



## What purpose do national qualifications frameworks serve? – A look at other countries

► Looking at developments in other countries and at European level, this article outlines the objectives being pursued with the implementation of qualifications frameworks, what qualifications frameworks can do and possible approaches to them. Understood here as sets of skills, qualifications form the basic unit used in qualifications frameworks. Drawing on the examples provided by Ireland, England, Wales and Northern Ireland, the authors show how qualifications can be positioned in a hierarchical multi-level system with the help of descriptors in order to establish transparency and lateral mobility throughout an entire education system.

Germany's education system has a number of strong sub-systems that are largely detached from one another and exhibit little transparency or mobility between them, be it between vocational training and university education or between initial training and continuing training (vertical mobility). The same is true of horizontal mobility – in other words, switching from one training path or profile to another. For individuals, the recognition of acquired skills – and particularly and very importantly the transfer of credit for these skills, regardless of the form of vocational training involved, be it the “dual” vocational training system (which combines part-time vocational schooling with actual work experience) or full-time vocational school, or the skilled occupation for which the skills were acquired – means that they can avoid having to repeat subject matter needlessly and there is greater effectiveness in the way periods of training are treated. Could a national qualifications framework be of help here?

### National qualifications frameworks – A global phenomenon

National qualifications frameworks (NQFs) are structures for developing, describing and systematising the relationships between qualifications.<sup>1</sup> An NQF takes all of a country's formally recognized qualifications and arranges them in a clearly defined structure. In this context, qualifications are understood as sets of certified or documented skills – with no regard given to the respective learning path. Qualifications frameworks make hierarchical distinctions between qualifications and categorise them by level. This vertical structure is complemented by a horizontal structure that subdivides qualifications of the same level into different types and then assigns them accordingly. Individual qualifications are classified on the basis of criteria (descriptors) which specify the degree of complexity, reflexivity and autonomy and/or the focus of a qualification's content.



**GEORG HANF**

*Ph. D., Member of the “International Cooperation in Vocational Education and Training, Education Marketing” Section at BIBB*



**UTE HIPPACH-SCHNEIDER**

*Member of the “International Cooperation in Vocational Education and Training, Education Marketing” Section at BIBB*

National qualifications frameworks (NQFs) were developed in a number of countries, particularly members of the Commonwealth, starting in the mid-1980s. Countries in other parts of the world such as the Middle East, Eastern and Western Europe also began developing NQFs in the 1990s. The development of national qualifications frameworks can definitely be called a global phenomenon.<sup>2</sup> In Anglo-Saxon countries, the initial motivation behind this was to open up access to acquiring vocational qualification. In other countries, the introduction of qualifications frameworks was undertaken in connection with a general overhaul of the respective education system. More recently, qualifications frameworks have been propagated as an instrument for fostering “life-long learning”.<sup>3</sup>

All national qualifications frameworks target two common goals. These are to:

- make qualifications transparent for users, learners and potential employers so that the former know what they have to learn and the latter know what they can expect;
- enable flexibility and transferability between different educational and occupational fields and between learning venues and, in doing so, eliminate barriers that currently block horizontal and vertical education paths.

National qualifications frameworks can serve other purposes as well. They can:

- foster the more rational design and development of qualifications;
- make it easier for government to steer skills development;
- foster educational mobility through the use of credit transfer systems;
- enhance the marketability of education offerings at international level;
- improve the representation of a country’s qualification potential in international statistics.

National qualifications frameworks go hand-in-hand with efforts to increase the autonomy of education institutions. In such cases, NQFs can help make institutions that are more self-governed accountable in terms of the outcomes they are to achieve/have achieved.

In ideal-typical terms, NQFs operate on the basis of the following assumptions<sup>4</sup>.

1. It is possible to describe all qualifications using *one single* set of descriptors.
2. A *single* set of levels is sufficient for depicting all qualifications.
3. All (sub-)qualifications can be described and assessed in terms of learning outcomes, regardless of the venue where they were acquired.
4. All qualifications can, in principle, be organised in units or unit standards for which a certain amount of learning

time can be assumed and corresponding credits can be granted. Furthermore, they can be assigned to the proper level within the qualifications hierarchy with the help of descriptors.

5. National qualifications frameworks provide the foundation for learner-centric training systems. NQFs open up options for individuals and, in doing so, assign them responsibility for organizing their respective education path.

Variations of qualifications frameworks have emerged in individual countries, depending upon how rigorously and fully the particular country follows these assumptions. There are “strict” frameworks in which all the above assumptions have been systematically implemented and “softer” frameworks in which compromises have been made.

### Examples of national qualifications frameworks

Some national qualifications frameworks encompass all education sub-systems and cover all levels of education (including vocational training), while others differentiate between vocational and general education or between vocational training and higher education. Frameworks also differ in terms of their legal status. They can be voluntary or they can be founded on legislation, regulations or contractual agreements.

In some cases, qualifications frameworks incorporate mechanisms for recognizing smaller units or clusters of learning outcomes, as is done in Scotland. These mechanisms are known as credit systems. With the help of such systems, modules and units – or even entire qualifications – can be recognised/credited individually, regardless of the level.

### IRELAND

The introduction of the National Framework of Qualifications in Ireland was preceded by two years of intensive consultations with all players in the education sector. This process was directed by the National Qualifications Authority of Ireland ([www.nqai.ie](http://www.nqai.ie))<sup>5</sup>, which was set up specifically for this purpose in February 2001.

The aim of these efforts was to develop a single structure that would be recognised nationally as well as internationally and that could be used to measure every kind of *learning outcome*, place them in relation to one another and define the relationships between *all* diplomas and certificates in the education and training sector. This qualifications framework is based on standards for knowledge, skills and competences.

Figure 1

**National Framework of Qualifications**  
GRID OF LEVEL INDICATORS

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Knowledge <i>Breadth</i>			Knowledge moderately broad in range.	Broad range of knowledge.	Broad range of knowledge.					
Knowledge <i>Kind</i>			Mainly concrete in reference and with some comprehension of relationship between knowledge elements.	Mainly concrete in reference and with some elements of abstraction or theory.	Some theoretical concepts and abstract thinking with significant depth in some areas.					
Know-How & Skill <i>Range</i>			Demonstrate a limited range of practical and cognitive skills and tools.	Demonstrate a moderate range of practical and cognitive skills and tools.	Demonstrate a broad range of specialised skills and tools.					
Know-How & Skill <i>Selectivity</i>			Select from a limited range of varied procedures and apply known solutions to a limited range of predictable problems.	Select from a range of procedures and apply known solutions to a variety of predictable problems.	Evaluate and use information to plan and develop investigative strategies and to determine solutions to varied unfamiliar problems.					
Competence <i>Context</i>			Act within a limited range of contexts.	Act in familiar and unfamiliar contexts.	Act in a range of varied and specific contexts taking responsibility for the nature and quality of outputs; identify and apply skill and knowledge to a wide variety of contexts.					
Competence <i>Role</i>			Act under direction with limited autonomy; function within familiar, homogenous groups.	Act with considerable amount of responsibility and autonomy.	Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups.					
Competence <i>Learning to Learn</i>			Learn to learn within a managed environment.	Learn to take responsibility for own learning within a supervised environment.	Learn to take responsibility for own learning within a managed environment.					
Competence <i>insight</i>			Assume limited responsibility for consistency of self-understanding and behaviour.	Assume partial responsibility for consistency of self-understanding and behaviour.	Assume full responsibility for consistency of self-understanding and behaviour.					

National Qualifications Authority of Ireland (NQAI)

Ireland's National Framework of Qualifications is a learner-centric framework that shows the various awards that can be earned at all levels of Ireland's entire education system and their relation to one another in a transparent and easily understood way. From a national point of view, it is of central importance in this context that the country's NQF has given new meaning to the concept of an "award". Today, an award makes a statement about actual learning outcomes. In other words, the important thing now is what the individual holding the particular award knows, can do and understands – and not how much time he or she spent in a certain programme.

The framework is comprised of ten levels, each based on specific standards for knowledge, skills and competences. These standards define the learning outcomes that the individual must achieve in order to earn an award for a particular level. The ten levels offer room for awards that can be earned in school, on the job, at training centres, colleges, universities and the like. New awards that recognise and certify skills and competences that have been informally acquired also have a place in the framework's design and architecture.

The Irish qualifications framework is of interest particularly in light of its elaborated set of standards for knowledge, skill and competence. The ten levels are delineated in eight descriptor groups (Knowledge: *Breadth and Kind*, Know-how and skill: *Range and Selectivity*, Competence: *Context, Role, Learning to Learn, Insight*), forming an 8 x 10 grid. The level indicators developed for this make it possible to position awards within the grid. Using these indicators it is also possible to assign the learning outcomes from individual units to the appropriate level in the grid and to develop new modules with an eye to this structure.

the individual for making the transition to the labour market.

Ireland created a “softer” framework. Its NQF builds on or incorporates existing structures. Rather than being implemented “from the top down”, it was developed following extensive consultations, following the motto “enable rather than dictate”.

#### ENGLAND, WALES UND NORTHERN IRELAND

A revised National Qualifications Framework went into effect in England, Wales and Northern Ireland in September 2004. The new NQF expanded the original five levels to eight and added corresponding entry levels. This change relates to qualifications earned in the higher education field.<sup>6</sup>

This national qualifications framework covers general certificates through to the end of secondary level II and vocationally-related and occupational certificates starting from secondary level I.

To facilitate comparison, Figure 2 details the level descriptors that generally correspond to Levels 2 through 4 of the framework used in England, Wales and Northern Ireland.

This framework is intended to assist learners with decisions on their personal education path by offering them a means of comparing accredited qualifications. A database was set up for this purpose.<sup>7</sup>

A variety of objectives played a role in the development of this framework as well. These aims included fostering access to education and training, boosting international competitiveness, promoting life-long learning by making education paths transparent, avoiding the duplication and overlapping of qualifications (such as diplomas, certificates) as well as promoting confidence in the substance of the country’s own national certificates and diplomas.

In addition to the NQF, England, Wales and Northern Ireland also have a Framework for Higher Education Qualification levels (FHEQ) that is organised in five levels and must be viewed parallel to the NQF’s revised Levels 4 through 8. As a result, this has placed vocationally-related and occupation-oriented qualifications on a par with other qualifications in higher education, albeit in a separate “flanking” framework.

The NQF is also an outcomes-oriented framework. In other words, the qualifications/awards classified as belonging to a certain level are comparable in terms of the level of the acquired skills they represent. The respective diplomas and certificates are also assigned to the appropriate level on the basis of descriptors.

Framework level	Level indicators	Examples of qualifications
Entry		
Level 1		
Level 2	Level 2 qualifications recognise the ability to gain a good knowledge and understanding of a subject area of work or study, and to perform varied tasks with some guidance or supervision. Learning at this level involves building knowledge and/or skills in relation to an area of work or a subject area and is appropriate for many job roles.	NVQ 2; GCSEs Grades A* - C; Certificate in Coaching Football; Diploma for Beauty Specialists
Level 3	Level 3 qualifications recognise the ability to gain, and where relevant apply a range of knowledge, skills and understanding. Learning at this level involves obtaining detailed knowledge and skills. It is appropriate for people wishing to go to university, people working independently, or in some areas supervising and training others in their field of work.	Certificate for Teaching Assistants; NVQ 3; A levels; Advanced Extension Awards; Certificate in Small Animal Care
Level 4	Level 4 qualifications recognise specialist learning and involve detailed analysis of a high level of information and knowledge in an area of work or study. Learning at this level is appropriate for people working in technical and professional jobs, and/or managing and developing others. Level 4 qualifications are at a level equivalent to Certificates of Higher Education.	Diploma in Sport & Recreation; Certificate in Site Management; Certificate in Early Years Practice
Level 5		
Level 6		
Level 7		
Level 8		

Quelle: Qualifications and Curriculum Authority, QCA, UK

Figure 2 Extract from the NQF of England, Wales and Northern Ireland

To illustrate this, Levels 3 through 5 are detailed shown in Figure 1. These levels correspond more or less to those levels in Germany that would be reserved for vocational education and training. Since Ireland’s framework covers all sub-systems – from both general education and vocational training – in the country’s education system, Levels 3 through 5 list awards from both these sectors, because the goals and learning outcomes tally with the respective level indicators. These levels contain not only the Leaving Certificate but also the Leaving Certificate Vocational Programme and the Leaving Certificate Applied that prepares

## Development of European reference framework for qualifications and skills

In its communication on the status of the Lisbon strategy<sup>8</sup>, the European Commission calls for the immediate establishment of a European qualifications framework. It notes that without a European framework for the recognition of qualifications earned through vocational training or higher education, the European labour market cannot function effectively and smoothly. This objective is considered a top priority for the successful implementation of the Lisbon strategy. According to the Commission, the successful establishment of a European qualifications framework would comprise an instrument for strengthening coherent strategies for life-long learning, foster the quality and attractiveness of vocational education and training, and promote mobility.

There is to be a European framework for a number of structural elements. The Copenhagen Declaration on enhanced cooperation in vocational education and training particularly stresses transparency, credit transfer and quality assurance and assigned these issues to special working groups. The higher education sector is pursuing the same aims, but started somewhat earlier. Working on the basis of the Bologna Declaration on enhanced cooperation in higher education – which they honed and continued to develop in the Prague Communiqué and at their Berlin meeting – the education ministers have reached agreement not only on transparency and credit transfer but also on a system of comparable diplomas and certificates – a qualifications framework. The work on this has already reached a relatively advanced stage.<sup>9</sup>

Developments in vocational education and training and in higher education that had taken place on a parallel basis up to that time were a focus during Ireland's term as president of the Council of the European Union. The establishment of a comprehensive European qualifications framework was subsequently also programized: "The European framework should link together the wide diversity of different qualifications frameworks and systems at national level, so that these systems are able to communicate, and so that individuals can move between them."<sup>10</sup>

Prompted by the results of a qualifications framework study<sup>11</sup> commissioned by the Copenhagen ECVET working group, the Commission has now added the European Qualifications Framework to its agenda.<sup>12</sup> It foresees a broad consultation process that should be concluded in the spring of 2006 with the Education Council's adoption of the framework.

*The European framework  
should link together the wide  
diversity of different NQFs*

## A national framework for qualifications and skills in Germany?

By stipulating a short timeframe for the development of a European qualifications framework, the European Commission has placed pressure on EU member states – and on Germany in particular – to take action.

Germany has traditionally belonged to that group of countries – such as France – that take an institution-oriented or process-oriented approach. In other words, its education paths are largely anchored in institutional (vocational or academic) communities. This contrasts with the fundamentally outcomes-oriented approach taken by English-speaking countries that is an essential element of qualifications frameworks. Is it conceivable to have an outcomes-oriented NQF that also retains the above "mooring" for initial education and training?

The rudiments of an NQF already exist in Germany. A qualifications framework for a specific field was established for the first time in Germany in the form of the three-stage continuing training system that was set up in the IT field.

The continuing IT training system with its three levels – specialist, operative professional and strategic professional – constitutes (along with the IT occupations at skilled worker/skilled salaried employee level) the core of a qualifications framework that could also be applied to other branches.

Germany's social partners commissioned a panel of experts back in 1996 to develop a system of qualifications levels for regular upgrading training pursuant to the Vocational Training Act.<sup>13</sup> Unveiled in late 2000, the experts' plan envisaged three levels: advanced qualification that requires additional qualification which in turn differentiates it from vocational training; qualification for middle-level skilled workers and management personnel (such as master craftsmen, specialists, commercial specialists such as bank clerks, industrial clerks or IT officers); qualification for management positions in medium-sized companies or the decentralized organizational units of large enterprises. The middle and upper levels are classified as belonging to the

bachelor or master's level. The social partners "want their efforts toward regulating training and the federal government's continuing training regulations to be based on this concept in the future" (ibid). The continuing IT training system was the first to implement this concept. The chemical and construction industries will follow.

At the same time that the regulations for continuing IT training were adopted, Germany's education and economics ministries and the social partners declared themselves in favour of a system for counting vocational qualifications toward higher education, with an eye to boosting mobility between the vocational education and training system on the one hand and the academic education system on the other.<sup>14</sup> In their recommendation regarding the granting of credit points for continuing vocational training and counting them toward university studies, which the Federal Ministry of Education and Research, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany ("KMK") and the German Rectors' Conference (association of state and state-recognised universities and other higher education institutions - "HRK") issued to Germany's universities on July 8, 2003, these bodies advocated the general implementation of such a system.

Future work must draw on and move forward from these objectives and the groundwork that has already been laid (in the IT field). Moving forward will require, as a first step, studies on the design and use of national frameworks. Such studies should focus particularly on the questions:

How many levels will be needed to capture existing qualifications/skills adequately? Which descriptors are appropriate for describing knowledge, skills and abilities and for differentiating between them on a constructive basis? Are there general descriptors that can cover all characteristics specific to individual fields in an appropriate way? Could there be an integrated set of descriptors that encompasses vocational training and higher education in a single continuum or do these two education systems follow fundamentally different sets of logic (experience versus written/more explicit knowledge, as the case may be)?<sup>15</sup> How can the provisions for granting credit be formulated? And lastly, the question arises whether it is possible to agree on descriptors that allow an appropriate portrayal/classification of various sets of competences (qualifications, occupations). The answer to this question will require comprehensive coordination that involves all parties at every level of the qualification system.

To return to our opening question: A national qualifications framework could help eliminate the previously mentioned obstacles. This would however require the social bodies and institutions that are "responsible" for designing and organizing qualifications to work together across the boundaries of their traditional territories. It would also require the involvement of new players. Only under these circumstances will it be possible to ensure the acceptance and credibility that qualifications need in order to function as a kind of "currency" on national and international labour markets. ■

#### Remarks

- 1 G. Hanf, J. Reuling: *Qualifikationsrahmen – ein Instrument zur Förderung der Bezüge zwischen verschiedenen Bildungsbereichen?* BWP 30 (2001) 6, pp. 49-54
- 2 Cf. Michael F. D. Young: *National Qualifications Frameworks as a Global Phenomenon: a comparative perspective.* In: *Journal of Education and Work*, Vol. 16, No. 3, September 2003, pp. 223-237
- 3 The OECD has taken up this topic from this angle with its activity "The Role of Qualifications Systems in Promoting Life-long Learning" ([www.oecd.org/edu/life-longlearning/nqs](http://www.oecd.org/edu/life-longlearning/nqs))
- 4 Michael F.D. Young, *ibid.*, p. 225
- 5 National Qualifications Authority of Ireland: *Towards a National Framework of Qualifications - Establishment of Policies and Criteria*, Dublin 2002
- 6 [www.qca.org.uk/qualifications/types/493.html](http://www.qca.org.uk/qualifications/types/493.html)
- 7 [www.openquals.org.uk/openquals/SimpleSearch.aspx?nav=key](http://www.openquals.org.uk/openquals/SimpleSearch.aspx?nav=key)
- 8 *Education & Training 2010: The success of the Lisbon Strategy hinges on urgent reforms: Joint interim report by the Council and the European Commission*, March 3, 2004 [http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/c\\_104/c\\_10420040430en00010019.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/c_104/c_10420040430en00010019.pdf)
- 9 Cf. V. Gehmlich: *Entwicklung eines europäischen Qualifikationsrahmens.* In: BWP 33 (2004) 6, pp. 17-22
- 10 Speech delivered by N. van der Pas on March 8, 2004
- 11 Mike Coles and Tim Oates: *Understanding zones of mutual trust and developing European reference levels for education and training* (unpublished manuscript)
- 12 Maastricht Communiqué on the Future Priorities of Enhanced European Cooperation in Vocational Education and Training (VET) from December 14, 2004
- 13 Federal Ministry of Education and Research: *Report on Vocational Education and Training for the Year 2002*, p. 222 (German version)
- 14 *Statement by the social partners' umbrella organizations, the Federal Ministry of Education and Research and the Federal Ministry of Economics and Technology on the implementation of university credit point systems in continuing vocational education and training based on the example of the Continuing IT Training Ordinance.* In: *Federal Gazette No. 105a* dated June 12, 2002. Regarding the question of how a credit system could work, please see Kerstin Mucke: *Förderung der Durchlässigkeit zwischen beruflicher und hochschulischer Bildung.* In: BWP 33 (2004) 6, pp. 11-16
- 15 K. Harney, G. Kissmann: *Maßstabsbildung, lokale Anpassung und hochschulischer Raumgewinn: Europa als Umwelt der beruflichen Ausbildung in Deutschland.* In: *Jahrbuch Arbeit, Bildung, Kultur*, published by Forschungsinstitut für Arbeiterbildung, Vol. 18/2000, pp. 43-68