



EQF from theory to practice  
**Methodical Reflections on Referencing**

Expert workshop, 18 February 2011, Sliema (MT)

A workshop documentation

compiled by  
Institut Technik und Bildung (University of Bremen) and  
DEKRA Akademie GmbH, Germany



**NQF-SQF**

National Qualifications Frameworks  
Sectoral Qualifications Frameworks

[www.project-nqf-sqf.eu](http://www.project-nqf-sqf.eu)

Bremen/Stuttgart, September 2011



## The project NQF-SQF

### “Common grounds for referencing NQFs and SQFs to the EQF”

Although *learning outcomes* should be basically describable for all qualifications by using the EQF descriptors *knowledge*, *skills*, and *competence* in the same way regardless of their origin in terms of country or organisation responsible for maintaining and monitoring structures in which they are embedded, a mere description in EQF terms cannot dispel any doubts about the real value of this qualification: the EQF *as such* does not deliver enough criteria for assessment and comparison of qualifications.

It is therefore important *how qualification frameworks are referenced* to the EQF. In a situation where qualification frameworks are not available in every European country, every educational area, and occupational sector at the same level of development, it does not surprise that a common understanding of appropriate referencing these frameworks to the EQF does not exist. But as the EQF is not intended to serve as a regulation of European education, institutional aspects do not play a primary role, and organisations responsible for frameworks of any kind are encouraged to reference them to the EQF. Due to not existing general referencing criteria, this should cause problems especially where qualification systems/frameworks compete or at least exist separately from each other: This is the case for national qualifications frameworks ministered by public bodies and sectoral qualification frameworks supervised by (private) sectoral organisations.

The overall aim of the project NQF-SQF is to *create common grounds for referencing national qualifications frameworks and sectoral qualifications/competence frameworks to the EQF*, thereby providing for comparability of qualifications on the basis of learning outcomes defined in terms of *abilities* required by *work processes*. This shall be enabled by the use of an *instrument to be developed within the project: the employability grid*. This grid shall be applicable for the assessment of qualifications as well as for the evaluation of frameworks qualifications refer to. It shall test how far descriptions of frameworks and qualifications make visible what the learning outcomes of qualification processes are in terms of work process requirements, thus supporting employment at the European labour market.

The instrument shall be used in order to draft *typologies of national and sectoral frameworks*, leading to recommendations for enhancing referenceability of frameworks, encompassing also a work process relationship criterion which can be added to the catalogue of referencing criteria already defined by the EQF Advisory Group. On the basis of this work, a *model of future collaboration between private/public stakeholders* at European level shall be drafted. The structure of collaboration shall be arranged around a *nucleus of already collaborating stakeholders*: the EQF Advisory Group and EQF national contact points.

Please visit [www.project-nqf-sqf.eu](http://www.project-nqf-sqf.eu) for further information.



# NQF-SQF

National Qualifications Frameworks  
Sectoral Qualifications Frameworks

#### NQF-SQF project partners

Institut Technik und Bildung, DE  
DEKRA Akademie GmbH, DE  
3s research laboratory, AT  
AFT-IFTIM, FR  
Fundacion Laboral del Metal, ES  
ANC (former ACPART), RO  
LUX Personal und Kommunikation, DE  
CREDIJ, FR  
Politecnico die Torino, IT  
General Secretariat for Lifelong Learning, HE  
Malta Qualifications Council, MT  
Kenniscentrum Handel, NL  
SwissMedia, CH  
IGMetall, DE  
European Metalworkers Federation, EU

EQF from theory to practice  
**Methodical Reflections on Referencing**

Expert workshop, 18 February 2011, Sliema (MT)

A workshop documentation

compiled by  
Institut Technik und Bildung (University of Bremen) and  
DEKRA Akademie GmbH (DE)

[www.project-nqf-sqf.eu](http://www.project-nqf-sqf.eu)

Bremen/ Stuttgart, September 2011



## Workshop introduction

by Gerald Thiel & Claudia Ball (DEKRA Akademie GmbH, DE)

The Malta Expert Workshop intended to enable a discussion about one of the basic requirements to be considered with the project *Common Grounds for Referencing NQFs and SQFs to the EQF: The right basis of referencing*. Three types of contributions have been envisaged about:

- national and sectoral frameworks as such,
- methodological approaches to interpret frameworks and
- creating conditions for a continuous debate on enhancing referencing approaches - ideas for further procedure

In order to ensure an orientation of all these contributions to the main topic *the right basis of referencing*, the following *key questions* have been referred to in the different types of contributions:

- What was the starting point for setting up the framework? Which kind of reference to the work process exists? How is the structure of work processes mirrored in the framework? Over occupational profiles or other ensembles of required abilities? Which are the relationships between descriptors? How far does the structure of the frameworks favour, how far does it prevent "fragmentation of learning outcomes"? What is the current link to the EQF?
- Which problems deliver the starting point for the methodological approaches? How are work processes considered? How are learning outcomes to be achieved derived from work processes and how far does this solve the problems encountered? How far do the approaches imply a critical position to the EQF?
- These ideas were supposed to focus on sustainable structures for further promising debates, answering the following questions: How can relevant stakeholders be gained to participate continuously in such a debate? Which technical/financial/organisational requirements have to be fulfilled for this purpose?

The contributions in this brochure provide a small inside view into the presentations and discussions that took place during the workshop. Anne Murphy from the Dublin Institute of Technology (IE) shares the Irish experiences when establishing sectoral qualifications frameworks and Terry Hook from e-skills (UK) presents the experiences made when referencing the e-competence frameworks to the European Qualifications Framework. Project results and research are presented by different contributors. The project EQF-Ref that reflects the referencing criteria is introduced by Sigrid Nindl from 3s research laboratory

(AT), Vidmantas Tutly from the Centre for Vocational Education and Research at the Vytautas Magnus University in Kaunas (LT) presents the SECCOMPAT project and its findings with regard to referencing NQFs, SQFs and the EQF. The just started approach of the Matching Frames project that investigates sector frameworks in the metal and electrical sector is introduced by Georg Spöttl from the Institut Technik und Bildung at Bremen University (DE) and Gerald Thiel from DEKRA Akademie GmbH (DE) introduces the Employability Grid approach that has been developed within the NQF-SQF project and is currently tested in the projects framework.

## Referencing experiences

This chapter introduces experiences made when developing and referencing sectoral frameworks to the EQF and to national qualifications frameworks. Anne Murphy (IE) and Terry Hook (UK) describe their experiences.

### Experiences of Sector Framework Development in Ireland

by Anne Murphy, Dublin Institute of Technology, Ireland

In this short paper I consider a number of aspects of sectoral framework development in Ireland and their relationship with the NQF: which sectors started first; how they did it; how the NQF contributed; attempts at generic sector level descriptors; what worked well and not so well; how things are developing now.

From a narrative analysis it is fair to say that particular trade and professional sectors began to develop their own versions of frameworks long before the arrival of national frameworks of qualifications.

#### *Apprentice framework*

The apprentice training area, for instance, had a *time-served* approach where the apprentice spent a number of years with a master learning the trade and developing skills. In the 1990s the Irish apprentice training system moved to a *standard-based system* where national standards for seven phases of training were agreed, four phases with employers on-the-job (phases 1, 3, 5 and 7) and three in formal training centres or colleges (phases 2, 4 and 6). The apprentice achieved the National Craft Certificate only after the 7 phases were successfully completed. This is essentially a

"...it was decided that all craft qualifications would be placed at level 6 [...] regardless of the level of learning [...]. This was felt to be an injustice to holders of National Craft Certificates as it somehow diminished their value on the accreditation market..."

When the NQF was developed it was necessary to map the apprentice framework on to the national framework. In that process it was decided that all craft qualifications would be placed at

level 6 – pre-bachelor vocational education – regardless of the level of learning of some of the more intensive trade training systems such as electronic engineering. This was felt to be an injustice to holders of National Craft Certificates as it somehow diminished their value on the accreditation market and made it very difficult for them to progress to more advanced awards, and to be recognised internationally. During the analysis of the impact of the NQF this point was strongly made by the evaluation panel, but the Qualifications Authority were not willing to dismantle the structure of the NQF which many still regard as too-oriented to the world of the university and not in tune with the realworld of training and work-related learning.

However, many higher education providers have developed progression routes for holders of craft certificates by using bridging studies, minor awards, progression awards and conversion courses. The difficulty here is that each craft award has to be measured against the progression award as there are very different curriculum emphases on each bachelor award. So different apprentices progressing from two or more trade areas will inevitably have different prior learning that must be accommodated in the progression award.

#### *Engineering professional frameworks*

Engineering qualifications in Ireland are an interesting case, particularly those qualifications regulated by Engineer Ireland. In the 1980s Engineers Ireland had already developed frameworks for associate membership, chartered membership and professional membership, with

clear progression routes and with arrangements for APEL

*“It could be argued that the NQF needed Engineers Ireland more than Engineers Ireland needed the NQF!”*

(accreditation of prior experiential learning). This sector is a very powerful one and had a considerable influence on how the NQF was designed. It could be argued that the NQF needed Engineers Ireland more than Engineers Ireland needed the NQF! It is still the case that engineering programmes in higher education are more ‘valuable’ on the labour market if they have accreditation from Engineer Ireland despite the framework level at bachelor or master.

#### *The professional regulation of nursing*

The Irish Nursing Board as a sectoral and regulatory body has had an enormous influence on how complex professional practice is organised in Ireland and is a model of excellent and mindful practice. Again, this sector did not follow the NQF blindly: it led the framework and diverges from it where necessary, particularly in describing the inter-relationships between levels of learning and the outcomes to be achieved at each level. Many other professional bodies in the health service

sector have taken a lead from the Nursing Board in their own professional progression systems.

#### *How the NQF contributed and attempts at sectoral descriptors*

There is no doubt that the NQF brought very useful technologies with it such as levels of awards, descriptions of what is to be achieved at each level, the use of learning outcomes, the use of credits, the integration of recognition of prior learning, alignment of awards in relation to each other, module mobility, etc..

In the early years of the NQF there was a view among some that it would be easy to map ‘sectoral’ learning needs on to the NQF level descriptors. The Higher Education Awards Council (HETAC) tried this with the sectors of mechanical engineering, business studies, art and design, computer science and social care. But this remained only as a paper exercise and was not generally heeded by the Dublin Institute of Technology, or by the universities.

The occupational sectors themselves were happy to use the NQF when it added a quality assurance dimension, a better progression structure and a professional ‘profile’ to what they already did. It also offered a method of benchmarking among sectors nationally and internationally and against other frameworks. What was not developed in the Irish NQF was a framework for work-related learning, as is the case in the NQF for Wales. For higher education practitioners who engage with company training and continuing professional development this would have been a great advantage. Likewise it would have been great to have had a credit system which was not always tied into education and training awards. As it is in the Irish NQF design, one cannot gain credits for learning unless they map into an existing award and are recognised by the awarding body. The system in Scotland allows for work-related credits to be accumulated outside of the formal education and training system. For sectors this is very important.

#### *What worked well and not so well*

A good thing about the Irish NQF is that it took existing custom and practice into account and allowed sectors and awarding bodies to ‘fit’ their systems into the framework. Doing this incrementally was a very good strategy.

The nationally agreed approach for recognition of prior learning was a very good development as it established a good set of principles and operational guidelines while still allowing different providers, sectors and professional bodies to make their own local arrangements.

What did not work so well was the clustering of too-many existing awards at level 6 regardless of the justice of doing so. The lack of work-related credits is still a problem,

as is the divide between VET and HE – unlike the NQF for Wales.

#### *What remains to be done?*

To date the Irish NQF has been aligned to the Bologna EHEA framework, even if there is still some disquiet about the bachelor award having downgraded the old Higher National Diploma which was a favourite of sectors and of the labour market. Replacing the diploma with the title 'ordinary degree' has not helped at all, and is adding to confusion about what actually constitutes a 'bachelor' degree.

A growing feature, and perhaps a 'problem, is the arrival of 'stateless' qualifications for sectors which are designed to be mobile but which have no particular locus of quality assurance. As workers become more mobile and qualifications more portable this will be an issue soon.

If we could give advice to sectors about frameworks what would we say? Would we advise them to invent their own, or to related them only to NQFs? Would we advise them to go for a sectoral framework and ignore the NQF, the EQF and the EHEA? Would we ask sectors to use the principle of 'subsidiarity' to their own advantage?

The speed with which frameworks are being developed and integrated across the globe is quite surprising considering their recency as a phenomenon. Do we say 'make haste slowly' or 'carry on regardless'?

#### Experiences from the European e-Competence Framework (e-CF)

by Terry Hook, e-skills, UK

The development of the e-CF was challenging but rewarding.

It was developed with a specific audience in mind; *ICT practitioners and ICT managers Human Resources, Higher Education curriculum developers, Vocational Training and Certification Providers, Policy makers and Market Researchers.*

It was also developed with a specific purpose in mind; to enable the development, management and planning of ICT practitioner and manager competences that are required for the long term perspective across Europe.

A definition of competence was adopted as follows: *Competence is a demonstrated ability to apply knowledge, skills and attitudes for achieving observable results.*

This definition aligns closely with that of competence within the European Qualification Framework (EQF) and therefore serves as a basis for benchmarking workplace competence alongside formal qualifications. The e-CF is an enabler for interoperability of ICT career development

across the European Union, e.g. between frameworks, qualifications, certifications and competence requirements.

The structure of the e-CF provides a common European reference for ICT Professionals; it contains 36 ICT practitioner and manager competences in 5 e-Competence areas. The competences are articulated at 5 proficiency levels.

Importantly construction of the e-CF was based upon a sound methodology combined with expert opinion from knowledgeable experts and stakeholders.

#### *Executive Overview*

The objective of the e-CF was to provide a common, shared, European tool to support organisations and training institutions in recruitment, assessment, competence needs analysis, learning programmes, career path design and development. It also aimed to support policy makers to define policies related to e-Skills development in education and in the work place. As European stakeholders were the target audience for the e-CF, the active involvement of experts and stakeholders from this community provided an essential ingredient in making the e-CF fit for purpose.

At the outset of the e-CF development four basic design elements of the forthcoming framework were considered.

The e-CF expert group together with the European stakeholders made clear decisions on; 1) overall framework structure

*"The objective of the e-CF was to provide a common, shared, European tool to support organisations and training institutions in recruitment, assessment, competence needs analysis, learning programmes, career path design and development."*

in four dimensions, 2) competence, knowledge, skill and attitude definitions, 3) ICT business processes and 4) the possible relationship between the e-CF and the EQF (the European Qualifications Framework), in particular between e-CF and EQF levels.

The decisions taken were as follows:

- *e-CF structure in four dimensions.* For the structure of the European e-Competence Framework, the experts analysed and evaluated other existing frameworks and agreed finally on a four dimensional approach. This structure is based on competence areas (dimension 1) and competences (dimension 2), as opposed to job profiles. Competence-based approaches are more flexible and foster local personalisation. Dimension 3 provides level assignments that are appropriate to each competence. The number of levels assigned to each competence varies and is dependent upon the nature and range of related activities. Dimension 4 provides short sample specifications of knowledge and skills but is not exhaustive.

- *Competence, skills, knowledge and attitude definitions.* In accordance with the overall approach regarding ICT stakeholder competence requirements, the definitions focussed on organisational competences instead of individual competences. However, individual competences can be identified within dimension 3 of the e-CF where competence proficiency levels are defined and are strongly related to complexity, autonomy and personal attitudes. Therefore it can be said that that Dimension 3 provides a bridge between organisational and individual competences. These definitions are in line with the EQF general definition of knowledge, skills and competence. However, it should be noted that EQF development is still in progress and continues progress towards the provision of improved competence descriptions.
- *Business Processes.* The combined team of e-CF experts and European stakeholders agreed to use, as a reference, a very general ICT process schema, compliant with most models provided by IT certification institutions (e.g. Exin, Cobit). The model includes process phases: Plan, Build, Run, Enable and Manage; where Enable and Manage are crosscutting phases. The purpose was to identify and define competences. It was used as a heuristic device and therefore should not be considered as a rigid definition of company business processes.
- *Levels.* The e-CF experts and European stakeholder teams extrapolated from the EQF the following level indicators; "context complexity", "autonomy" and "behaviour" to help position competences. These characteristics reflect organisational perspectives on competence. The EQF uses further criteria such as "responsibility", but stakeholders elected to avoid this element as responsibility can be confused with the organisational accountability and erroneously link competence levels to organisation hierarchical levels. Consequently, the e-CF defines levels from the companies' viewpoint. However it also provides a consistent relationship to the EQF and its associated learning levels.

The decisions taken in constructing the e-CF was backed by theoretical and literature references. Best industry practice and current competence state of the art theory was examined and adopted. The overall methodology was based on a step-by-step, bottom up approach focused upon stakeholders' experience and practical exploitation requirements.

*"The EQF uses further criteria such as "responsibility", but stakeholders elected to avoid this element as responsibility can be confused with the organisational accountability and erroneously link competence levels to organisation hierarchical levels."*

Methodological experts provided coherence with the definitions and decisions taken at the outset of the project.

The methodological challenges were:

- Making stakeholders' views explicit
- Achieving agreement on possible choices and decisions
- Formalising decisions
- Structuring decisions and choices within the European e-Competence Framework.

The process was based on consensus building, raising awareness among stakeholders and finding common views to establish a common language; a European currency for e-Competences. Literature and theoretical knowledge helped the team, when consensus was difficult; otherwise, the approach taken was to make the e-CF consistent and complementary to the original project definitions and also to the EQF.

## Referencing Reflections from Project Work

---

This chapter provides short introductions into project work with regard to referencing and the projects' different approaches and results.

### EQF Referencing Process and Report – EQF-Ref (2009-2011)

by Sigrid Nindl, 3s research laboratory, Austria

In order to use the EQF as a translation device, countries are asked to reference the levels of their national qualifications systems to the EQF. According to common agreement, the national EQF referencing processes must use transparent procedures and methods. The EQF Advisory Group has decided on criteria and procedures that should be considered for the referencing of national qualifications levels to the EQF. To support the EQF implementation and development, several activities are carried out. For example, the European Commission is financing EQF pilot projects via the Lifelong Learning Programme. One of these projects is the EQF-Ref project: ([www.EQF-Ref.eu](http://www.EQF-Ref.eu)).

The EQF-Ref project seeks to facilitate communication between the partner countries (Austria, Bulgaria, Czech Republic, Finland, Germany and the Netherlands), to enhance learning from each other and to develop 'mutual trust' in referencing qualifications levels to the EQF. In particular, the EQF Ref project seeks to develop a proposal for the structure and content of the EQF referencing reports, to reflect on important issues related to the EQF referencing process and to develop some recommendations.

The EQF-Ref project addresses a target group that includes responsible bodies and stakeholders involved in these processes (for example, members of National Contact Points) in the partner countries and in other European countries as well as policymakers at European

level (in particular members of the EQF Advisory Group and of the European Commission).

#### *Structure of the EQF referencing reports proposed by the EQF-Ref partnership*

The EQF-Ref partnership proposes the following structure as a kind of orientation for the development of the referencing reports. It lists the parts considered as most relevant and should therefore be clearly visible in the reports (even though it is not expected or intended that exactly the same structure or the same naming of sections should be used in all reports):

- *Executive summary:* Short overview of the results of the referencing process and, in particular, a summary of the information related to the 10 criteria and procedures.
- *Description of the national qualifications system and the NQF:* Short presentation of the national qualifications system (including pathways, access to programmes, etc.) and the NQF (design features, aims and functions, stage of the development process) – the description should focus on information relevant for understanding the answers to the 10 criteria and procedures.
- *Background information:* Short description of the process for preparing the report (referencing process)
- The 10 criteria and procedures for referencing national qualifications levels to the EQF: Main part of the report: addressing each criterion separately
- *Further information:* Short presentation of, for example, plans, intentions and next steps regarding the NQF development and implementation, challenges expected or already met in this process, the expected impact of the EQF implementation (What will change on a national level?).
- *Annexes:* For example, list of institutions or experts involved in the preparation of the report, examples of qualifications (that will also be presented at the EQF portal), statements from national stakeholders and/or international experts, relevant legal texts.

#### *Criteria and procedures for referencing national qualifications levels to the EQF*

Discussions of the referencing criteria in the EQF-Ref partnership considered the crucial ones as Criterion 2 (linking national qualifications levels to the EQF levels) and on Criterion 4 (transparent criteria and procedures for classifying qualifications in an NQF). It was therefore decided to particularly focus on these two criteria. The following issues need to be considered when answering to them:

- *Transparency:* Countries are asked to explain how they came to their decisions; the procedures and methodology applied need to be described. However, does everybody share the same concept of transparency? What actually can be considered as 'sufficient' transparency? How detailed does the information needs to be? How much and what kind of additional information is needed?
- *Evidence:* How can transparency and credibility be enhanced by providing evidence for justifying the decisions presented in the referencing reports? One possibility could be to include selected qualifications to illustrate the classification procedure or for justifying the linking of an NQF level to a certain EQF level. Such examples need to be introduced by explaining their purpose. For example, indicate whether it is a typical qualification or an exceptional one. In case of exceptions, further explanations are needed: for example, why is this qualification allocated to a higher/lower level than the others of the same type?
- *Trust:* In order to create trust, challenges and possible conflicts in the referencing process should be addressed and explanations should be provided on how the country managed to resolve such problems. Sharing this kind of information instead of hiding it can enhance understanding of the decisions and approaches taken in the national context.

*"However, does everybody share the same concept of transparency? What actually can be considered as 'sufficient' transparency?"*

The EQF-Ref project has been funded with support from the European Commission and the Austrian Federal Ministry for Education, the Arts and Culture (bm:ukk).

#### **Comparison: EQF – NQF – SQF**

by Vidmantas Tutlys, Centre for Vocational Education and Research, Vytautas Magnus University, Kaunas, Lithuania

The dynamic processes of the implementation of European Qualifications Framework for Lifelong Learning, European Credit Transfer system in Higher Education (ECTS) and European Credit System for Vocational Education and Training (ECVET) demand more research and analysis on how the development of varieties of competence and qualifications on the sector and national levels influence the inter-country comparability of qualifications.

Key Activity 1 EQF testing project 'EQF and comparability of sectoral qualifications between countries (SECCOMPAT) aimed to test the compatibility of qualifications in selected sectors. Qualifications in the construction and hospitality sectors were compared between Lithuania, Austria, Czech Republic, France and Ireland to establish the degree of compatibility. Three

approaches were tested for comparing sector qualifications: direct comparison of sectoral qualifications without referencing to NQFs or the EQF; referencing sectoral qualifications from one country to the NQF levels of another country; referencing sectoral qualifications to the levels of the EQF without referencing to respective NQFs; comparing sectoral qualifications between countries with the intermediation of NQFs and the EQF.

This project identified three methodological and practical challenges of the variety of competences and qualifications:

- conceptual differences in competence and qualifications between sectors and countries,
- differences in structures and contents of sectoral qualifications between countries,
- differences of the principles and criteria of referencing of sectoral qualifications to the different qualifications frameworks - sectoral, NQFs, EQF.

The research of the SECCOMPAT project indicated, that both NQFs and EQF can be used as measures for the comparison of qualifications. However, in using qualifications frameworks for the inter-country comparison of qualifications it is necessary to estimate differences on the conceptual level (how they are defined and understood, the concepts of qualification, competence, learning outcome, etc.), differences of the structures of sectors in terms of qualifications and the differences of the structures of qualifications in the sectors. The usage of the NQFs in the inter-country comparison of sectors' qualifications ensures the consideration of the factors, related to the provision of qualifications in the VET and higher education systems of the countries, such as existing institutional VET and HE (Higher Education) systems, types and levels of education and training programmes, etc.

*"However, in using qualifications frameworks for the inter-country comparison of qualifications it is necessary to estimate differences on the conceptual level [...] the structures of sectors in terms of qualifications and the differences of the structures of qualifications in the sectors."*

Differences of socioeconomic models of skills development in this research were regarded as important factors influencing specificity and commonality of sectoral qualifications between countries.

Another currently executed project 'EQF implementation: impact of national qualifications systems' processes (EQF-PROQS)' (<http://www.eqf-proqs.eu>) deals with the research of the impact of the processes of designing of qualifications, provision of education and training, assessment of competences and awarding of qualifications to the inter-country comparison of qualifications.

Inter-country referencing and comparability of qualifications are considered as important factors of

international and inter-sectoral mobility of employees, job-seekers and learners. However, the quality of this mobility and implied possibilities of employment, learning and career development depend not so only on the formal comparability of *designed* descriptors of qualifications ensured by the referencing to the National Qualifications Frameworks and European Qualifications Framework for lifelong learning, but even more on the comparability of *acquired* learning outcomes – knowledge, skills, autonomy, responsibility, creativity, etc. The features and contents of these learning outcomes are largely influenced by the processes of the national systems of qualifications: designing of qualifications, provision/acquisition of qualifications via education, training and studies in the systems of VET, higher education and continuing training, assessment of competences and awarding of qualifications by the different institutions and bodies. Therefore *the aim* of this project is to disclose the influence of the processes of designing, provision and awarding of these qualifications and the impact of socioeconomic, institutional and cultural context of these processes to the comparability and compatibility of the qualifications in the construction, hospitality and metalworking sectors of Lithuania, France, Austria, Slovenia, the UK, Germany and the Netherlands.

#### Matching Frames: EQF-NQF-SQF

by Georg Spöttl, Institut Technik und Bildung at the University of Bremen, Germany

Triggered by the Bologna initiative, a great number of frameworks for educational systems are currently emerging in Europe. The European Qualifications Framework (EQF) has at least succeeded in obtaining a certain acceptance as a reference framework. The subsequently emerging frameworks are oriented to the EQF on the one hand. On the other hand they often have their own structures, their own definitions of descriptors, their own number of levels and they are interpreted in their own ways.

#### Development trends

Frameworks that had been created prior to the national frameworks continue to exist. Furthermore new frameworks are being developed based on the educational and qualification structures. At the same time sector frameworks are emerging, dominated by a very diverging perception of a sector. In one case (e.g. Germany) sector frameworks are developed with reference to economic sectors. In other cases (e.g. Ireland) a number of sector frameworks exist with reference to qualification fields such as e.g. "apprentice framework", "engineering professional framework" etc. More or less all European countries are making efforts to create frameworks that are rather oriented to status

groups. Apart from this first approaches to work-related frameworks are being developed.

One of the most challenging questions is how a future international understanding can take place in the light of such a variety of differently shaped frameworks apart from the EQF.

#### *Steps forward*

One of the greatest challenges for the implementation of the national and the European Qualifications Framework (EQF) is the assignment of qualificational profiles to the individual levels of the frameworks according to comparable principles. This should be envisaged in a way to safeguard comparability and transparency of differently structured qualificational profiles. Therefore the main target of the project "Matching Frames" is to develop practical methods and aids/ tools which can be easily applied by the respective institutions. The development results will then be tested, made applicable and used in the partner countries (in companies, in training institutes, by the social partners). The developed tools and methods will be made available in a way that they can be easily handled.

They should be suitable to assign qualifications and training regulations/ curricula defined by the member states to the respective national qualifications framework (NQR) and to assign them to the individual levels. The methods and aids should help to reach comparability in order to better assess the quality of European qualificational profiles. More or less a "networking" of the individual qualifications frameworks should safeguard mutual transparent relationships.

At the same time the project aims to shed light on the advantages of result-oriented, sector-related qualifications frameworks which may help to meet the assignment tasks.

First and foremost transparent instruments for operationalization must be developed and applied which can also be used for concrete cases within the sectors following the idea of "Matching Frames" and which can be transferred to other sectors.

The project work will focus on the metal and electrical sector as core sectors. The metal sector includes the automotive sector. Work process orientation will be the overall basis for all project work as it is structurally identical throughout Europe.

The predominant aim of the project is the development and testing of methods and aids/ tools adequate to identify qualifications/ profiles and training regulations in three selected sectors (metal and automotive technology, electrical technology) and to assign them to the respective levels of national sector frameworks and to the levels of the EQF. The methods and aids/ tools must not only be of high practical applicability. They must also safeguard

transparency. Thus clear and logical connections between national qualifications frameworks and the EQR should be attained in order to safeguard the comparability of qualifications. Prior to solving this problem it should be investigated whether the existing qualifications/ profiles and training regulations are formulated according to a learning results orientation. If this is not the case, proposals will be made for a learning results oriented re-shaping on the basis of work processes.

The following demand of European politics will be supported by the project results: In order to make the project results transferrable – e.g. to other sectors -, guidelines for stakeholders and experts will be written which can be used within the framework of implementation.

According to the Lisbon Declaration of the European Council 2000 and the Maastricht Declaration (December 2004), the development of an EQF for the support of transparency and mobility in and within the national educational and

*"One of the most challenging questions is how a future international understanding can take place in the light of such a variety of differently shaped frameworks apart from the EQF."*

employment systems was decided. The declaration also aims at improving the quality of VET and to support its equality with school and academic education. At the same time a close interlinking between the development of an EQF and a European Credit Point System (ECVET) for VET has been aspired. After the approval of EQR 2008 by the European Parliament and the European Council of Ministers, the national governments were asked to set up national qualifications frameworks (NQF or in Germany DQR) along with an ECVET system. This is seen as a prerequisite for the proof of qualifications, knowledge and skills acquired by the employees and the legal acknowledgment of these competences.

A sector-specific transfer is in the centre of interest. On the one hand an exemplary sectoral framework of the automotive sector within the metal and electrical sector of the partner countries should be described. On the other hand the already designed instruments for the assignment of qualifications to the adequate levels of national and of the European sector framework should be optimized in order to safeguard their implementation and their use by the partners in the partner countries. In addition the project aims at a comparison of the predominant result-oriented shaping of the training regulations and curricula. This will be followed by an optimization and implementation in the partner countries. Above all the Advisory Boards of the partner countries are asked to ensure the transfer of the products via a close networking of their stakeholders in the different working environments.

The focus of the "Matching Frames" is the development and the implementation of instruments and tools for the assignment of qualificational profiles to the levels of the different qualifications frameworks, to national frameworks, to the European Framework, to sector frameworks. The tools and instruments shall be designed in a way that they can easily be used by field actors. At the same time quality standards – which are still to be defined – are applied. Compared to the current practice this has a decisive advantage: The assignment will take place according to carefully selected quality criteria rather than emotional decisions. This means that the assignment should take place by adhering to transparent quality criteria which can hold out against evaluation procedures. The tools and instruments to be developed and implemented must be aimed at this objective. In reality there will be less heuristic procedures. Moreover it will be clarified how learning result oriented descriptions of qualifications could be used in order to create valid and qualitative assignment procedures. This approach across all country borders could help to practice assignment processes based on quality criteria with transparent and comparable results.

The Matching-Frame project is funded with support from the European Commission.

### The Employability Grid

by Gerald Thiel, DEKRA Akademie GmbH, Germany

Within the project *Common Grounds for Referencing NQFs and SQFs to the EQF*, the *employability grid* is the main methodological instrument to be used for the assessment of national or sectoral frameworks and qualifications with regard to their *references to the European Qualification Framework*. The employability grid

*"The employability grid is based on a holistic model of abilities required for working as a professional in a specific job function that is used to make the work process orientation of the EQF explicit."*

is based on a *holistic model of abilities required for working as a professional in a specific job function* that is used to make the *work process orientation* of the EQF explicit. At the same time it seeks to reduce the ambiguity of the EQF categories and to deliver *content-based criteria* (referring to the work process) for referencing national and sectoral qualification frameworks to the EQF.

The starting point for the development of this model is the reflection that work processes do not take place separated from each other, but can be assembled under the umbrella of a common goal: the *work objective*. This objective can be understood as the intention to *create a specific product or to deliver a specific service*. Vocational education and training should refer to work objectives in a way that learning outcomes *enable* individuals to achieve

these objectives by applying their knowledge, skills and competences gained within learning processes. But what is meant by *work objective: not the specific work objectives of an organisation* that competes with others and therefore is interested to gain advantages by determining work objectives differing from those of competitors, but the goals that have turned out to be the *core work objectives* of a sectoral subarea or domain at a certain stage of competition: the *state of the art of products and services* which is the *result* of competition, but at the same time the *starting point* for developments to overcome this state.

If attempts to achieve work objectives shall be successful, some requirements have to be considered that can be formulated at a generic level:

1. The specific character of the work subject: Dependent upon the work subject, technical requirements for work can be obviously very different.
2. The *scope of the work subject* in relationship to other ones: It is important to ask how far the overall work objectives of organisations really determine work in subunits of these organisations, or if subunits work rather independently from each other and refer their work to work objectives only defined for themselves.
3. The needs of those *who use products or services*: This means *customer orientation*.
4. The needs of the organisation which arise from her specific character as an enterprise or a public institution: This can concern economic reflections, but also legally defined tasks of organisations. These needs are not always in line with customer orientation.
5. The needs of individuals *who work for the organisations intending to deliver a product or service*: Often enough, they are not identical with the needs of those who employ them.
6. Needs which arise from the environment within which the work objective has to be achieved (as security regulations, specific laws, etc.)
7. The way how work within an organisation is organised: This issue is *cross-cutting with regard to the above mentioned issues* since it can be *considered a tool to relate work processes best to the work objective* which implies that the specific character of the above mentioned issues 1 – 6 has to be taken in account for this purpose. *The organisation of work is crucial for the ways how individuals contribute to achieve the overall work objectives*, and it relates work processes to each other via *hierarchical relationships between individuals*.

On this basis, learning outcomes should be understood as *abilities to deliver a contribution to achieve the work objective according to the individual's position in the*

Table 1: EQF level elaboration employability grid

| Level | Competence in EQF terms   | Action with regard to action of others | Action with regard to context                            | Context   |
|-------|---|--|--|---|
| 1     | work or study under direct supervision in a structured context  | Steered by action of others            | Determined by context                                    | Not changing<br><i>Structured</i>                       |
| 2     | work or study under supervision with some autonomy  | Steered by action of others            | Determined by context                                    | Not changing<br><i>Not structured</i>                   |
| 3     | take responsibility for completion of tasks in work or study<br>adapt own behaviour to circumstances in solving problems  | neutral                                | Determined by context                                    | Not changing<br><i>Including changing circumstances</i> |
| 4     | exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change<br>supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities | Steering action of others              | Determined by context                                    | Not changing/<br>changing                               |
| 5     | exercise management and supervision in contexts of work or study activities where there is unpredictable change<br>review and develop performance of self and others  | Steering action of others              | Determined by context                                    | Changing  |
| 6     | manage complex technical or professional activities or projects, taking responsibility for decisionmaking in unpredictable work or study contexts<br>take responsibility for managing professional development of individuals and groups                            | Steering action of others              | Determined by context                                    | Changing  |
| 7     | manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches<br>take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams             | Steering action of others              | Determining context<br><i>Transforming</i>               | Changing  |
| 8     | demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research                                   | Steering action of others              | Determining context<br><i>Transforming and replacing</i> | Changing  |

*organisational structure*. This does not mean that issues 1 – 6 are ignored; they have to be considered *conditions which have to be dealt with properly if the work objective shall be achieved*. Work processes should thus be described in a multidimensional way, and the description of abilities to carry out these work processes should mirror this. The *employability grid* is based on the assumption that the EQF basically implies the work process orientation of abilities. Following this assumption it is analysed how far the EQF categories are usable for *reflecting the holistic concept of the work objective*.

Within the analysis it turned out that the EQF category *competence* is appropriate for this purpose. In opposition to first impressions, it is not a category that has to be considered separately from *knowledge* and *skills*, for it steers them:

“‘competence’ means the proven *ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations* and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of *responsibility and autonomy*”.<sup>1</sup>

The complementary terms *responsibility* and *autonomy* are obviously applicable for a differentiation of *competence* according to *levels*, thereby reflecting the position of the individual in the hierarchy of an

organisation. A closer look at the column *competence*<sup>2</sup>, however, shows on the one hand that there is a lot of “cloudy” additional information that surrounds the level descriptions in terms of *responsibility* and *autonomy*, on the other hand that there is not only a differentiation according to *responsibility* and *autonomy*, but also to the *context* in which work takes place, and there is a strong interrelationship between the descriptions of this context and the description of work that is defined by *actions* referring to *work* or *study*.

In order to reveal what the actual differences between levels are that are not easily visible due to the mentioned reasons, the key terms *actions* (related to *work* and *study*) and *context*, identifiable as implicitly or explicitly used at every level, shall be described by oppositions that allow for better distinction:

- With regard to *action* the opposition *subject/object* is suggested; in terms of the relationships to actions of other individuals this opposition can be formulated as *steering/steered*; with regard to the *context* as *determining/determined*. Some specifications of these oppositions are nevertheless added; they seem to be relevant for differentiation of levels.

“The complementary terms *responsibility* and *autonomy* are obviously applicable for a differentiation of *competence* according to *levels*, thereby reflecting the position of the individual in the hierarchy of an organisation.”

<sup>1</sup> See Recommendation of the European Parliament and of the Council from 23 April 2008 on the establishment of the European Qualification Framework for lifelong learning, Annex I., my emphasis.

<sup>2</sup> See Recommendation, l.c.

- With regard to *context* the category *change* is suggested which allows for the basic opposition *changing/not changing*. Specifications are added if necessary.

On this basis, the distinction displayed in table 1 is suggested in order to provide less ambiguous understanding of the EQF category *competence*.

## Workshop summary

---

by Georg Spöttl, Institut Technik und Bildung at the University of Bremen, Germany

The present articles are an interesting demonstration of the fact that the discussions on qualifications frameworks have meanwhile not only become manifold but also confusing. One of the reasons for this development is that qualifications frameworks that emerge as the result of different theoretical reflections have a different structure and are based on different requirements. The following summary relates to the European Qualifications Framework, to sector frameworks and to skilled qualifications frameworks. The examples do not state comparable theoretical approaches or a comparable orientation to practical fields. Different aims are being pursued instead. It is therefore apparent that there are a lot of activities and projects carried out which try to relate the different qualifications frameworks to each other. This reflects the desire to attain a common orientation. This has already been postulated at the very beginning of the discussion on qualifications frameworks and would make them lucrative: To pave the way for the comparability of qualifications beyond borders. The variety of the existing qualifications frameworks rather hampers this objective and the broad public is not aware of this development.

*"The findings from the summaries recommend to handle this variety generously and to check whether a certain type of qualifications framework could be useful for one's own purposes and user profiles."*

The findings from the summaries recommend to handle this variety generously and to check whether a certain type of

qualifications framework could be useful for one's own purposes and user profiles. This may be at the expense of transparency. It is, however, impossible to suspend all the different approaches.

#### NQF-SQF project partners

Institut Technik und Bildung, DE • DEKRA Akademie GmbH, DE • 3s research laboratory, AT • AFT-IFTIM, FR • Fundacion Laboral del Metal, ES • ANC (former ACPART), RO • LUX Personal und Kommunikation, DE • CREDIJ, FR • Politecnico die Torino, IT • General Secretariat for Lifelong Learning, HE • Malta Qualifications Council, MT • Kenniscentrum Handel, NL • SwissMedia, CH • IGMetall, DE • European Metalworkers Federation, EU

#### Contributors to the Malta expert workshop

James Calleja, MQC, MT • Claudio Demartini, Politecnico di Torino, IT • Terry Hook, UK • Anne Murphy, DIT, IE • Sigrid Nindl, 3s research laboratory, AT • Gerald Thiel, DEKRA Akademie GmbH, DE • Tormod Skjerve, HSH, NO • Georg Spöttl, ITB, DE • Vidmantas Tütlys, Vytautas Magnus University, LT • The NQF-SQF project partners representatives

*We thank all contributors and partners  
for making this enriching workshop possible!*



NQF-SQF:

*Common Grounds for Referencing NQFs and SQFs to the EQF*

E-Mail: [EU-project.akademie@dekra.com](mailto:EU-project.akademie@dekra.com), Internet: [www.project-nqf-sqf.eu](http://www.project-nqf-sqf.eu)

Project implementation period: March 2010 – February 2012

Funded by the Lifelong Learning Programme of the European Commission  
(Project Number: 167196-LLP-1-2009-1-DE-KA1-KAEQF)



Institut Technik und Bildung, Am Fallturm 1, D-28359 Bremen, Germany,

Telefon: 49.421.218-4648 Fax: +49.421.218-9009,

E-Mail: [spoettl@uni-bremen.de](mailto:spoettl@uni-bremen.de), Internet: [www.itb.uni-bremen.de](http://www.itb.uni-bremen.de)



DEKRA Akademie GmbH, Handwerkstrasse 15, 70565 Stuttgart, Germany,

Telefon: 49.711.7861-3687 Fax: +49.711.7861-2655,

E-Mail: [EU-project.akademie@dekra.com](mailto:EU-project.akademie@dekra.com), Internet: [www.dekra-akademie.de](http://www.dekra-akademie.de)



This project has been funded with support from the European Commission. This brochure reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

EQF from theory to practice:  
Methodical Reflections on Referencing;  
a workshop documentation;  
Bremen/Stuttgart, September 2011



**NQF-SQF**

National Qualifications Frameworks  
Sectoral Qualifications Frameworks

