-formal and informal learning 2010, country report Sweden*. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77476.pdf> [cited 7.10.2011].

a number of organisations and stakeholders arguing that this contradicts the general view of this qualification in society (as well as the expectations of this qualification). Reference is also made to the Finnish NQF where primary education is placed at level 3. It is argued that the principles used by the Finns in this case are also relevant to the Swedish situation. Upper secondary education (Gymnasieskolan), both general and vocationally oriented, is placed at level 4. In line with the proposal to open levels 6-8 to all qualifications, academic and non-academic, one type of advanced vocational education (*Kvalificerad yrkesutbildning*) is placed at level 6.

Important lessons and the way forward

A first version of the Swedish NQF will be ready – and referenced to the EQF – by the end of 2011. Given that only two years will have passed since the formal go-ahead was given by the Government at the end of 2009, the process has been rapid and intense. It is clear, however, that the current version of the framework only represents a first step. The discussion related to opening up levels 6-8 of the framework to non-academic qualifications point to more fundamental challenges in the equivalence of different types of qualifications. The introduction of learning outcomes based levels challenges the traditional way of defining 'higher education' and raises questions about how quality is legitimately assured. Perhaps the most important challenge faced by the NQF is to aid the development of quality assurance requirements (and institutions) able to work in the new environment created by the NQF. If this is not done it can negatively affect trust in the levels and qualifications placed on them. The same challenge is faced in relation to validation of non-formal and informal learning. So far the NQF has not been explicitly able to indicate how it can support validation and the credibility of these processes. Future developments of the framework need to look carefully into this. The Swedish NQF as a platform for cooperation still has some way to go. While the involvement of stakeholders has been systematic and extensive, the separate self-certification of higher education to EHEA – and the lack of reflection on this in the NQF proposals – points to the need for closer dialogue between the university sector and the remaining parts of the education and training system can be seen as a warning. Successful development of the NQF requires full involvement of all stakeholders, including universities and other academic institutions.

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Introduction

The former Yugoslav Republic of Macedonia has been working towards a national qualifications framework (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. ⁽²²⁹⁾ This was a high political priority. The Ministry of Education and Science established a working group in 2008 for the preparation of QF for HE, which resulted in the proposal, submitted to the Ministry of Education. Based on the proposal, a Decree on Higher Educational Qualification was adopted in 2010, (Republic of Macedonia, 2010) ⁽²³⁰⁾ which is now being implemented. National registers of higher education qualifications and higher educational institutions are in preparation and the specific descriptors of study programmes are being drafted. 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.

⁽²²⁹⁾ Bologna process, National report 2007-09. Available from Internet:
http://www.ond.vlaanderen.be/hogeronderwijs/bologna/links/National-reports-2009/National_Report_Macedonia_2009.pdf [cited 3.9.2011].

⁽²³⁰⁾ УРЕДБА за Националната рамка на високообразовните квалификации [Decree on the National framework for higher education qualifications] Official Gazette, No. 154 30/2010. Available from Internet:
<http://www.mon.gov.mk/images/stories/dokumenti/NacionalnaRamka/uredba.pdf> [cited 6.9.2011].

Rationale, main policy objectives and scope of the framework

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 important tool and valuable contribution to modernising education and training, with a view to improving quality and better adaptability of education to labour market needs.

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 processes associated with the NQF are intended to improve the credibility and transparency of qualifications in the NQF. The main quality assurance processes associated with the NQF will be the 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 purposes of qualifications;
- create confidence in qualifications and standards linked to quality standards, defined nationally at the government level 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.

The intended beneficiaries of the framework have been identified as:

- employers and enterprises;
- institutions offering formal and non-formal courses and study programs leading to qualifications in the NQF;
- individual citizens and lifelong learners;
- holders of qualifications in the NQF;
- economy and society at large.

Stakeholder involvement

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 on the development of the NQF, is an issue to be resolved.

The working group was established by Ministry of Education in 2008. It comprises mainly representatives of stakeholders from education: the Ministry of Education, the Bureau for Development of Education (BDE), the Vocational Education and Training (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 validation of qualifications and accreditation of institutions.

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 to the design and award of qualification, and appeal processes. However, detailed arrangements would continue to be tailored to each area by the body responsible.

Operational arrangements for the NQF are being explored. Four proposals have been made for ensuring harmonisation across education sectors, for the

inclusion of qualifications in the NQF to be carried out or agreed by one of the following:

- a joint commission established by the main agencies for quality assurance i.e. BDE, VET Centre, AEC and Accreditation Board;
- a commission established by the Ministry of Education and Science which would bring together representatives of the main agencies;
- a commission but with additional members representing other key agencies (e.g. the State Education Inspectorate and the State Examination Centre) and/or key stakeholders, such as providers and social partners;
- a separate agency established for the purpose.

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.

Levels and descriptors

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 dimension 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 the qualifications types.

A step-by-step approach was used 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 – and to include non-formal provision for adults as developed by the project. A broad range of sources was used to develop level descriptors; EQF and Dublin descriptors are complemented by analysis of the existing qualifications and descriptors of other countries. Other references or indicators may be added to make the levels easier to understand.

The qualifications framework for HE uses the following descriptors:

- knowledge and understanding;
- applying knowledge and understanding;
- making judgments;

- communication skills;
- learning skills (Republic of Macedonia, 2010). ⁽²³¹⁾

Use of learning outcomes

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 underway in different part of education and training in the line with national education strategy for 2006-15, even though the progress has been limited (European Commission, 2010) ⁽²³²⁾.

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. ⁽²³³⁾ Descriptors for study programmes are being drafted. Common guidelines for describing learning outcomes, including the space for creativity and differences between study programs, 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.

A project is planned to reform VET standards and curricula based on occupational standards to be prepared in cooperation with labour market actors.

⁽²³¹⁾ УРЕДБА за Националната рамка на високообразовните квалификации [Decree on the National framework for higher education qualifications] Official Gazette, No. 154 30/2010. Available from Internet: <http://www.mon.gov.mk/images/stories/dokumenti/NacionalnaRamka/uredba.pdf> [cited 6.9.2011].

⁽²³²⁾ Commissions staff working document. The former Yugoslav Republic of Macedonia, 2010 progress report, accompanying the Communication from the Commission to the European Parliament and the Council Enlargement Strategy and Main Challenges 2010-2011, p 69. Available from Internet: http://ec.europa.eu/enlargement/pdf/key_documents/2010/package/mk_rapport_2010_en.pdf [cited 10.10.2011].

⁽²³³⁾ Bologna process, National report 2007-09. Available from Internet: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/links/National-reports-2009/National_Report_Macedonia_2009.pdf [cited 3.9.2011].

Important lessons and the way forward

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

One of the key issues is also to improve trust and communication among ethnic communities in the country to establish a truly 'national' qualifications framework. (European Commission, 2010, p. 69) ⁽²³⁴⁾

Main sources of information

National qualifications web site is available to users: <http://www.mon.gov.mk>

TURKEY

Introduction

A comprehensive national qualifications framework (Turkish Qualifications Framework, TQF) is being developed in Turkey. It aims to bring together a national vocational qualification system, led by the Vocational Qualifications Authority (NVQ system), 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.

Developments build on the experience of the broad EQF consultation process in 2005, the VET reform in 1990s and the outcomes of the Strengthening vocational education and training projects (2002-07).

Passing the Vocational Qualifications Authority Law (No 5544, 2006) was the most important legal stage for developing a national vocational qualification

⁽²³⁴⁾ 'Interaction between ethnic communities in education remains limited.'

system of labour market oriented qualifications. Through this law, a tripartite Vocational Qualifications Authority (VQA) 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 (MoNE). Its main objective was to develop the national vocational qualification system and framework, based on occupational standards and with strong involvement of sectors. It is being developed as a parallel system to existing formal education under the responsibility of Ministry of National Education. ⁽²³⁵⁾ It is used also for validating non-formal and informal competences and skills.

The Council of Higher Education (CoHE) is in charge of developing a qualifications framework for higher educations.

The main challenge is to link these qualification systems and frameworks in a coherent and comprehensive national qualifications framework. Developments of national standards and cooperation and coordination between the Vocational Qualifications Authority (VQA), Ministry of National Education and the Council of Higher Education is crucial to further development of a more coherent national qualification system.

Rationale, main policy objectives and scope of the framework

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 a NQF is to reduce mismatches and increase effective employment and training programmes. It underlines nine priority areas and 30 measures to be taken in these areas to strengthen the relationship between education and employment. Implementation of a comprehensive NQF is an important tool in developing an internationally competitive workforce.

⁽²³⁵⁾ 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. Available from Internet: <http://libserver.cedefop.europa.eu/vetelib/2011/77657.pdf> [cited 7.7.2011].

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) ⁽²³⁶⁾ Also, educational attainment of population is still low ⁽²³⁷⁾ compared to EU Member States.

The VET system is undergoing major reforms with substantial EU support; development of occupational standards, which are the basis for validating non-formal learning, is underway. Educational standards, defined by Ministry of National Education are different from those used in the system of vocational qualifications, under the remit of the Vocational Qualifications Authority. (Akkök, 2010, p. 1) 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 (Akkök, 2010, 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 national vocational qualifications system (NVQS).

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 framework (TQF), consisting of three sub-framework and 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

⁽²³⁶⁾ *Country information note 2010, Turkey 2010*, p. 2. Available from Internet: [http://www.etf.europa.eu/pubmgmt.nsf/\(getAttachment\)/371E87C744EDB330C125773800300A15/\\$File/NOTE864C9X.pdf](http://www.etf.europa.eu/pubmgmt.nsf/(getAttachment)/371E87C744EDB330C125773800300A15/$File/NOTE864C9X.pdf) [cited 12.07.2011]

⁽²³⁷⁾ According to Eurostat data for 2010 only 28.4% of population (aged 24-65) completed upper secondary education and reducing early school leaving (46.6% for age 18-24) is a big challenge.

mobility, flexibility, all kinds of learning activities to be valued, and progression routes to be clearly defined.

Stakeholder involvement

The work on the NQF development was initiated by the Ministry of National Education (MoNE) in 2005 through the EQF consultation process. Since the Vocational Qualifications Authority (VQA) was established in 2006, it has been coordinating the process together with the Ministry of National Education (MoNE), the Council of Higher Education (CoHE) and other stakeholders.

The VQA became operational in 2007, governed by assembly and executive board. Employee, and employer and professional organisations are members of the executive board of the VQA with representatives from government: Ministries of Labour and Education, and the Council of Higher Education.

It has developed secondary legislation on occupational standards and sectoral committees in 2007; work on the development of procedures and supporting documents and guidelines started at the beginning of 2008. Secondary legislation for qualifications, assessment and certification was published in 2008.

Work on occupational standards is continuing. So far, 180 occupational standards ⁽²³⁸⁾ have been approved with many more in the process of development and review by sectoral committees. However, the validation process for only one qualification (plastic welder) has been established (Akkök, 2010, p. 1). One open issue was who will develop qualifications from occupational standards the procedure for developing a qualification is very similar to that for occupational standards. The first vocational knowledge and skills testing and certification centres (VOC-TEST) in priority sectors (e.g. automotive and related sub-sectors, tourism, construction, transportation, energy, metal industry, etc.) were set up in 2011, responsible for assessment and certification.

As Turkey has decided to adopt a more comprehensive approach and to better link initial VET and the emerging national vocational qualification system, a NQF Preparation Commission was established in August 2010. Its main task is to prepare a proposal for a comprehensive NQF during 2011. Technical and research studies were carried out to assist the NQF Preparation Commission in NQF developments. Focus groups support specific activities, e.g. one focus group has developed level descriptors. Currently there is work on determining the

⁽²³⁸⁾ Available from Internet: <http://www.myk.gov.tr> [cited 1.9.2011].

existing qualifications, developing criteria for inclusion of qualifications in the framework and creating a common format for the qualifications included in the framework. The EU project Strengthening Vocational Qualifications Authority and national qualifications systems in Turkey (UYEP) supports these developments.

The institutional arrangements for the future comprehensive NQF have not yet been clarified. Apart from the Vocational Qualifications Authority (VQA), 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 ⁽²³⁹⁾, there are two further bodies responsible for education and national qualifications in Turkey. The Ministry of National Education (MoNE) is responsible for developing qualifications up to the fifth level and The Council of Higher Education (CoHE) is an autonomous public body responsible for planning, steering, governing and supervising higher education institutions and qualifications. An independent Quality Assurance Agency is planned.

The NQF for LLL and higher education

Development and implementation of the NQF for HE along with the principles of the Bologna Process and the Lisbon Strategy have been given high priority by the Council of Higher Education (CoHE), the national authority responsible for HE in Turkey. Initial work was started after Bergen Communiqué in 2005. To organise the process, a national committee was set up by the CoHE on April 28, 2006. Since then there has been a great interest in continuing work to develop the NQF by HE institutions and other stakeholders. Important progress has been made.

At the initial stage of development, it was agreed that the definitions on qualifications and competences, which are set up in the overarching QF for EHEA based on the Dublin descriptors, would be applied in Turkey. Accordingly, the committee drafted the level descriptors compatible with those of the EHEA first, second and third cycles as well as the short cycle. After consultation with relevant stakeholders (all universities, National Ministry of Education, national student union, the business world including employers and employees, NGOs) it was decided to redraft the level descriptors and to take both overarching QF (the

⁽²³⁹⁾ 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.

EQF and the QF for EHEA) into account when developing descriptors for all levels and profiles of HE. It was emphasised that this would aid lifelong learning orientation and would be a step towards one single comprehensive framework in the future.

The higher education system in Turkey also includes short cycle vocational qualifications, MYO's, which are strongly linked to vocational education at secondary level.

Levels and descriptors

The proposed draft NQF consists of eight levels defined in terms of knowledge, skills and competence. It is 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.

Use of learning outcomes

The learning outcomes approach is seen as an essential part of the development of the NQF and is the stated intention of all current reforms 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. In higher education, the implementation of the learning outcome approach is an essential part of the implementation of the NQF for higher education.

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, 180 occupational standards ⁽²⁴⁰⁾ have been approved, mainly at level 2-5. An important strength is that labour market actors have been significantly involved in these processes. Qualifications developed from occupational standards are described in terms of learning outcomes. Awarding criteria for bodies setting vocational qualifications were developed.

⁽²⁴⁰⁾ Available from Internet: <http://www.myk.gov.tr> [cited 1.9.2011].

A system for validation of non-formal learning is at the stage of development and piloting. NQF and Vocational Qualifications Authority will play the key role. (Akkök, 2010)

Referencing to the EQF

The referencing process has started and is at an early stage. Work is performed by a referencing committee, composed of members VQA, of the Ministry of National Education (MoNE), Council of Higher Education (CoHE) and other relevant stakeholders. A draft referencing report is expected to be prepared by 2012.

Important lessons and the way forward

A very important condition to developing an effective process of establishing NQF is to have clear responsibilities, defined roles and a coordination body which has a clear mandate. The first important 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 goal is a single comprehensive national framework, encompassing all stages of formal and all kinds of informal learning, the important precondition is to develop effective and sustainable cooperation between stakeholders across all three sectors. Strengthening and adjusting governance structures are being discussed.

One important objective of the NQF is to use it as vehicle for developing new occupational standards and qualifications, which are required by the labour market and use them for validation and reform of curricula. To retrain employer engagement in qualifications development seems to be crucial.

The other challenge is to develop the quality assurance of learning outcomes of education and training underpinning the whole NQF. This would require development of some comprehensive quality assurance approaches and mechanisms in the future.

Main sources of information

The Vocational Qualification Authority (VQA) is the NCP. Information is available on its website: www.myk.gov.tr [cited 7.7.2011].

For QF for HE detailed information is available on its website: <http://bologna.yok.gov.tr> [cited 7.7.2011].

THE UNITED KINGDOM

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 qualifications and credit framework (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 (FHEQ). 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 facilitated by the 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 QCF is expected to be fully implemented by 2011. 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 voluntary framework supporting transparency and the positioning of qualifications to each other.

Rationale, main policy objectives and scope of the framework

The QCF is seen by many as a ‘mature’ NQF, influencing later framework developments in Europe and beyond. The current QCF can be traced back to the framework for national vocational qualifications (NVQ) established in 1987. This framework – operating with five levels – was set up to deal with a diverse and in-transparent national VET system. As stated by Lester (2001) ⁽²⁴¹⁾, ‘... 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 addressing work-based awards. In 2003 the NVQ-framework was replaced by the national qualifications framework (NQF) 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 NQF would cover all publicly funded qualifications, including general and vocational education but excluding degree-awarding institutions (higher education) ⁽²⁴²⁾. 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) ‘... 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;

⁽²⁴¹⁾ The UK qualifications and credit framework; a critique. *Journal of vocational education and training*, Vol.63, No 2, June 2011, p. 205-216.

⁽²⁴²⁾ 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).

- reduce the burden of bureaucracy in the accreditation and assessment of qualifications.

The QCF furthermore 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;
- the introduction of the QCF reduces administrative bureaucracy and costs.

The QCF differs from the majority of new NQFs now developing throughout Europe through 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 indeed has been by some commentators (Tuck, 2007). But the framework also differs from most the new ‘EQF inspired’ frameworks by only covering a part of the qualification system, mainly basic and vocational qualifications awarded at work and in school. 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 legal basis

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 (OfQual).

- in Northern Ireland, the qualifications regulator is the Council for Curriculum, Examinations and Assessment (CCEA), which regulates external qualifications other than NVQs.

The English and Northern Irish Framework and higher education

A separate framework for higher education qualifications (FHEQ) has been established for England, Northern Ireland and Wales. This framework has five levels and is based on the concept that qualifications is awarded for demonstrated achievement. These levels are comparable to levels 4-8 of QCF although a different approach (descriptors) is used to describe them ⁽²⁴³⁾. 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 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 HE 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.

Levels and descriptors

The QCF comprises of nine levels from entry level (sub-divided into entry level 1-3) to achievement at level 8.

The level descriptors ⁽²⁴⁴⁾ 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 national

⁽²⁴³⁾ See Annex 3.

⁽²⁴⁴⁾ See Annex 3 for detailed descriptors.

qualifications framework (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. ⁽²⁴⁵⁾

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 consists of 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.

Use of learning outcomes

The learning outcomes approach underpins the English and Northern Irish qualifications systems. Actively promoted since the 1980s, this perspective is broadly accepted and implemented.

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 formally 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.

⁽²⁴⁵⁾ See Annex 3 for detailed level descriptors.

Table 21. **Levels 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 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 qualification framework over time and 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 the English and Northern Irish education and training system; 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 now are 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

<http://www.qcda.gov.uk/8150.aspx>

Scotland

Introduction

The SCQF promotes lifelong learning in Scotland. The framework was originally implemented in 2001 but has since been gradually revised and refined. The 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 qualifications.

Rationale, main policy objectives and scope of the framework

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. There are three strategic goals for the SCQF partnership for the period 2007-11 in line with the objectives of the company. These are to:

- maintain the quality and integrity of the SCQF;
- promote and develop the framework as a tool to support lifelong learning;
- develop and maintain relationships with other frameworks in the UK, Europe and internationally.

SCQF has a clear ambition to promote integration and progression across levels and types of qualifications. While the existence of a common set of descriptors and criteria is seen as an important precondition, the development of an integrated framework is seen as a long term task. Particular attention is being paid (for example) to sectors like construction and health where the framework is used to clarify progression routes.

Stakeholder involvement

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.

Levels and descriptors

There are 12 levels in the Scottish framework, described on the basis of common level descriptors which apply to all types of learning programmes and qualifications ⁽²⁴⁶⁾.

⁽²⁴⁶⁾ See Annex 3.

It is worth noting that the SCQF, in the same way as the other UK frameworks, operates with access (entry) levels. Levels 1-3 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.

Use of learning outcomes

It is a requirement of the framework that learning 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. The work on the referencing started in June 2008. The internal Scottish process was organised through the Board of the Scottish Credit and Qualifications Framework Partnership (SCQFP). This board appointed a quality committee to look after the integrity of the framework. This committee is in charge of any work which involves referencing the SCQF to any other framework. It established a steering group to manage the activities of the NCP, including:

- referencing qualification levels within the national qualifications system to the EQF levels;
- promoting and applying the European principles for QA in education and training when relating the national qualifications system to the EQF;
- ensuring all methodology used to refer national qualifications levels to the EQF is transparent and that the resulting decisions are published;
- providing guidance to stakeholders on how national qualifications relate to the EQF through the national qualifications system;
- ensuring the participation of all relevant national stakeholders including, according to national legislation and practice, higher education and

vocational education and training institutions, social partners, sectors and experts on the comparison and use of qualifications at European level.

The steering group included representation from major stakeholders along with two European experts. Scotland has completed its self assessment against the EHEA as part of the Bologna process. This work is now being taken account of within the referencing of the full SCQF to the EQF.

The work of the group resulted in the following referencing:

Table 22. **Levels 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		6		7	8

Main sources of information

<http://www.scqf.org.uk/>

Wales

Introduction

The CQFW is a descriptive voluntary framework which was developed by bringing together a number of sub-frameworks already in existence in Wales: the framework for higher education qualifications (FHEQ); the national qualification framework (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.

Rationale, main policy objectives and scope of the framework

The CQFW is positioned as a key part of Wales' lifelong learning policy and strategy:

- CQFW enables any learning post-16 to be formally recognised and is not in itself a regulatory mechanism; any regulatory requirements are supplied through its relationship with regulating bodies;
- CQFW is unit-based, defines one credit as 10 hours of learning time and has nine levels (the lowest subdivided into three) with supporting levels descriptors;
- the technical specifications apply to all post-16 learning.

Levels and descriptors

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.

Use of learning outcomes

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. The referencing work started in June 2008 and was carried out by an EQF coordination group in June 2008. The role of the group was:

- referencing levels of qualifications within the national qualifications system to the EQF;

- promoting and applying the principles for quality assurance in education and training when relating the national qualifications system to the EQF;
- ensuring the methodology used to refer national qualifications levels to the EQF is transparent and the resulting decisions are published;
- providing guidance to stakeholders on how national qualifications relate to the EQF through the national qualifications system;
- ensuring the participation of all relevant national stakeholders including, according to national legislation and practice, higher education and vocational education and training institutions, social partners, sectors and experts on the comparison and use of qualifications at European level.

Table 23. **Levels 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, the group which was established to ‘scope’ the link between the FEHQ and EQF, concluded that no additional benefit from linking to the EQF could be identified. This decision can however be reviewed in the future, depending on the developments of the EQF and the feedback from potential users of the frameworks.

Main sources of information

<http://wales.gov.uk/topics/educationandskills/learningproviders/creditqualificationframework/?lang=en> [cited 10.10.2011].

ANNEX 1

List of informants

Country	Name and surname	Institution
Austria	Eduard Staudecker, Stephanie Mayer	Federal Ministry of Education, Arts and Culture
Belgium (Flanders)	Jan Meers	Flemish Ministry of Education
	Wilfried Boomgaert	Flemish Ministry of Education
Belgium (Wallonia)	Jo Leonard Jean-Pierre Malarme	Ministry of Education, French-speaking region of Belgium
Bulgaria	Mimi Daneva	Ministry of Education, Youth and Science
	Ivana Radonova	Ministry of Education, Youth and Science
Croatia	Mile Dzelalija	Ministry of Science, Education and Sports
Cyprus	Nikos Andilios	Ministry of Education and Culture
Czech Republic	Miroslav Kadlec	National Institute of Technical and Vocational Education
	Milada Stalker	
	Petr Černíkovský	Ministry of Education, Youth and Sports
Denmark	Jan Jørgensen	Ministry of Education
Estonia	Küllli All	Ministry of Education and Research
Finland	Carita Blomquist	National Board of Education
	Kirsi Kangaspunta, Birgitta Vuorinen	Ministry of Education
France	Yolande Fermon	Direction générale pour l'enseignement supérieur
	Brigitte Bouquet	CNCP
Germany	Jutta Mahlberg Susanne Weber	Federal Ministry of Education and Research DQR office
Greece	Alexandra Ioannidou	Ministry of National Education and Religious Affairs
Hungary	Szlamka Erzsébet	Ministry of National Recourses
Iceland	Bjorg Petursdottir	Ministry of Education
	Olafur Kristjansson	Ministry of Education
Ireland	Jim Murray	National Qualifications Authority
Italy	Gabriella di Francesco	ISFOL
Latvia	Baiba Ramina	Academic Information Centre
Liechtenstein	Marion Kindle-Kühnis	National Agency for International Education Affairs (AIBA)
Lithuania	Vidmantas Tutlys	Vytautas Magnus University
Luxembourg	Jos Noesen	Ministry of National Education
Malta	James Calleja	Malta Qualifications Council, Ministry of Education, Culture, Youth and Sport
Montenegro	Tanja Ostojić	Ministry of Education and Sports
Netherlands	Marlies Leegwater	Ministry of Education
	Karin van der Sanden	Ministry of Education
	Marijke Dashorst	

Norway	Jan Levy	Ministry of Education and Research
	Kari Berg	Ministry of Education and Research
Poland	Ewa Chmielecka	Warsaw School of Economics
	Agnieszka Chłoń-Domińczak	Educational Research Institute
Portugal	Elsa Caramujo	National Agency for Qualifications
Romania	Margareta Ivan	National Qualifications Authority
Slovakia	Jaroslav Juriga	Ministry of Education
Slovenia	Elido Bandelj	National Institute for Vocational Education and Training
Spain	Carmen Baños Saborido	Ministry of Education
Sweden	Stefan Skimutis	Swedish National Agency for Higher Vocational Education
	Carina Linden	Ministry of Education
Turkey	Ahmet Gözüküçük	The Vocational Qualification Authority
former Yugoslav Republic of Macedonia	Borcho Aleksov	Ministry of Education and Science
United Kingdom England and Northern Ireland Scotland Wales	Mike Coles	QCDA
	Aileen Ponton	SCQF

ANNEX 2

Short overview of the NQF developments

	The scope and the 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	<p>Comprehensive NQF is being implemented</p> <p>It will include qualifications from all parts of education and training and will aid validation of non-formal and informal learning</p> <p>At levels 6-8 two strands in the NQF will coexist:</p> <ul style="list-style-type: none"> the Dublin descriptors will be used for allocating qualification related to Bologna cycles VET and adult learning qualifications, provided outside HE institutions, will be allocated to the NQF based on EQF descriptors and additional criteria <p>A framework with communication and orientation function</p>	Eight levels are adopted	<ul style="list-style-type: none"> knowledge skills competence <p>EQF level descriptors are used as national descriptors</p> <p>Additional table(s) (e.g. criteria and procedures) have been developed</p>	An Act on the NQF is being prepared	Implementation stage	<p>Federal Ministry of Education, Arts and Culture initiated and is coordinating the developments in cooperation with Federal Ministry of Science and Research</p> <p>All ministries and <i>Länder</i> representatives are involved as well as social partners and other relevant stakeholders from education and training</p>	<p>Referencing report is expected to be prepared in spring 2012</p> <p>OeAD (Österreichischer Austauschdienst) – Austrian Agency for International Cooperation in Education and Research is designated the national coordination point (NCP)</p>
Belgium (Flanders)	<p>A comprehensive NQF has been developed</p> <p>A framework with communication and orientation function</p> <p>A qualifications framework linked to the QF-EHEA has been developed separately (since 2003) but forms an integrated part of the comprehensive NQF</p>	Eight levels have been adopted	<ul style="list-style-type: none"> knowledge/ skills context/ autonomy/ responsibility 	An Act on the qualification structure, providing explicit basis for the NQF, was adopted April 2009	Established in April 2009 Implementation stage	<p>The Ministry of Education is the competent authority</p> <p>Other ministries are involved (labour, finances) as well as social partners and other relevant stakeholders from education and training</p> <p>Broad consultation has been carried out at different stages of the process</p>	Referencing to the EQF was carried out in June 2011

	The scope and the 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
Belgium (Wallonia)	NQF is under preparation A framework with communication and orientation function The NQF for the French speaking community of Belgium will build on some of the same basic principles as the Flemish framework	Eight levels are proposed	<ul style="list-style-type: none"> ● knowledge/ skills ● context/ autonomy/ responsibility 	A separate Decree was adopted in 2008 linking levels 6-8 exclusively to Bologna cycles This decree has been reconsidered and distinction between educational and professional qualifications at levels 6-8 to be introduced The NQF will be based on a Parliamentary Act	Late design stage Preparations for adoption taking place	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	Referencing to EQF is seen as an integrated part of the work on NQF Referencing report is expected to be presented to EQF AG in 2012
Belgium (German-speaking community)	NQF is under development NQF developments will be informed by experiences of other two Communities in Belgium, but also experiences from dual-system countries, e.g. Germany will be taken into account	Most likely 8-level structure will be proposed			Conceptualisation/design stage NQF draft is due to be published in 2011	Consultation with all stakeholders on the first draft and the following process was organised in mid- 2011	

	The scope and the 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
Bulgaria	Draft NQF was prepared in spring 2011 Comprehensive NQF will include all levels of formal education and training A framework with communication and orientation function	Eight levels are proposed	All levels are defined as: - knowledge (theoretical and factual) - skills (cognitive and practical) - personal and professional competences (autonomy and responsibility, learning competence, communicative and social 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) Decree on NQF is planned to be adopted after the consultation process by the end of 2011	Consultation stage	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 to EQF is seen an integrated part of the work on NQF NQF draft and draft referencing report will be prepared by October 2011 The European Integration and International Cooperation Directorate acts as NCP

	The scope and the 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
Croatia	Comprehensive NQF for LLL (CROQF) has been developed It will include all education and training sub-systems and provide for validation of non-formal and learning	Eight levels with additional sublevels at 4, 5, 7 and 8 are adopted	Comprehensive set of level descriptors spans all levels of education and training, defined as: <ul style="list-style-type: none"> ● knowledge (theoretical and factual) ● skills (cognitive, practical and social) ● responsibility and autonomy 	Ministry of Science, Education and Sports formed a joint working group of experts from VET and HE in 2006 5-year action plan was prepared (2008-12) Croatian Qualifications Framework, Introduction to Qualifications was adopted by the Government in 2009 A draft law regulating the implementation of NQF has been prepared	Implementation stage	Ministry of Science, Education and Sport is the competent 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	Referencing to the EQF has started One comprehensive report is being prepared to link to the EQF levels and to self-certify to QF-EHEA Preliminary results were presented to the EQF AG in February 2011 Directorate for International Cooperation and European Integration at the Ministry of Science, Education and Sports acts as NCP
Cyprus	Draft comprehensive NQF has been presented It will include all types of nationally recognised qualification from formal education and training as well as professional qualifications system under the Human Resource Development Authority	Eight levels are proposed	<ul style="list-style-type: none"> ● knowledge ● skills ● competence EQF level descriptors are used as national level descriptors	Council of Ministers decision to develop a comprehensive NQF was adopted in July 2008	Consultation stage was carried out in spring 2011	Ministry of Education and Culture is the competent authority The Ministry of Labour and Social Insurance and the Human Resources Development Authority are involved	Referencing report is expected to be prepared in 2012 by the Ministry of Education and Culture, which acts as NCP

	The scope and the 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
Czech Republic	<p>The national framework for vocational qualifications is in place</p> <p>The core of the framework is publicly accessible national register of professional qualifications (full and partial qualifications)</p> <p>It has regulatory function and provides the basis for validation of non-formal and informal learning</p> <p>Qualifications framework for tertiary qualifications is under development within the Q-RAM project</p> <p>Level descriptors have been prepared for primary and secondary education</p> <p>Discussions on developing a comprehensive NQF continuing</p>	Eight levels are adopted	<p>Qualifications levels are differentiated by level of competence</p> <p>Each competence has a knowledge and skills component</p> <p>Each competence is classified according to activity dimension (considered primary) and knowledge dimension (field or discipline)</p>	<p>Work on the national framework for professional qualifications started in 2005</p> <p>The Act on the verification and recognition of further education results, adopted in 2006, is the legal basis for NQF development</p> <p>Embedded in the national LLL strategy</p>	Implementation stage of the national framework for vocational qualifications	<p>Ministry of Education, Youth and Sport is the competent authority</p> <p>Other ministries act as authorising bodies</p> <p>Education and training providers, universities are authorised bodies</p> <p>Social partners participate in the qualifications development</p> <p>National qualification Council is an advisory body</p> <p>National VET Institute (NUOV) manages and administers the NQF for professional qualifications</p>	<p>Draft referencing report has been prepared and is expected to be presented to the EQF AG in December 2011</p> <p>National VET Institute (NUOV) was designated as NCP</p> <p>In July NUOV was merged with two other agencies to form the National Institute for Education</p>

	The scope and the 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
Denmark	<p>A comprehensive NQF includes all officially validated and recognised public qualifications from all subsystems of education and training</p> <p>The qualifications framework for HE was approved in 2007-08 and forms part of the comprehensive framework</p> <p>Communication and transparency function, but regulating function in HE</p> <p>The level descriptors for levels 6-8 in the NQF are identical with the level descriptors in the NQF-HE</p> <p>Descriptor at level 5 is broader than for the corresponding descriptor in the NQF_HE for short cycles</p> <p>This makes it possible to include VET qualifications at level 5</p> <p>Evaluation is planned in 2012</p>	Eight levels have been agreed	<ul style="list-style-type: none"> ● 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) <p>Levels 6-8 have clear reference to Dublin descriptors</p> <p>Level descriptors reflect EQF descriptors, Dublin descriptors, existing descriptors of learning outcomes of curricula and programmes, research related outcomes in HE</p>	<p>Work started in 2006 following an initiative of the Ministry of Education and referring to the 2006 government strategy on Denmark in the global economy</p> <p>The NQF was approved by the Minister of Education, the Minister of Science, Technology and Innovation, the Minister for Culture and the Minister for Economic and Business Affairs in 2009</p>	<p>Implementation stage</p> <p>All state recognised qualifications are included in the framework</p> <p>A next stage is envisaged in 2012 and 2013 seeking to integrate qualifications from the private sector and the labour market</p>	<p>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.</p>	<p>The final referencing report was agreed by the coordinating committee including representatives from Ministry of Education, Ministry of Science, Technology and Innovation, Ministry of Culture and Ministry of Economic and Business affairs</p> <p>It was presented to the EQF advisory group in May 2011</p> <p>NCP is hosted by the Danish Agency for International Education</p>

	The scope and the 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
Estonia	Estonia is implementing the comprehensive NQF for LLL, which includes all state qualifications It brings together four sub-frameworks for HE qualifications, VET qualifications, general education and professional qualifications with more detailed and specific descriptors and rules for designing and awarding qualifications	Eight levels are adopted	NQF level descriptors are identical to EQF level descriptors and defined as: <ul style="list-style-type: none"> ● knowledge ● skills ● responsibility and autonomy 	The amended Professional Act (September 2008) is the legal basis for NQF development and implementation	Implementation stage	Ministry of Education and Research is the competent authority Other ministries are involved (social affairs, economic affairs) as well as social partners and other relevant stakeholders from education and training and public agencies (National Examination and Qualifications Centre, Estonian Qualifications Authority) Estonian Qualification Authority (QA) manages and administers the NQF	Estonian Qualification Authority is the NCP A single comprehensive referencing report to link national qualifications levels to EQF and QF - EHEA was presented to the EQF AG in October 2011

	The scope and the 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
Finland	Comprehensive NQF will include all publicly recognised qualifications (by Ministry of education and other branches of the public administration) Framework will have a communication and orientation function, but is also seen as a way to strengthen validation of non-formal and informal learning	Eight levels have been agreed	The descriptors have been inspired by EQF descriptors, but adopted to suit the national context; the following categories are used: <ul style="list-style-type: none"> ● knowledge ● work method and application (skill) ● responsibility, management and entrepreneurship ● evaluation ● key skills for lifelong learning Descriptors 6-8 have been adjusted to Dublin descriptors	Work started in August 2008 following an initiative of the Ministry of Education An NQF outline was finalised in June 2009 A specific Law on the NQF has been presented to the Parliament for adoption and will present the framework, the descriptors and other features contained by it Adoption is expected November 2011	Implementation stage	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 will take place as soon as Parliamentary adoption has been completed in late 2011 The National Board of Education has been appointed the NCP

	The scope and the 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 EOF
France	<p>The current NQF covers all levels and types of vocationally or professionally oriented qualifications</p> <p>The framework has a regulatory function, in particular through the role played by CNCP (national committee on professional certificates)</p> <p>The CNCP can be seen as the 'gatekeeper', regulating which qualifications are to be officially accredited</p> <p>Validation of non-formal and informal learning is an important part of the framework</p> <p>The general baccalaureate (which gives access to higher education) is not part of the jurisdiction of the CNCP</p>	<p>Five levels exist for the moment; an eight-level structure is being considered, possibly towards the end of 2012</p>	<p>The French levels are distinguished on the basis of:</p> <ul style="list-style-type: none"> ● skills ● knowledge ● competence 	<p>A note on possible revisions to be made to the existing framework was presented to the Prime Minister in autumn 2009</p> <p>The note is based on the conclusions of a representative working group currently looking into these questions</p> <p>The discussion on a change to a new, eight-level structure is continuing</p>	<p>Implemented, currently revision stage</p>	<p>The CNCP coordinates the register of qualifications</p> <p>All relevant ministries, social partners, chambers and representatives of education and training subsystems are represented in the Committee</p>	<p>The referencing was finalised in October 2010</p> <p>The national committee on professional qualifications (CNCP) is the NCP</p>

	The scope and the 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
Germany	<p>A final proposal for a comprehensive NQF for LLL (<i>Deutscher Qualifikationsrahmen – DQR</i>) was adopted in March 2011 by working group Arbeitskreis DQR</p> <p>Adoption by the Ministry and Standing Conference of the Ministers for Education and Cultural Affairs of the <i>Länder</i> is pending</p> <p>DQR will include qualifications from all subsystems and aid validation of non-formally and informally acquired competences</p> <p>A framework with communication and orientation functions</p> <p>NQF for HE was established in 2005 and self-certified to the QF-EHEA in January 2010</p>	Eight levels are proposed	<p>The level descriptors are defined in two categories of competence:</p> <ul style="list-style-type: none"> ● 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 and learning competence) 	<p>A process started in 2006, when a national steering group was jointly established by the Federal Ministry of Education and Research and the Standing Conference of the Ministers of <i>Länder</i></p> <p>In February 2009, first proposal of the German NQF was published</p>	Implementation stage	<p>Federal Ministry of Education and Research and Standing Conference of the Ministers of Education and Cultural Affairs of <i>Länder</i> have jointly initiated the work</p> <p>Broad range of stakeholders is included from HE, school education, VET, social partners, public institutions from education and labour market, researchers and practitioners</p>	<p>National steering group acts as NCP and will be in charge of referencing</p> <p>Referencing report is expected to be submitted by 2012</p>
Greece	<p>Proposal for a comprehensive Hellenic QF was subject of consultation in spring 2011</p> <p>A new institution – National Organisation for the Certification of Qualifications (EOPP) – is responsible for HQF implementation</p> <p>A qualifications register is being put in place</p> <p>A methodological guide for referencing learning outcomes to the HQF levels has been prepared</p>	Eight levels are adopted	<p>Level descriptors are defined as:</p> <ul style="list-style-type: none"> ● knowledge ● skills ● competence <p>EQF level descriptors were used as starting point</p>	<p>The Law on lifelong learning was adopted in September 2010, providing the legal framework for NQF implementation</p>	Implementation stage	<p>Ministry of Education and Religious Affairs is the competent authority</p> <p>Stakeholders from public institutions, social partners, representatives of universities and external experts are included</p> <p>Consultation was organised from March to September 2010</p>	<p>Referencing report is expected to be prepared by 2012</p> <p>National Organisation for the Certification of Qualifications (EOPP) is designated the NCP</p>

	The scope and the 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
Hungary	Comprehensive NQF is under development It will include qualifications from all subsystems of education and training	Eight-level structure is proposed	It is proposed to describe levels in terms of knowledge, abilities attitudes, autonomy and responsibility	Work started in 2007 in the framework of the New Hungary Development Plan (2007-13) NQF development is based on the Government Decision No 2069/2008 and (No 1004/2011) adopted in January 2011	Design stage First NQF draft is available	The overall responsibility for the development of the NQF is shared between the Ministry of National Resources and the Ministry of National Economy 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	Referencing process will start second quarter of 2011 Referencing report is expected to be prepared by 2013 Department for EU Relations of the Ministry of National Resources acts as the NCP
Iceland	Comprehensive NQF will include qualifications from all subsystems of education and training and non-formal and informal learning QF for HE was implemented in 2007 and will form part of the new NQF	Seven levels are proposed	Level descriptors are more detailed and specific than EQF level descriptors but use similar concepts as starting points: <ul style="list-style-type: none"> ● knowledge ● skills ● competence 	Work started in autumn 2007 following an initiative of the Ministry of Education An NQF draft will be ready autumn 2011	Adoption 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 the education and training system (for example teachers)	Referencing is expected early 2012

	The scope and the 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
Ireland	Comprehensive and integrating 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 Referencing report to link national qualifications levels to EQF was adopted in May 2009 by NQA and presented in September 2009 to the EQF advisory group	Ten levels are adopted Four award types are included: major, minor, special-purpose and supplemental	Each level is based on nationally agreed standards of: <ul style="list-style-type: none"> ● 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 Bologna process has been an important part of the NFQ on a voluntary basis Policies and criteria on inclusion of awards of certain international and professional bodies were published by NQAI in July 2006 and amended in 2010	Implementation Framework implementation and impact study was published in September 2009 Nineteen recommendations for further implementation were proposed	NQF work was initiated by the Department of Education and Science and the Department of Enterprise, Trade and Employment The National Qualifications Authority of Ireland (NQAI) was established (2001) It has developed, maintained and monitored the NQF Amalgamation between FETAC, HETAC, IUOB and NQAI into a new institution – Qualifications and Quality Assurance Agency is under way	The final referencing report was adopted in May 2009 and presented to the EQF advisory group in September 2009
Italy	Steps towards establishment of an NQF have been taken QF for HE has been prepared Levels defined by learning outcomes for upper secondary education	The number of levels has not been defined yet	Level descriptors are being developed	Since 2003, various laws and agreements between ministries, social partners and regions have been adopted (e.g. Guidelines for Training in 2010)	Conceptual, design and partly testing phase Learning outcomes based methodology was tested in different sectors	The responsibility for NQF development is shared between the Ministry of Labour and Social Policies and the Ministry of Education, University and Research The key player in the NQF development has been National Committee (<i>Tavolo Nazionale</i>) It consists of representatives of both ministries, regions, autonomous provinces and social partners ISFOL prepares and implements national methodologies and coordinates expert groups	Draft referencing report has been prepared for consultation ISFOL is designated the NCP

	The scope and the 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 8-level structure was adopted by the Cabinet of Ministers 'Regulations on the classification of the Latvian education', in 2010 All nationally recognised education programmes from primary, secondary and higher education are referred 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) When developing the level descriptors, relevant state education standards, the EQF and Dublin level descriptors and Bloom's taxonomy were used	The Cabinet of Ministers 'Regulations on the classification of the Latvian education' is the legal basis for introducing 8-level structure	Implementation stage	Ministry of Education and Science is the competent authority	Academic Information Centre has been appointed as the NCP The referencing process started in 2009 It is organised in two stages: - phase I (2009-11) – the referencing of the existing Latvian formal education system to the EQF and the QF -EHEA - phase II (2013-15) – review of the national Self-assessment Report on the basis of the VET and HE laws and projects results One comprehensive referencing report was presented to the EQF AG in October 2011
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 Stage	National Agency for International Affairs (AIBA) coordinates the work	

	The scope and the 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 EOF
Lithuania	A comprehensive NQF covering all levels and types of qualifications (including Matura exam but excluding secondary education) has been adopted through Government Decree	Eight levels are adopted	Level descriptors reflect two parameters, characteristics of activities (complexity, autonomy, changeability) and types of competence (functional, cognitive and general)	A Decree on the NQF was adopted in 2010; it provides the legal and political basis for the NQF implementation	Implementation stage	The Ministry of Education and Science holds the main responsibility of developments	Referencing to take place autumn 2011
Luxembourg	Comprehensive NQF will cover all levels and types of education and training NQF draft proposal was presented to Council of Ministers in early 2009 A set of level descriptors was prepared in 2010 and are currently being discussed and finalised	Eight levels have been agreed	Level descriptors are differentiated according to: <ul style="list-style-type: none"> ● knowledge ● skills ● attitude 	Work started in 2006 following an initiative of the Ministry of Education The new law on vocational education and training adopted in autumn 2008 is key to the NQF developments	Advanced design and early adoption 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 report is expected to be submitted by mid 2012

	The scope and the 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) was launched in June 2007 It encompasses all levels of formal, non-formal and informal education and training	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 They give a broad profile of what an individual should know and do with varying degrees of autonomy and responsibility	NQF development started in 2005 It is based on the Legal Notice 347 (2005)	Implementation since 2007	The work was initiated by the Ministry of Education (competent body) in cooperation with stakeholders from education and training, labour market, social partners and others: parent associations; student councils, and non-governmental organisations Malta Qualifications Council was set up in 2005: it coordinates and administers the NQF Amendments to Education Act (September 2011) have introduced a new body – the National Commission for Further and Higher Education	A single comprehensive 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
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	Implementation	Ministry of Education and Sport has the overall responsibility	Referencing to the EQF is planned
The Netherlands	A comprehensive NQF including all nationally recognised qualifications has been adopted by the Government; it will mainly have a communication and orientation function The NQF builds on and integrates the QF for higher education already developed (since 2005)	Eight levels and one entry level has been adopted	- context - knowledge - skills - responsibility - independence	Work started in January 2009 following an initiative of the Ministry of Education The final proposal adopted mid-2011	Adoption and early implementation	Ministry of Education, Culture and Science (competent authority) will organise a process including all relevant stakeholders in education and training as well as in the labour market	Referencing report was presented to the EQF AG in October 2011

	The scope and the 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
Norway	Proposal for a comprehensive NQF have been through a final consultation stage and adoption by Government is (end 2011) prepared	Seven levels	Knowledge Skills General competence	The NQF will be based on a Ministerial Decree (<i>Forskrift</i>)	Adoption stage	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 spring 2012
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 A final proposal was ready by autumn 2011 The work builds on and integrates the work on a QF for HE started in 2006/07	An eight-level Polish NQF is proposed	Descriptors are defined by <ul style="list-style-type: none"> ● knowledge (scope, depth of understanding); ● skills (communication, problem solving, using knowledge in practice) ● Social competences (identity, autonomy, cooperation, responsibility) 	Work started in August 2008, following an initiative of the Ministry of Education A proposal for a comprehensive NQF was presented in December 2009 The final proposal was developed on this basis and concluded 2011	Adoption 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 2011

	The scope and the 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
Portugal	<p>Comprehensive NQF is in force since October 2010 as a single reference framework for classifying all school, VET and HE qualifications</p> <p>It integrates the system for the recognition, validation and certification of competences (RVCC)</p> <p>The national qualification catalogue, created in 2007, is the backbone of the NQF</p> <p>Framework for HE (FHEQ – Portugal), constituting an integral part of comprehensive national framework</p>	Eight levels are adopted	<p>Level descriptors are defined in broad categories of:</p> <ul style="list-style-type: none"> ● knowledge ● skills ● attitude <p>An interpretative guide (NQF –users’ guide) with more detailed level descriptors was prepared</p>	<p>NQF is legally based on the Decree No 782/2009 on the implementation of the NQF</p> <p>Work started in 2007, when the agreement between Government and social partners was signed and the Decree Law No 396/2007 on the establishment of the NQF was adopted</p>	Implementation stage	<p>Ministry of Labour and Social Solidarity initiated the work in cooperation with Ministry of Education and Ministry of Science, Technology and Higher Education</p> <p>National Agency for Qualifications was set up in 2007; it works closely with General Directorate of Higher Education</p> <p>The NQF implementation is supervised by the National Council for Vocational Education</p>	<p>National Agency for Qualifications is the NCP</p> <p>The final referencing report to link national levels to the EQF and QF-EHEA was presented to the EQF advisory group in June 2011</p> <p>-</p>

	The scope and the 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
Romania	<p>NQF will bring together all nationally recognised qualifications from IVET, CVET, apprenticeship at work, general education and HE</p> <p>NQF developments build on the five-level structure in VET</p> <p>QF for HE is being set up in parallel</p> <p>Methodology on the use of the NQF for HE was approved in June 2009</p>	Eight levels have been proposed	<p>Level descriptors are being developed, defined as:</p> <ul style="list-style-type: none"> ● knowledge ● skills ● competence <p>In QF for HE two categories of competence are defined:</p> <ul style="list-style-type: none"> ● professional competences (knowledge, skills) ● transversal competences (autonomy and responsibility, social interaction and professional development) 	<p>Development started in 2005 and builds on the five-level structure for VET and on the Tripartite Agreement signed by the Prime Minister, the Employers' National Confederation and the Trade Unions' National Confederation</p> <p>Development is continuing to incorporate the QF for HE into the comprehensive NQF</p>	Design and early implementation stage	<p>Ministry of Education, Research and Innovation initiated the work in cooperation with Ministry of Labour, Family and Social Protection</p> <p>Other ministries are involved (regional development, finance, etc.) as well as social partners and other relevant stakeholders from education and training</p> <p>In June 2011, National Council for Adult Training and Agency for Qualifications in Higher Education and Partnership between Universities and Representatives of the Social and Economic Environment were merged into the single body – National Qualifications Authority</p>	Preparations for referencing have started
Slovakia	<p>A proposal for a comprehensive NQF including all national qualifications from all subsystems of education and training was prepared in March 2011</p> <p>Main pillars of the NQF development are the national register of qualifications and the national register of occupations</p>	Eight levels were proposed	<p>EQF level descriptors were taken as a starting point</p> <p>National level descriptors are defined in terms of knowledge, skills and competence</p> <p>Links with formal education and training system are established for every level</p>	<p>NQF development started in 2009 and is based on the Government Decision on EQF implementation (February 2009)</p> <p>Memorandum of Cooperation between Ministry of Education and Ministry of Labour, Social Affairs and Family has been prepared</p>	Design stage	<p>Ministry of Education has initiated and is coordinating the developments</p> <p>Other ministries (labour, interior, health, economy, regional development, transport, agriculture and culture) are involved</p>	<p>Referencing group was established in 2009</p> <p>The referencing report is expected to be prepared by end 2012</p> <p>Ministry of Education, Science, research and Sports – Adult Education and Youth Division is the EQF NCP</p>

	The scope and the 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
Slovenia	<p>Proposal for a comprehensive NQF has developed</p> <p>It will include all nationally recognised qualifications and support validation of non-formal and informal learning</p> <p>Main pillars are the register of occupational standards, assessment qualifications catalogues for NVQs and register of national VET framework curricula which includes assessment standards and VET titles</p>	Ten levels are proposed	<p>The level descriptors are defined in terms of outcome criteria:</p> <ul style="list-style-type: none"> ● knowledge ● skills ● competences <p>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)</p>	In 2006, Government Decree (No 46/2006) on the Introduction and use of the classification system of education and training (Klasius) was adopted	Consultation was carried out in spring 2011	<p>Ministry of Education and Sport in cooperation with Ministry of Higher Education, Science and Technology and the Statistical office initiated the development</p> <p>Ministry of Labour is involved as well as social partners and the National Institute for VET</p>	<p>A national steering committee was established in January 2010</p> <p>Referencing report is expected to be prepared by 2012</p> <p>National Institute for VET acts as NCP</p>
Spain	<p>NQF for LLL (MECU) is being developed</p> <p>It will include and coordinate qualifications from different subsystems of education and training</p> <p>QF for HE (MECES) is being put in place in parallel</p> <p>NQF for LLL will have an orientation and communication function</p>	<p>Eight levels are proposed</p> <p>The four highest levels will be compatible with the QF for HE (MECES)</p>	<p>EQF level descriptors are being used as starting points</p> <p>They are defined in terms of:</p> <ul style="list-style-type: none"> ● knowledge ● skills ● competence 	<p>NQF developments are based on various acts</p> <p>A royal Decree on the introduction of MECU will be adopted by the Spanish Government in 2011</p>	Design and consultation stage	<p>Ministry of Education is coordinating the NQF development in cooperation with other ministries (e.g. labour and immigration, science, industry, tourism and commerce, etc.)</p>	<p>The IFIIE (Institute for Teacher Training, Research and Education Innovation) within the Directorate General for Vocational Training has been designated as NCP</p> <p>Draft referencing report is expected to be prepared by 2012</p>

	The scope and the 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 EOF
Sweden	A comprehensive NQF covering all existing public education and training qualifications is currently being developed on the basis of a mandate given by the government A proposal was presented to the Government October 2010 The Swedish NQF builds on and integrates the QF for higher education presented in 2007	Eight level structure was proposed	Level descriptors are defined as knowledge skills and competence	The Swedish Government decided on the 23 December 2009 to develop a comprehensive NQF	Design and consultation stage	Ministry of Education (competent authority) coordinates the process An inter-ministerial group consisting of representatives of different ministries (education, labour, business and finance) has been set up	Referencing report is expected to be presented to the Government in mid 2011 The Swedish National Agency for Higher Vocational education is designated as NCP
FYROM	A NQF is being developed Qualifications framework for higher education was adopted in 2010 by a decree on Higher Education Qualifications	Eight levels with a number of sub-levels are proposed	Level descriptors are defined as knowledge, skills and competence		Design stage	Ministry of Education and Science is the competent body	

	The scope and the 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 (NVQ system), QF for HE, developed in the Bologna process, and integrate them with the qualifications, awarded by Ministry of National Education	Eight levels are proposed	EQF descriptors have been taken as a starting point They are defined as: <ul style="list-style-type: none"> ● knowledge ● skills ● competence In HE competence is further divided into: <ul style="list-style-type: none"> ● autonomy and responsibility ● learning to learn ● field specific competences ● social and communication skills (with emphasis on foreign languages and ICT) 	Work started in 2005 The work of the NVQ system is legally embedded in the Vocational Qualification Authority Law (No 5544/2006) Development of a comprehensive framework is embedded in the Government programme documents, including the Action plan for the strengthening of relationship between education and employment	Design stage	Ministry of National Education (competent authority) initiated the work Since 2007, the Vocational Qualifications Authority (VQA) has been coordinating the process Council of Higher Education is in charge of developing QF for HE Broad range of stakeholders is included via Board of the VQA: employees' and employers' organisations and professional organisations and representatives from government (Ministries of Labour and Education, Higher Education Council)	Draft referencing report is expected to be prepared by 2012 Vocational Authority (VQA) acts as the NCP
United Kingdom (England and Northern Ireland)	England and Northern Ireland formally introduced a qualifications and credit framework (QCF) in 2008 This framework has regulatory functions A separate framework for higher education, FHEQ, exists for England, Northern Ireland and Wales	A nine-level structure (including entry levels) has been adopted	For England and Northern Ireland, each level is divided into: <ul style="list-style-type: none"> ● knowledge and understanding ● application and action ● autonomy and accountability 	In England the qualifications regulator is the office of the qualifications and examinations regulator (OfQual), In Northern Ireland the regulator is the Council for Curriculum, examinations and assessment (CCEA)	Implemented and reflects development of frameworks starting late 1980s		The QCF has been referenced to the EQF (February 2010) The Framework for higher education has not been referenced to the EQF, only to QF-EHEA

	The scope and the 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
(Scotland)	Scotland has implemented a comprehensive framework, the SCQF, with orientation and communication functions	A 12-level structure (including entry levels) has been adopted	For Scotland, each level is defined in terms of five broad categories: <ul style="list-style-type: none"> ● knowledge and understanding ● practice (applied knowledge and understanding) ● generic cognitive skills (e.g. evaluation, critical analysis) ● communication, numeracy and IT skills ● autonomy, accountability and working with others 			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 Colleagues and Scottish Ministers	The Scottish framework was referenced to the EQF in February 2010
(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: <ul style="list-style-type: none"> ● knowledge and understanding ● application and action ● autonomy and accountability 		Implemented, reflects a long tradition in framework developments		Referenced to the EQF in February 2010 The Framework for higher education has not been referenced to the EQF, only to QF-EHEA

ANNEX 3

Examples of level descriptor in EQF and NQFs

This annex provides examples to illustrate descriptors used by countries for their NQF level 5 which are also in line with EQF level 5. Developing descriptors for this level is a challenge in many countries, as it is considered to bridge VET and HE. The examples are structured to explain the main elements and concepts used for defining levels in the NQFs (e.g. knowledge, skills, competence etc) and then presentation of the level descriptor as such.

Descriptors defining levels in the EQF:

Level descriptors elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> ● factual and/or ● theoretical 	<ul style="list-style-type: none"> ● cognitive ● practical 	<ul style="list-style-type: none"> ● autonomy and ● responsibility

The learning outcomes relevant to level 5 ⁽²⁴⁷⁾ are: (European Parliament; Council of the European Union, 2008) ⁽²⁴⁸⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
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

⁽²⁴⁷⁾ Descriptor for level 5 is compatible with the descriptor for the higher education short cycle (within or linked to the first cycle).

⁽²⁴⁸⁾ 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. Available from Internet: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:111:0001:0007:EN:PDF> [cited 7.10.2011].

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 ⁽²⁴⁹⁾:

<ul style="list-style-type: none">● 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	<ul style="list-style-type: none">● 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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⁽²⁴⁹⁾ Flemish Act on the qualification structure. Available from Internet:
http://www.evcvlaanderen.be/files/DecreetVKS_ENG.pdf [cited 10.10.2011].

Bulgaria

Three main level descriptor elements defining levels 1-8 in Bulgaria:

Level descriptors elements				
Knowledge: <ul style="list-style-type: none"> theoretical and/or factual 	Skills: <ul style="list-style-type: none"> 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

Example of the descriptor for level 5 ⁽²⁵⁰⁾

KNOWLEDGE	SKILLS	COMPETENCES			
		Autonomy and Responsibility	Learning Competences	Communicative and Social Competences	Professional Competences
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • works independently under changing conditions, taking responsibility to carry out both individual tasks 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • carries out comprehensive tasks under changing circumstances, takes managerial responsibility for the performance of others and allocation of resources

⁽²⁵⁰⁾ This is a proposal for the national consultation.

Croatia

Three main level descriptor elements defining levels 1-8 in Croatia:

Level descriptors elements		
Knowledge: <ul style="list-style-type: none"> • factual • theoretical 	Skills: <ul style="list-style-type: none"> • cognitive c) practical • social 	Autonomy and responsibility

Example of the descriptor for level 5 (Vlada Republike Hrvatske, 2009) ⁽²⁵¹⁾:

<i>Knowledge</i>	<i>Skills</i>	<i>Autonomy and responsibility</i>
<ul style="list-style-type: none"> • factual: Analysing and synthesising of factual knowledge in a field of work or study, giving rise to the awareness of the frontier of knowledge in the field, plus evaluating • theoretical: Analysing and synthesising of theoretical knowledge in a field of work or study, giving rise to the awareness of the frontier of knowledge in the field, and their evaluation 	<ul style="list-style-type: none"> • cognitive: Simple abstract creative thinking (required to generate solutions to abstract problems) in partially unpredictable conditions • practical: Producing complex movements and an advanced use of methods, instruments, tools and materials in partially unpredictable conditions as well as developing simple methods, instruments, tools and materials • social: Management and realisation of complex communication and cooperation in a group in partially unpredictable conditions 	<ul style="list-style-type: none"> • autonomy: Taking part in the management of activities in partially unpredictable conditions • responsibility: Taking full responsibility for managing, and limited responsibility for evaluating the development of activities in partially unpredictable conditions

⁽²⁵¹⁾ *Hrvatski kvalifikacijski okvir, uvod u kvalifikacije* [Croatian qualifications framework]. Available from Internet: http://personal.unizd.hr/~mdzela/hko/HKO_Prirucnik.pdf [cited 10.10.2011].

Cyprus

EQF level descriptors are adopted as national level descriptors in Cyprus: defined in knowledge, skills and competence

Level descriptors elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • factual and/or • theoretical 	<ul style="list-style-type: none"> • cognitive • practical 	<ul style="list-style-type: none"> • autonomy and • responsibility

The learning outcomes relevant to level 5 are ⁽²⁵²⁾:

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
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

⁽²⁵²⁾ This is a starting point for further development.

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: ⁽²⁵³⁾

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

⁽²⁵³⁾ NQF *Qualifications levels and their characteristics*. Available from Internet:
<http://www.nuov.cz/nqf-qualification-levels-and-their-characteristics> [cited 3.11.2011].

Denmark

Three main level descriptor elements defining levels 1-8 in Denmark:

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • types of skills (practical, cognitive, creative or communicative) • complexity of the problem solving • communication 	<ul style="list-style-type: none"> • 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 ⁽²⁵⁴⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<p>Must have knowledge of practice, and application of methodology and theory in an occupational area or field of study.</p> <p>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.</p>	<p>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.</p> <p>Must be able to assess practice-related problems and adjust work procedures and processes.</p> <p>Must be able to communicate practice-related problems and possible solutions to collaboration partners and users.</p>	<p>Must be able to enter into development oriented and/or interdisciplinary work processes.</p> <p>Must be able to undertake defined management and planning functions in relation to the practice of an occupation or the field of study.</p> <p>Must be able to identify and develop own possibilities for continued further education and training in different learning environments.</p>

⁽²⁵⁴⁾For more information see: Level descriptors in the Danish framework Available from Internet: <http://en.iu.dk/transparency/qualifications-frameworks/levels> [cited 3.11.2011].

Estonia

EQF level descriptors are adopted as national level descriptors in Estonia defined in knowledge, skills and competence

Level descriptor elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> ● factual and/or ● theoretical 	<ul style="list-style-type: none"> ● cognitive ● practical 	<ul style="list-style-type: none"> ● autonomy and ● responsibility

The learning outcomes relevant to level 5 are: ⁽²⁵⁵⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
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 sub-frameworks: for general education, initial vocational education, higher education and professional qualifications.

Example of the level 5 descriptors of professional qualifications ⁽²⁵⁶⁾

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.
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⁽²⁵⁵⁾ Estonian Minister for Education and Research (2008) *Amended professions act*. Available from Internet: <http://www.hm.ee/index.php?popup=download&id=9030> [cited 7.7.2011] or <http://www.kutsekoda.ee/en/kutsesysteem/oigusaktidkutseseadus> [cited 7.7.2011].

⁽²⁵⁶⁾ Referencing of the Estonian qualifications framework to the European qualifications framework, 2011, p. 54. [unpublished].

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

Example of a draft level 5 descriptor ⁽²⁵⁷⁾:

- 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.

⁽²⁵⁷⁾ Draft level descriptor to be approved by the Finnish Parliament.

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's examination (Ministry of Interior), sub-officer qualification (rescue services) (Ministry of Interior)

France ⁽²⁵⁸⁾

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 one 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 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.

⁽²⁵⁸⁾ *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) ⁽²⁵⁹⁾:

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.

⁽²⁵⁹⁾ The German qualifications framework for lifelong learning adopted by the 'German qualifications framework working group' (AK DQR), 22 March 2011. Available from Internet: <http://www.deutscherqualifikationsrahmen.de/de?t=/documentManager/sfdoc.file.supply&s=Ps4JMwXnVSyFI11k70&fileID=1306419029291> [cited 20.5.2011].

Greece

Three main level descriptor elements defining levels 1-8 in Greece

Level descriptor elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • factual and/or • theoretical 	<ul style="list-style-type: none"> • cognitive • practical 	<ul style="list-style-type: none"> • autonomy and • responsibility

Example of level 5 descriptor ⁽²⁶⁰⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
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 formally are 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			
<i>Knowledge</i>	<i>Abilities</i>	<i>Attitudes</i>	<i>Autonomy and responsibility</i>

⁽²⁶⁰⁾ 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 ⁽²⁶¹⁾

<i>Knowledge</i>	<i>Abilities</i>	<i>Attitudes</i>	<i>Autonomy and responsibility</i>
<p>Has a fundamental general and specialised, theoretical and practical knowledge, related to a particular field of study/work. His theoretical and practical knowledge is organised into a system.</p> <p>A sound knowledge of the application of methods and tools ensures the long-term and high quality practice of the profession.</p> <p>Knows the professional terminology of the field (in the mother tongue and in at least one foreign language).</p>	<p>Can solve the tasks related to a profession: to plan and accomplish them, to select the necessary methods and tools, to apply them in a unique and complex way.</p> <p>His/her capacities to communicate in his mother tongue and in a foreign language enable him/her to undertake professional cooperation with speakers of other languages.</p> <p>Can improve his/her knowledge, and apply different methods of knowledge acquisition, self-improvement and current information and communication technologies for that purpose.</p> <p>Can make responsible decisions related to employment and enterprise.</p>	<p>Open to the new results and innovations of the certain field of work/study. Strives to know about them, to understand and to use them.</p> <p>Aims for continuous self-education.</p> <p>Committed to high quality professional work.</p> <p>Self-critical concerning his/her own work.</p> <p>Accepts and genuinely stands for the social role and the values of his/her profession.</p>	<p>Works independently under continuous self-monitoring.</p> <p>Takes responsibility for his or her team's work, results or failures.</p> <p>When making decisions takes into consideration the ethical and legal rules of his profession.</p>

⁽²⁶¹⁾ First proposal, which might change. [unpublished].

Iceland

Three main level descriptor elements defining levels 1-7 in Iceland

Level descriptors elements		
<i>Knowledge</i>	<i>Skill</i>	<i>Competence</i>
<p>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.</p> <p>Knowledge is analysed by discussing, categorising and comparing.</p> <p>Knowledge is communicated through various forms of expression, for example, orally, in writing, or through work.</p>	<p>Is both cognitive and practical. Skill involves the ability to apply methods and practices.</p> <p>Skill is acquired through training, methods, and practices.</p> <p>Skill involves analysis by choosing between methods, and the organisation of procedures.</p> <p>Skill is communicated by applying working methods, tools, and the methods of the various forms of expression.</p>	<p>Involves broadmindedness and the ability to use knowledge and skill.</p> <p>Competence is based on responsibility, broadmindedness, creativity, moral values, tolerance, and the students' appreciation of their own abilities.</p> <p>Additionally, their self-confidence and autonomous working methods.</p> <p>Competence involves the students' analysis of their own knowledge and skill by comparing, finding connections, simplifying, drawing conclusions, reflecting, and reasoning.</p> <p>Analytical competence involves critical thinking and professional criticism.</p> <p>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.</p>

Example of the draft level 4 descriptor ⁽²⁶²⁾

<i>Knowledge</i>	<i>Skill</i>	<i>Competence</i>
<p>Students have acquired:</p> <p>specialised knowledge useful for professional advancement and/or as preparation for further studies</p> <p>specialised vocabulary in a foreign language useful for professional advancement and/or as preparation for further studies</p>	<p>Students have acquired skill to:</p> <p>guide and communicate their knowledge in a simple and creative manner</p> <p>organise a procedure, employ appropriate techniques and develop the methods of a profession and/or specialised knowledge in a responsible manner</p> <p>show initiative and autonomy in working methods at analysing circumstances and reacting in an appropriate, realistic and creative manner</p>	<p>Students</p> <p>have acquired competence to express their specialised knowledge in Icelandic and a foreign language, if necessary in work or for further studies</p> <p>are able to take part in a conversation based on specialised knowledge and skills in a critical and clear manner</p> <p>have moral responsibility for the utilisation and development of their specialised knowledge with regard to the working conditions</p> <p>have acquired competence to be an active and responsible citizen in a society of a speciality and/or a profession</p> <p>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</p> <p>have acquired competence to connect their knowledge with the global environment</p>

⁽²⁶²⁾ Draft descriptors as presented in final report (August 2011) from the Icelandic EQF National Coordination Point to the European Commission regarding use of EQF grants.

Ireland

The learning outcomes descriptors are broken down into eight knowledge-, skills- and competence sub-strands in a 10-level framework in Ireland

Level descriptor elements		
<i>Knowledge</i>	<i>Know-how and skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • breadth • kind 	<ul style="list-style-type: none"> • range • selectivity 	<ul style="list-style-type: none"> • context • role • learning to learn • insight

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 sub-strands for level 6 (National Qualifications Authority of Ireland, 2003) ⁽²⁶³⁾:

Level descriptor elements		
<i>Knowledge</i>	<i>Know-how and skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • Breadth Specialised knowledge of a broad area. • Depth Some theoretical concepts and abstract thinking, with significant underpinning theory. 	<ul style="list-style-type: none"> • Range Demonstrate comprehensive range of specialised skills and tools. • Selectivity Formulate responses to well defined abstract problems. 	<ul style="list-style-type: none"> • 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.

Latvia

Three main level descriptor domains used for levels 1-8 in Latvia

Level descriptors elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • knowledge • comprehension 	ability to apply: <ul style="list-style-type: none"> • knowledge, • communication and • general skills 	<ul style="list-style-type: none"> • analysis, • synthesis and • assessment

⁽²⁶³⁾ Outline National framework of qualifications – Determinations made by National Qualifications Authority of Ireland. Available from Internet: <http://www.nqai.ie/docs/publications/12.pdf> [cited 10.10.2011]. Level 6 was referenced to the EQF level 5.

Example of level descriptors for level 5 (Academic Information Centre; Ministry of Education and Science of the Republic of Latvia., 2011) ⁽²⁶⁴⁾

Level descriptors elements		
<i>Knowledge</i>	<i>Know-how and skills</i>	<i>Competence</i>
Able to demonstrate comprehensive and specialised knowledge and understanding of facts, theories, causalities and technologies of the concrete professional field	<p>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</p> <p>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</p>	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

⁽²⁶⁴⁾ 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. Available from Internet: <http://www.nki-latvija.lv/?p=783?lang=en> [cited 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 competences:

Parameters		
	Characteristics of activities	Types of competences
Criteria	<ul style="list-style-type: none"> - complexity of activities - autonomy of activities - variability of activities 	<ul style="list-style-type: none"> - functional competences - cognitive competences - general competences

Brief indicator of qualification level 5 ⁽²⁶⁵⁾:

The qualification is intended for activities distinguished by integrated coordination of activity tasks in different activity areas. The activities include the evaluation of the competencies of lower-qualification employees and training thereof. The activities require coordination of comprehensive knowledge of the activity area with general knowledge in dealing with various specialised activity tasks in several different activity areas.

The employee performs the activities independently and is supervised only as regards the evaluation of results. The activity tasks are set by an employee of a higher qualification, who frequently grants the employee performing the activities the discretion as to the choice of methods and measures to complete the tasks. The employee supervises the activities of lower-qualification staff, plans and assigns activity tasks, oversees the performance of the activities, 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.

⁽²⁶⁵⁾ Government of the Republic of Lithuania Resolution No 535 of 4 May 2010. Description of the Lithuanian Qualifications Framework, available from http://www.kpmc.lt/LTKS_EKS/LTQF_official_translation.pdf (10.10.2011)

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.

Example of level 5 descriptors ⁽²⁶⁶⁾:

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;

⁽²⁶⁶⁾ *Level descriptors from the Malta qualifications framework (MQF)*. Malta Qualifications Council. Available on <http://www.mqc.gov.mt/malta-qualifications-framework> [cited 10.10.2011]. Level 5 of the MQF was referenced to level 5 in the EQF.

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.

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:
<i>Applying knowledge</i>	<ul style="list-style-type: none"> • reproduce, analyse, integrate, evaluate, combine and apply knowledge in an occupation or a knowledge domain
<i>Problem-solving skills</i>	<ul style="list-style-type: none"> • comprehend, recognise or identify and solve problems
<i>Learning and development skills</i>	<ul style="list-style-type: none"> • personal development, autonomously or under supervision
<i>Information skills</i>	<ul style="list-style-type: none"> • obtain, collect, process, combine, analyse and assess information
<i>Communication skills</i>	<ul style="list-style-type: none"> • 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, 2011) ⁽²⁶⁷⁾

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 <i>Applying knowledge</i>	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
<i>Problem solving skills</i>	Identify, analyse and solve complex problems in the knowledge domain in a creative way by selecting and using relevant data
<i>Learning and development skills</i>	Undertake personal development by reflecting on and evaluating personal (learning) results
<i>Information skills</i>	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
<i>Communication skills</i>	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

⁽²⁶⁷⁾ *The referencing of the Dutch national qualifications framework to the EQF*. August 2011, p. 46. [unpublished].

Norway

Three main level descriptor elements defining levels 1-7 in Norway

Level descriptor elements		
<i>Knowledge</i>	<i>Skill</i>	<i>General competence</i>
And understanding of theories, facts, principles, procedures in subject areas and/or occupations	The ability to utilise knowledge to solve problems or tasks (cognitive, practical, creative and communication skills)	The ability to utilise knowledge and skills in an independent manner in different situations

Example of parallel level descriptors at the level 4 ⁽²⁶⁸⁾

a) Norwegian level 4: Tertiary vocational training 1

Level descriptors		
<i>Knowledge</i>	<i>Skills</i>	<i>General competence</i>
<p><i>The candidate...</i></p> <ul style="list-style-type: none"> • is familiar with concepts, processes and tools that are used in a specialised discipline area • 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 part played by his/her industry/discipline area in society 	<p><i>The candidate...</i></p> <ul style="list-style-type: none"> • 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 assess and identify what measures that need to be implemented 	<p><i>The candidate...</i></p> <ul style="list-style-type: none"> • understands the ethical principles that apply in the trade/ discipline area • 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

⁽²⁶⁸⁾ The Norwegian framework is still under development and the descriptors reflect the stage of work reached in spring 2011. Available from Internet:
<http://www.regjeringen.no/nb/dep/kd/dok/hoeringer/hoeringsdok/2011/horing---nasjonalt-kvalifikasjonsrammeve.html?id=632187>

b) Norwegian level 4: Tertiary vocational training 2

Level descriptors		
<i>Knowledge</i>	<i>Skills</i>	<i>General competence</i>
<p><i>The candidate...</i></p> <ul style="list-style-type: none"> • is familiar with concepts, theories, models processes and tools that are used in a specialised discipline area • 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 industry/discipline • has insight into his/her own opportunities for development 	<p><i>The candidate...</i></p> <ul style="list-style-type: none"> • 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 	<p><i>The candidate...</i></p> <ul style="list-style-type: none"> • 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 industry/discipline area and participate in discussions about the development of good practice • can contribute to organisational development

Poland

Three main level descriptor domains in for levels 1-8 in Poland

Level descriptor elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Social competence</i>
<ul style="list-style-type: none"> • Scope • Depth of understanding 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • Identity (participation, responsibility, models of conduct) • Cooperation (team work, leadership, conditions) • Responsibility (individual and team actions, consequences, evaluation)

Example of level 5 descriptor ⁽²⁶⁹⁾

Level descriptor elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Social competence</i>
<p>Broad knowledge in a field of study and work</p> <p>Understanding moderately complex dependencies in a field of study and work</p>	<p>Solving non-routine problems that are not too complex under variable, predictable conditions</p> <p>Autonomous learning also in non-structured forms</p> <p>Ability to use native language in speech and writing to formulate and understand moderately complex statements employed in a field of study and work;</p> <p>ability to use a foreign language to formulate and understand simple statements as well as to understand the basic terminology of a field of study and work</p>	<p>Awareness of one's basic professional and social responsibilities, their review and interpretation</p> <p>Autonomously acting and working with others under structured conditions; directing a small team in structured conditions</p> <p>Evaluating one's own activities, those of others and the team one is directing; taking responsibility for the results of those activities</p>

Portugal

Three main level descriptor domains as defined in the EQF used for levels 1-8 in Portugal:

Level descriptor elements		
<i>Knowledge:</i>	<i>Skills:</i>	<i>Attitudes:</i>
<ul style="list-style-type: none"> Facts, principles, theories and practices 	<ul style="list-style-type: none"> Cognitive skills (logical, intuitive and creative thinking) Practical skills (manual dexterity and the use of methods, materials, tools and instruments) 	<ul style="list-style-type: none"> Autonomy Responsibility

⁽²⁶⁹⁾ Draft level descriptors proposed for the Polish qualifications framework (PQF).

More detailed level descriptor interpretation

<i>Knowledge</i>	<i>Know-how and skills</i>	<i>Attitudes</i>	<i>Context</i>
<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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), and at higher level of qualification it is expected to be able of research and innovation to solve critical problems and perform complex tasks to redefine existing knowledge and professional practises (research and development tasks, innovation). 	<ul style="list-style-type: none"> • Responsibility This sub-domain 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 authority, innovation and scientific and professional integrity. • Autonomy This sub-domain is structured from no autonomy/low level of autonomy (levels 1/2) to maximum autonomy, understood as a sliding scale. 	<ul style="list-style-type: none"> • 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.

Example of level 5 descriptor: (National Agency for Qualifications, 2011) ⁽²⁷⁰⁾

<i>Knowledge</i>	<i>Know-how and skills</i>	<i>Attitudes</i>	<i>Context</i>
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • Responsibility Review and develop self-performance Manage and supervise the individual performance of others • Autonomy On a sliding scale from less to more 	<ul style="list-style-type: none"> • Context of application In a specialised field of work or study • Predictability and Complexity Subject to unpredictable changes of variable complexity

Slovenia

Three main level descriptor elements defining levels 1-10 in Slovenia

Level descriptors elements		
<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
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.

⁽²⁷⁰⁾ Report on the referencing of the National qualifications framework to the European qualifications framework. [unpublished].

Example of level 6 descriptor: (Institute of the Republic of Slovenia for vocational education and training, 2011, p. 12) ⁽²⁷¹⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
Professional and theoretical knowledge in the specific field as well as practical knowledge for resolving concrete 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 works pertaining 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.

Spain

Three main level descriptor elements defining levels 1-8 in Spain:

<p>Knowledge described as theoretical and/or practical:</p> <ul style="list-style-type: none"> to have or understand knowledge 	<p>Skills and abilities described as cognitive and practical:</p> <ul style="list-style-type: none"> to apply knowledge ability to communicate in various languages analysis ability 	<p>Competence described as autonomy and responsibility:</p> <ul style="list-style-type: none"> learning ability attitudes
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⁽²⁷¹⁾ Slovenian qualifications framework: proposal by the Steering committee group on the preparation of the National qualifications framework. Available from Internet: http://www.nok.si/data/files/68_file_path.pdf [cited 7.10.2011].

Example of level 5 descriptor ⁽²⁷²⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • Specialised knowledge in a study or professional field, with a critical comprehension for transferring, integrating and innovating knowledge. 	<ul style="list-style-type: none"> • Advanced technological knowledge application and integration when defining and developing working procedures. • Management and supervision of the work techniques and outcomes, carried out by oneself and other people. • Autonomy and responsibility for carrying out foreseeable and unforeseeable activities in a professional field, and in charge of supervising the activities by subordinate people. • To communicate knowledge, abilities, feelings and activities properly in unforeseeable contexts. • Correct management of technological resources in a work or study field. • Analysis of the consequences of one's and other's actions in unforeseeable 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. 	<ul style="list-style-type: none"> • 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. • Responsible attitude towards work and training, making possible to develop activities, in an autonomous way, in a study or professional field. • Responsible attitude so as to supervise workplace risk prevention, staff safety, work quality and protection of the environment where the professional activity is carried out.

⁽²⁷²⁾ Draft level descriptors are in public consultation and might be amended. [unpublished].

Turkey

Three main level descriptor domains are used for levels 1-8 in Turkey:

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
<ul style="list-style-type: none"> • theoretical • practical 	<ul style="list-style-type: none"> • cognitive • practical 	<ul style="list-style-type: none"> • autonomy • responsibility

Example of level 5 descriptor ⁽²⁷³⁾

<i>Knowledge</i>	<i>Skills</i>	<i>Competence</i>
Have basic theoretical and practical knowledge required to specialise (preparing to specialise) in a field of work or learning.	<p>Use broad theoretical and practical knowledge specific to the field to provide solutions for clearly stated, complicated problems encountered for the first time</p> <p>Observe tasks applied while performing an activity/ duty and conduct research to develop methods used</p> <p>Relay knowledge, solutions and methods pertaining to a field of work or learning in a detailed manner.</p>	<p>Manage and audit the fulfilment of complicated activities/ duties in various working (professional activity) or learning environments</p> <p>Take responsibility for activities conducted to reach self learning and working objectives</p> <p>Take initiative in environments in line with the standards (whose quality has been assured) and act independently</p> <p>Take partial responsibility and act independently in environments including unprecedented changes.</p>

The United Kingdom

Qualifications and credit framework (QCF) in England and Northern Ireland defined

<i>Summary</i>	<i>Knowledge and understanding</i>	<i>Application and action</i>	<i>Autonomy and accountability</i>

⁽²⁷³⁾ Draft level descriptors of TQF might be amended. [unpublished].

Example of level 5 descriptor (Ofqual, 2008) ⁽²⁷⁴⁾

<i>Summary</i>	<i>Knowledge and understanding</i>	<i>Application and action</i>	<i>Autonomy and accountability</i>
Achievement at level five 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

⁽²⁷⁴⁾ *Regulatory arrangements for qualifications and credit framework (QCQ)*. Coventry: Office of the qualifications and examinations regulator. Available from Internet: http://www.ofqual.gov.uk/files/Regulatory_arrangements_QCF_August08.pdf [cited 8.11.2011].

Examples of level descriptors for levels 7 and 8 ⁽²⁷⁵⁾:

Knowledge and understanding	
Level 7	Level 8
<p>Demonstrate and/or work with: A broad knowledge of the subject/discipline in general; Knowledge that is embedded in the main theories, concepts and principles; An awareness of the evolving/changing nature of knowledge and understanding; An understanding of the difference between explanations based on evidence and/or research and other forms of explanation and of the importance of this difference.</p>	<p>Demonstrate and/or work with: A broad knowledge of the scope, defining features and main areas of a subject/discipline; Detailed knowledge in some areas; Understanding of a limited range of core theories, principles and concepts; Limited knowledge and understanding of some major current issues and specialisms; An outline knowledge and understanding of research and equivalent scholarly/academic processes.</p>
Practice: applied knowledge and understanding	
Level 7	Level 8
<p>Use some of the basic and routine professional skills, techniques, practices and/or materials associated with a subject/discipline. Practise these in both routine and non-routine contexts.</p>	<p>Use a range of routine skills, techniques, practices and/or materials associated with a subject/discipline, a few of which are advanced or complex. Carry out routine lines of enquiry, development or investigation into professional level problems and issues. Adapt routine practices within accepted standards.</p>
Generic cognitive skills	
Level 7	Level 8
<p>Present and evaluate arguments, information and ideas which are routine to the subject/discipline. Use a range of approaches to address defined and/or routine problems and issues within familiar contexts.</p>	<p>Undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues that are within the common understandings of the subject/discipline. Use a range of approaches to formulate evidence-based solutions/responses to defined and/or routine problems/issues. Critically evaluate evidence-based solutions/responses to defined and/or routine problems/issues.</p>

⁽²⁷⁵⁾ SCQF handbook:
<http://www.scqf.org.uk/News/LatestNews/SCQFHandbookUserGuide2009.aspx> [cited 24. 6. 2010]. Levels 7 and 8 were referenced to the EQF level 5.

Communication, ICT and numeracy skills	
Level 7	Level 8
<p>Use a wide range of routine skills and some advanced skills associated with the subject/discipline, for example:</p> <ul style="list-style-type: none"> • Convey complex ideas in well-structured and coherent form; • Use a range of forms of communication effectively in both familiar and new contexts; • Use standard 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. 	<p>Use a range of routine skills and some advanced and specialised skills associated with a subject/discipline – for example:</p> <ul style="list-style-type: none"> • 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
<p>Exercise some initiative and independence in carrying out defined activities at a professional level. Take supervision in less familiar areas of work. Take some managerial 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 in carrying out and evaluating tasks. Work with others in support of current professional practice, under guidance.</p>	<p>Exercise autonomy and initiative in some activities at a professional level.</p> <p>Take significant managerial or supervisory responsibility for the work of others in defined areas of work.</p> <p>Manage resources within defined areas of work. Take the lead on planning in familiar or defined contexts.</p> <p>Take continuing account of own and others' roles, responsibilities and contributions in carrying out and evaluating tasks.</p> <p>Work in support of current professional practice, under guidance.</p> <p>Deal with ethical and professional issues in accordance with current professional and/or ethical codes of practices, under guidance.</p>

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Development of national qualifications frameworks in Europe

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The 27 EU member states, five EU candidate countries and Liechtenstein and Norway are making rapid progress towards establishing and implementing national qualifications frameworks (NQF). By the end of 2011, 12 countries have linked their national qualifications levels to the European qualifications framework (EQF) levels. Cedefop's third review of NQF/EQF development shows that countries consider NQFs as tools that support national reforms and coherent lifelong learning policies. By promoting the use of learning outcomes they address barriers between vocational education and training and higher education. This report also highlights that the links between NQFs and validation of non-formal and informal learning are becoming stronger in most of the countries reviewed, an issue that is currently high on the policy agenda.

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