Global Inventory of Regional and National Qualifications Frameworks

Volume II:
National and Regional Cases

United Nations Educational, Scientific and Cultural Organization

UNESCO Institute for Lifelong Learning

ETF Working together Learning for life

CEDEFOP European Centre for the Development of Vocational Training

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Section I

Inventory of National Qualifications Frameworks

AFGHANISTAN

Introduction

Initiated in 2008 by the Government of Afghanistan, the Committee on Education and Skills Policy (CESP) was formed to lead the development of the Afghanistan National Qualifications Authority (ANQA) and the Afghanistan National Qualifications Framework (ANQF), and to establish the country's technical and vocational education and training (TVET) board. The secretariat of CESP has developed the legal and operational framework for the establishment of the ANQA and the ANQF. This will help ensure that policies, structures, facilities and mechanisms are in place to deliver relevant, equitable and cost-effective education and training in Afghanistan.

The CESP secretariat has been responsible for the development of the ANQA, including all legal and operational frameworks, to date. The proposed ANQF is now at the final stage of approval.

CESP has decided to work on the establishment of the TVET board as the first to be developed under the ANQA. Regulations and standard operating procedures have been developed and nationwide awareness and communication campaigns are planned.

The economic challenges faced by Afghanistan include addressing the demands of industry and commerce for a pool of skilled labour, and ensuring that ordinary men and women get gainful employment and decent work. Afghanistan's economy consists mostly of micro-enterprises in the informal sector and subsistence agriculture. Seventy per cent of Afghan women have never attended school and the literacy rate is very low (MoLSAMD, 2007).

There are problems too in technical and vocational education and training. The lack of proper governance and of an overarching body to coordinate and manage TVET are two significant issues. Other challenges include addressing the rigidity of the existing system; putting in place functioning mechanisms for quality assurance; and regulating, registering and accrediting training providers. Removing the hurdles of an outdated curriculum, which is not responsive to the needs of learners and employers, is another challenge. This situation is further complicated by the lack of trained and qualified teachers/instructors, and the absence of mechanisms for the recognition of prior learning. Generally, the quality of provision is poor.

Afghanistan still lacks a long-term vision for the continuing vocational education and training (CVET) of adults. As a result , there is little incentive for adults to continue to learn and to build on the knowledge, skills and competence they acquired through non-formal and informal learning. Currently, the majority of Afghans, especially those who historically, have been excluded from national education, training and skills development, gain their learning and competences through grassroots programmes in non-formal settings and informal apprenticeships.

In general, educational institutions have little capacity to train current participants or prepare new entrants for the labour force.

Main policy objectives

The ANQF is seen by the government as an important policy instrument for:

- coordinating and improving education and training quality;
- making qualifications more responsive to the needs of the country;
- assisting citizens who, historically, have been excluded from the national education, training and skills development system;
- adopting an integrated approach to education, training and skills development by registering all qualifications and competency standards;
- recognizing the different forms of learning and their specific contributions to the entire spectrum of education and training;
- expanding access, progression and mobility within and across all learning sectors;
- developing a comprehensive policy on the recognition of prior learning (RPL);

- ensuring that all recognized qualifications in the ANQF are subject to a quality-checking process;
- helping individuals to plan their education and training career progression;
- offering programmes (courses) that lead to recognized qualifications; and
- helping employers to recruit workers with qualifications relevant to the labour market.

Stakeholders involvement and framework implementation

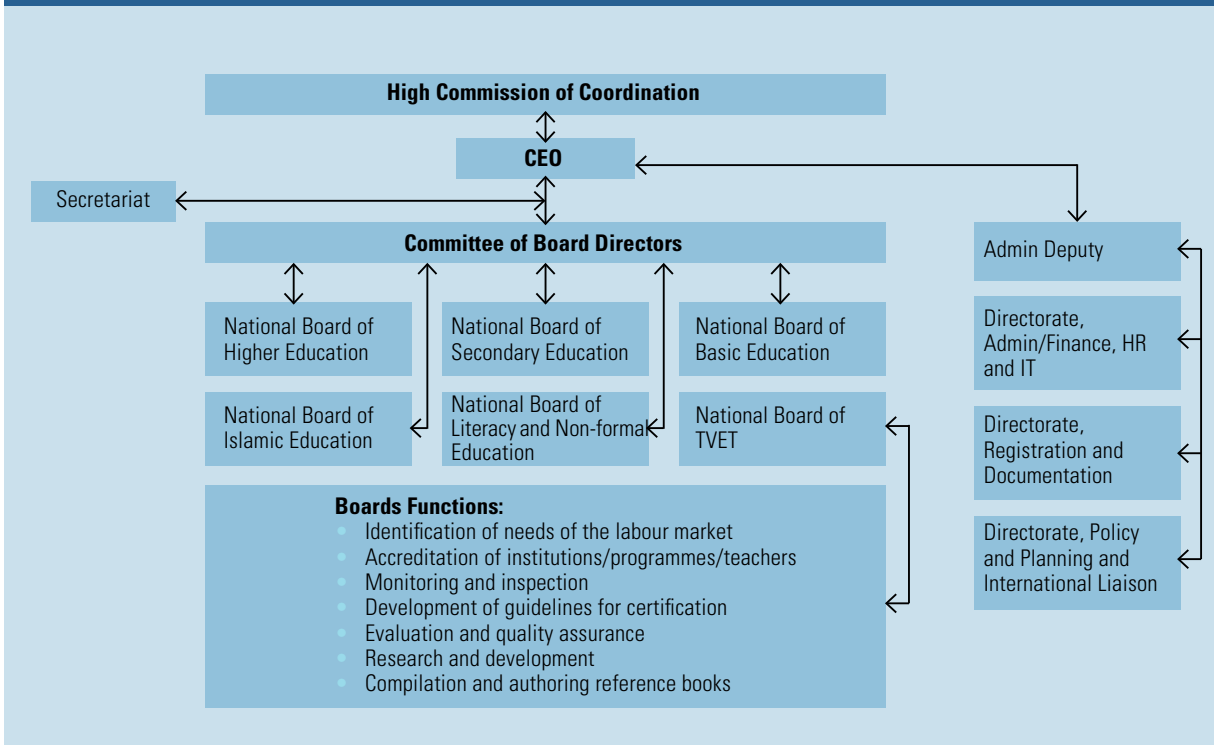
CESP is chaired by the Vice President, and comprises minister- or deputy minister-level representatives from the Ministry of Education, the Ministry of Higher Education, and the Ministry of Labour, Social Affairs and Martyrs and Disabled (MOLSAMD), as well as a representative of the Ministry of Finance.

The CESP secretariat, with the technical assistance team, works in close coordination with the concerned departments and other relevant ministries and agencies involved in TVET to facilitate the creation of the ANQA/ANQF.

CESP is to be gradually replaced by new regulatory bodies approved by an act of parliament, and independent of all ministerial links. This will include the Afghanistan National Qualifications Authority and awarding boards such as the national boards for primary/basic education, and secondary education, the National Vocational Education and Training Board, the Islamic Education National Board, the Literacy and Non-formal Education National Board and the Higher Education National Board. The awarding boards' functions are to identify the needs of the labour market, accredit institutions and programmes, undertake monitoring and inspection, develop guidelines for certification, and undertake research and development. The awarding boards are legal authorities, each reporting to a chief executive officer.

The Afghanistan National Qualification Authority is an apex body which will be responsible for the governance and management of the NQF. In addition, it will coordinate policy across government ministries and ensure the adequate involvement of stakeholders. It will also establish and promote the maintenance of standards, skills and competences leading to the award of qualifications in the areas TVET, general education, Islamic education, basic education and higher education, and promote and facilitate access, progression and mobility through the framework. Figure 1 sets out the proposed ANQA operational chart.

Figure 1 Proposed ANQA operational chart



Source: CESP, Concept and information concerning ANQA/ANQF, n.d.

CESP will put in place the necessary administrative, legal and regulatory foundations to establish the ANQA to schedule.

The units responsible for monitoring and evaluation, and quality control and assurance, within the Ministry of Education, the Ministry of Higher Education and the Ministry of Labour will be under the direct supervision of the deputy minister with oversight of the TVET sector. The first ever Educational Joint Sector Review (EJSR), involving all agencies, partners and funders, took place on 26 and 27 June 2012.

Level descriptors and learning outcomes

The ANQF has eight levels in order to allow for the full range of qualification types in the education, training and skills development system.

The level descriptors cover three areas (CESP, 2010, pp. 65–81):

(i) knowledge and understanding;
(ii) practice and skills, i.e. applied knowledge and understanding;
(iii) attitudes and competences, further divided into: generic cognitive skills, communication, ICT and numeracy skills, and autonomy, accountability and working with others.

Level descriptors are written in terms of learning outcomes. In other words, the knowledge, skills and responsibilities expected of the graduate of a learning programme at a specific level should align with the knowledge, skills and responsibilities expressed in the level descriptors for that specific qualification framework level.

Each ANQF-registered qualification, whether it incorporates unit standards or not, is designed as a whole to serve a specified purpose.

In the process of establishing the ANQF, an integrated framework based on the Irish model has been envisaged in order to embed formal, non-formal and informal training and education without privileging one sector over another.

Recognition and validation of non-formal and informal learning

The ANQF and TVET board will be established by an act of parliament, this is expected to promote lifelong learning and, in particular, the recognition of non-formal and in-formal learning as a right. The aim is to motivate adults to continue learning and to remedy the situation, under the existing qualifications system, where only non-formal and informal learning equivalent to Grade 6 formal school is recognized, and only on the condition that the learner is of a suitable age for the level

Table 1 Afghanistan National Qualifications Framework

ANQF Levels	Literacy and basic education	Secondary and higher education	TVET	Islamic education
L 8		HE/Ph.D.		
L 7		HE/Master's degree		
L 6		HE/Bachelor's degree		
L 5		Tertiary education/ Grade 14 diploma	Tertiary TVET/Grade 14 diploma	Tertiary Islamic education/ Grade 14 diploma
L 4		Advanced Certificate, high school/Grade 12	Advanced Certificate, TVET high school	Advanced Certificate, Islamic high school
L 3	Intermediate education/Grade 9 certificate		Intermediate vocational education and training certificate	Intermediate Islamic education/Grade 9 certificate
L 2	School preparation literacy LC Progression literacy LB Foundation literacy LA		Vocational training certificate	
L 1	Basic level		Apprenticeship	

Source: CESP, 2010, p. 61.

at which he/she is assessed, and that the learner continues his/her education in a formal school (Nasry, 2013).

The majority of Afghan people receive training and education in non-formal or NGO-run training centres. In the informal economy people gain skills by working as apprentices with masters, fathers or brothers. This learning will be officially recognized and certified once the qualifications framework is fully established. A recognition system for the informal sector, linked to the ANQF, is envisaged. In the meanwhile, the National Skills Development Project has developed a methodology for the assessment of skills based on a competency-based training approach. The assessment includes the identification of competences, and the collection of evidence on performance and knowledge that can be compared to the required occupational standards. Only if competences are demonstrated will a certificate be issued. If they are not, then the learner is signposted to do a further training course. Non-formal education and training is offered mainly by the Ministry of Education, the Ministry of Labour and Social Affairs, and NGOs. The updating of standards with a focus on occupational skills is undertaken by these ministries.

The current progression pathways in the national qualifications framework reflect the situation on the ground in Afghanistan. For example, currently, TVET and Islamic education goes up to Grade 14 only. However, if, in future, specialized degrees are offered in TVET or Islamic education, the levels of qualifications in those two areas could be revised to higher levels in accordance with the approval of the respective boards under the ANQA (CESP, 2010, p. 63).

Important lessons and future plans

An important lesson is the importance of setting in motion a consultative process between the government and all national stakeholders to decide on the final version of the ANQA/ANQF.

The eight levels and the six education programmes of the proposed ANQF (basic education, secondary education, technical and vocational education, islamic education, literacy and non-formal education and higher education) are now at the point of moving on to the next stage of their development.

A crucial element in the further development of the framework is how well it caters for all segments of society, particularly its under-privileged members.

The next steps will involve the drafting of acts of parliament ensuring legal status and implementation, and continuing consultations with all stakeholders to support the process (CESP, 2010, p. 5).

References

Afghanistan National Qualifications Authority (ANQA). *Concept Note on the Project.* http://www.cesp.gov.af/anqa/gp.php?gpID=2 (Accessed 16 January 2014.)

Committee on Education and Skills Policy (CESP). Concept and information concerning ANQA/ANQF. Kabul, CESP. http://www.cesp.gov.af/anqa/Documents/Revised%20ANQA%20Operational%20Chart.pdf.

Committee on Education and Skills Policy (CESP). *National Qualifications Authority.* Kabul, CESP. http://www.cesp.gov.af/anqa/gp.php?gpID=2 (Accessed 26 June 2012.)

Committee on Education and Skills Policy (CESP). 2010. Annex 1: Meeting minutes of technical advisory group (to discuss the final version of the ANQA/ANQF). Kabul, Ministry of Labour, Social Affairs, Martyrs and Disabled (MoLSAMD).

Ministry of Labour and Social Affairs, Martyrs and Disabled (MoLSAMD). 2007. *National Skills Development Programme Strategy (NSDP).* For the Afghanistan National Development Strategy (with focus on prioritization). Kabul, MoLSAMD.

Ministry of Labour and Social Affairs, Martyrs and Disabled (MoLSAMD). 2009. *National Skills Development Project.* Kabul, MoLSAMD.

Ministry of Labour, Social Affairs, Martyrs and Disabled (MoLSAMD). 2007. *TVET in Afghanistan.* National Skills Development Project. Kabul, MoLSAMD.

Nasry, A. R. 2013. National Qualifications Framework assisting citizens excluded from education. M. Singh and R. Duvekot (eds), *Linking Recognition Practices and National Qualifications Frameworks: International benchmarking of experiences and strategies on the recognition, validation and accreditation of non-formal and informal learning.* Hamburg, UNESCO Institute for Lifelong Learning (UIL).

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

ALBANIA

Introduction

In June 2014 Albania became a candidate for entry to the European Union. The decision by the European Council to grant candidate status to Albania can be considered an endorsement of the new Albanian Government, formed by the Socialist Party-led Alliance for a European Albania after the 2013 elections.

The new government has presented an ambitious programme, with employment and quality development of the labour force the main priorities. Recently, the Ministry of Social Welfare and Youth presented its National Employment and Skills Strategy (NESS) and Action Plan 2014–2020, which integrates economic, educational, training and also entrepreneurial policies. The Employment and Skills Strategy complies with the European Employment Strategy 2020 and will bring Albania closer to EU integration.

The Action Plan offers concrete measures which aim to address the number-one concern in Albania, the unemployment trap. The country has an unemployment rate of 16 per cent (15–64, Labour Force Survey 2013) with a long-unemployment rate of 75 per cent. Most of the unemployed have low levels of education and, for those living in rural areas, the main source of employment or self-employment is agriculture. Youth unemployment is 30 per cent (15–24; LFS 2013). Many employed people have informal or unpaid family jobs. The participation of women in the labour market is much lower than men and declined in the past years of crisis. The Albanian economy is dominated by micro and small companies (98 per cent). In 2011, 91 per cent of active enterprises employed up to four workers, with an overall contribution to employment of 37 per cent, primarily in the service sector. Enterprises employing 20 workers or more represent only 2 per cent of total active enterprises, but account for 47% of total employment. Enterprises engaged in the production of goods (namely industry, agriculture and construction) represent 17 per cent of all active enterprises, while nearly 46 per cent operate in the trade, hotel and restaurant sectors.

During 2012 a number of economic indicators showed critical signs of decline, for example in consumption, imports, exports, remittances, the number of active companies and employment. This followed a slowdown in economic growth over the previous two years. Since late 2013 the economy has started to grow again, albeit slightly. Huge arrears in payments of construction and utility bills by the old government had increased public debt, which the new government managed to pay off by negotiating loans from international financial institutions.

Albania has a population of 2.8 million (2013). Population growth rates are slowing down due to a falling birth rate and continuing emigration. In 2010, the number of Albanian citizens abroad was estimated to be 1.4 million, but due to the economic crisis many migrants had lost their jobs abroad and returned home. The country is homogeneous in terms of its ethnic composition – minority groups make up less than 1.5 per cent of the population. The 2011 census showed that, for the first time in history, more people (54 per cent) lived in urban rather than in rural areas. Tirana and Durres are the cities with the highest population growth and density.

According to the new National Employment and Skills Strategy and Action Plan 2014–2020, the Albanian Qualifications Framework (AQF) is to become one of the pillars for effective employment, education and training policies. Challenges to address include improved administration, efficient use of financial resources, and better design, monitoring and evaluation of outcomes. Implementation of the AQF is considered instrumental to a strong governance of the labour market and qualification systems.

The vocational education and training (VET) system is still a centralized system with limited involvement of social partners and low responsiveness to local needs. There are two separate VET provider systems – the vocational schools and the vocational training centres (VTCs). Their structures and offers could be streamlined

and better aligned to labour market needs. Both should deliver qualifications to one common national qualifications framework (the AQF). The attractiveness of vocational education is still low and perceived as a second-best path to tertiary education, rather than a route to labour-market entry.

Main policy objectives

Developing and implementing the Albanian Qualifications Framework is one of the policy objectives of the National Employment and Skills Strategy 2014–2020 and is part of the strategic objective to strengthen the governance of labour market and qualification systems.

Actions to reach the objective to develop and implement the AQF include:

- *Review of the work undertaken on vocational qualifications within the AQF.*

  Under this action line, the **AQF law**, adopted in 2010, will be revised and implemented. Amendments to the law will be arranged by means of by-laws.

  The work done on **qualifications** by NAVETQ (the National Agency for VET and Qualifications) and under different donor projects will be reviewed as well as qualifications offered by public or private VET providers or universities.

  The system for **evaluation and certification** of qualifications will be revised.

- *Establishment and operationalization of sector committees.*

  Under this action line, **sector committees** with social partner representation and minimum representation of 30 per cent qualified women will be established. Each sector committee will review the qualifications required within its sector and will participate in the revision of a national list of occupations, the development of **occupational standards** at different levels of competence for a prioritized list of occupations, and development of vocational qualifications for priority sectors and their insertion in the AQF database.

- *Revision and linking of curricula to the AQF.*

  Under this action line, **curricula** will be revised and interlinked on the basis of AQF qualifications and standards, and referenced to AQF levels.

  Selecting bodies and putting in place **procedures for the validation of qualifications, skills assessments, certification and the validation/recognition of prior learning.** (See section 5).

Stakeholder involvement

A major contribution towards the development and implementation of the AQF was made by the EC CARDS (Community Assistance for Reconstruction, Development and Stabilization) 2006 VET 3 project, implemented between 2008 and 2010. EU directives and standards (EQF, ECVET/ECTS and EQARF) and the Bologna process were strong driving forces behind the AQF developments. The EU project contributed to conceptual clarifications and legal provisions related to an AQF. The project had an impact on all decision-making levels resulting in the adoption of the AQF law in 2010. After this breakthrough the CARDS project developed an AQF implementation plan, as well as recommendations and additional regulations for the AQF and subsystems.

However, the economic and financial crisis led to severe budget cuts and a planned reinforcement of NAVETAQ with extra staff for the implementation of the AQF did not materialise. The further development and implementation of the AQF came to a standstill, although NAVETAQ and numerous donor organisations made progress with the development of a national list of occupations, vocational qualifications and VET curricula. For example:

- NAVETAQ defined a list of occupations based on ISCO (International Standard Classification of Occupations) 2008, coordinated the development of 190 occupational descriptions with main job tasks/duties and employment opportunities, and proposed a list of vocational qualifications linked with AQF Levels 2, 3 and 4. For 50 vocational qualifications, draft descriptions were developed. These descriptions are based on learning outcomes; each describes the required knowledge, skills and attitude for that qualification. NAVETAQ sets the criteria and provides guidance to vocational qualification developers, which include both teachers and business representatives.
- Within the scope of the International Labour Organization's Instrument for Pre-Accession Assistance (ILO-IPA) 2010 Human Resources Development (HRD) project, the ILO is developing four frame curricula for post-secondary (Level 5) qualifications, based on a feasibility study.

- The same ILO-IPA 2010 HRD project has a pilot project on the recognition of prior learning in the textile/footwear sector. Within the scope of this project, a frame methodology and guidelines for occupational standards and assessment are being developed, as well as an assessment tool. The methodology and tools will be tested in a pilot in which the skills of some fifteen workers will be assessed. NAVETAQ has been involved in this project from the start. The project will be completed by the end of 2014.
- The focus of the VET reform projects of the German international development organization GIZ (Gesellschaft für Internationale Zusammenarbeit), Swisscontact and Kulturkontakt (Austria) is on strengthening VET schools curriculum development, teacher training, equipment and internships. The newly developed programmes could be turned easily into qualification descriptions, following the national template.

Levels descriptors and learning outcomes

The AQF is described in law as a comprehensive eight-level structure that corresponds to the European Qualifications Framework and recognizes three types of qualifications:

- General or non-vocational qualifications at secondary-school level – AQF levels 1–4.
- Higher qualifications offered at or in cooperation with universities – AQF levels 5–8.
- Vocational qualifications offered at VET schools, training centres or in the workplace – AQF levels 2–5.

The eight levels of the AQF will be defined by level descriptors in terms of:

- theoretical and factual knowledge ;
- cognitive and practical skills; and
- autonomy and responsibility.

Both the Ministry of Education and Science (MoES) and the Ministry of Labour, Social Affairs and Equal Opportunities (MoLSAEO) share responsibilities for implementing the AQF. However, the curricula for VET and HE introduced by national agencies over the past years, despite many innovative elements, do not depart from the traditional input and subject-based approach and the conditions in most educational institutions are such that it is difficult to work towards the achievement of agreed learning outcomes and competence levels.

Validation of non-formal learning and links to the NQF

Since the academic year 2009/10, initial vocational education has been offered at three levels to provide students with general and vocational (theoretical and practical) education, preparing them for work and further education. At the first level, two-year programmes train semi-skilled workers and lead to a basic vocational training certificate. At the second level, one-year programmes train technicians and lead to the award of a certificate of professional training. The third level, one additional year of study, gives access to higher education. At the end of the third level, students complete a technical-vocational programme with the State Matura exam and the professional practice exam. However, the focus is very often on academic knowledge; practical skills cannot always be guaranteed. Fifty per cent of VET school graduates on average pass on to higher education.

The development of post-secondary VET qualifications is at an initial stage. The commission to work out reform proposals for higher education has set up a sub-group on Level 5 qualifications and the European Credit Transfer and Accumulation System (ECTS). In addition, a review of higher education qualifications in the AQF is envisaged through a new Tempus project.

The NESS Action Plan 2020 specifies that a national system will be established for the recognition of qualifications, work experience and skills obtained/received abroad within the scope of AQF implementation. Under this action line, special bodies will be appointed and procedures established for the validation of qualifications; assessments of knowledge, skills and competences; certification; and validation of prior learning.

Referencing to regional frameworks

It is intended that the AQF be linked to the EQF, though, no practical steps are planned at this stage. The focus for the coming years will be on AQF implementation and strengthening of the qualification system and the labour market.

Important lessons and future plans

The various VET reform activities of the last few years were often developed in isolation from each other with limited and diffuse impact on the labour market and qualification systems. The renewed emphasis of the Albanian Government on a well

developed and implemented AQF could provide the structure and quality mechanisms for VET reform.

However, NAVETAQ is a small agency with limited resources to drive AQF developments and implementation. It will need more staff and resources to be able to take the lead on all AQF-related actions resulting from the National Employment and Skills Strategy.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

ARMENIA

Introduction

Based on projections from Armenia's population census of 2011, the population in January 2013 was 3,027,000, with a gender composition of 51.5 per cent female and 48.5 per cent male. When compared with the same indicator as of the beginning of 2012, the total figure had risen by 5,500, reflecting a natural increase in the (difference between registered births and deaths) and estimated net migration. Emigration is still an important factor in the country. In 2013 a little over 32,000 people emigrated, although this figure has declined in recent years. Some findings from the responses of potential migrants revealed that 36 per cent of them (aged 18–50) are seriously thinking about leaving the country to find a job.

Almost 32 per cent of the population was below 25 years. The average age of the population was 36.2 with 34.5 for males and 37.8 for females. Since 2001, population trends have been characterized by alternating phases of rising and falling numbers, but during this period, a total decrease of 5.7 per cent was registered. In the last five years, the trends in the age structure of the population have shown a slow decrease for the younger age group (up to 24) and an accelerated expansion of adult labour resources (25–64).

With reference to economic performance, in 2013 Armenia (classified by the World Bank as a middle-income country) registered a slight decrease in GDP compared to the previous year. After a significant contraction in 2009 (-14.1 per cent), GDP had started to grow gradually: by 2.2 per cent in 2010, 4.7 per cent in 2011 and 7.2 per cent in 2012, which was followed by a deceleration in 2013 (+3.2 per cent). Over the period 2010–2013, the contribution to GDP made by the industrial sector went down slightly, from 36.9 per cent to 31.5 per cent. Due to unfavourable climatic conditions in 2013, a slight reduction was recorded in the agricultural sector's contribution to GDP from the previous year, from 21.6 per cent to 20.9 per cent. The service sector registered an increase in its GDP share in 2013 to 46.6 per cent (from 44.1 per cent in 2012).

Regarding the position of the country in the international context, it is important to mention that the Armenian Government, in October 2014, signed the Russian-led customs agreement, together with Belarus and Kazakhstan. However, during the Vilnius Summit in November 2013, the EU and Armenia adoptedt a declaration, which proposed that they continue to cooperate in non-trade related areas such as human rights, good governance and the rule of law.

The situation in the labour market has remained stable, with a slight increase in the activity rate (from 61.2 per cent in 2011 to 62.7 per cent in 2012) and the employment rate (49.64 per cent in 2011 to 51.9 per cent in 2012), with 45.2 per cent of the workforce being women. The overall unemployment rate slightly decreased, from 19 per cent in 2010 to 17.3 per cent in 2012. There is also a gender disparity in the unemployment statistics, with worse figures recorded for women (19.8 per cent compared to 16.4 per cent for men). The rate of informal employment in 2012 continued to be high at 50.1 per cent, with an incidence of 24.1 per cent in urban and 79 per cent in rural areas and covering 99 per cent of the workers in agriculture and 19.3 per cent in non-agricultural activities.

Youth unemployment (aged 15–24) is still the highest category, at more than double the general unemployment rate, although there is a declining trend. The unemployment rate for young people decreased from 39.2 per cent in 2011 to 35.4 per cent in 2012, while for young women the rate decreased from 44.9 per cent in 2011 to 40.7 per cent. There is an urban/rural disparity in youth unemployment, with higher rates in urban areas and an increase from 47.3 per cent in 2011 to 50.2 per cent in 2012.

A first concept paper on an national qualifications framework (NQF) for vocational education and training (VET) was developed in 2008 by stakeholders from different government institutions. The NQF concept was built on recent VET reforms and focused on the development of new qualifications. The European Qualifications Framework (EQF) was used as a point of

reference, and a future link with general education and HE within an overarching framework was foreseen. Following this, the Armenian National Qualifications Framework (ANQF) was adopted by Government Decree (N° 332-N), in March 2011, in accordance with the Education Law of the Republic of Armenia. In August 2011, a government decision was taken to approve an activity plan towards implementation and operationalization of the ANQF, which originally encompassed eight levels and the same overall descriptors as the EQF (knowledge, skills and competences). In 2012, the Ministry of Education and Science (MoES) set up a working group to establish an ANQF self-certification system (for the Framework for Qualifications of the European Higher Education Area, QF-EHEA) and in May 2014 a first draft of the ANQF self-certification report was discussed and a number of weaknesses and shortcomings identified.

Since 2011 most of the attention of the Armenian Government has been devoted to higher education. Furthermore, the Twinning Project on the 'empowerment of tertiary-level education in Armenia for European Higher Education Area integration' started in September 2014 with the following five objectives:

- Review of Armenian legislation of higher education and institutional arrangements for the development and maintenance of a NQF;
- Raising the capacity of the MoES's representatives to sustain the Bologna reforms and awareness of implemented reforms;
- Raising the capacity of the National Centre for Professional Education Quality Assurance's (ANQA) representatives;
- Raising capacity of representatives of universities to implement the Bologna reforms;
- NQF and higher education institutions to meet the requirements of employers and graduates for the labour market.

The Ministry of Education and Science has the overall responsibility for the qualifications framework, and the framework is seen as a key reform instrument aiming at improving quality in the national education and training system.

Main policy objectives

The ANQF aims, in addition to supporting the overall improvement of quality, to provide more transparency to the qualifications provided by the education and training system, assist employers in assessing the skill level of the workforce, and allow the government to take decisions for skills-matching adjustments.

The objectives of the Armenian framework are similar to the frameworks of other countries:

- To link different levels of qualifications in a hierarchy from the lowest to the highest;
- To link Armenian qualifications to those of other countries, thus promoting international mobility;
- To enable learners to attain qualifications, transfer between different pathways and progress from one level to the next.

Stakeholder involvement

In September 2009, a memorandum of understanding on social partnership was concluded between the Ministry of Education, the Union of Employers and the Chamber of Commerce, foreseeing cooperation in the development and updating of the educational standards as well as in the provision and assessment of VET.

With EU budget support until the end of 2013, 100 training standards were developed by the National Centre for VET development, in cooperation with sector skills councils, representing the employer side, to ensure that the standards met the requirements of the labour market. These standards are competence based and are organised into learning modules, outcomes and performance criteria. They are also structured based on general subjects, core skills, and general vocational skills for the sector and specialised vocational skills for particular professions, including theory and practice. The structure also defines the number of weeks and hours devoted to theory and practice.

Level descriptors and learning outcomes

The ANQF is a common reference system that describes and links qualifications at different levels, issued in Armenia in a hierarchy from the lowest to the highest, as well as making them comparable with the qualifications of other countries with an NQF.

As mentioned above, a first concept, which was based on eight levels, is under revision, with the possibility of extending it to nine levels. Levels 1 to 5 will accommodate qualifications from general education and vocational education and training. Levels 6 to 9 will cover qualifications from higher education, while qualifications from both VET and higher education will be placed at Level 4 and Level 5.

The three categories of descriptors used are knowledge, skills and competences. Again, as in the EQF and in the revised ANQF level descriptors, skills are divided into three sub-descriptors: applying knowledge and understanding; communication, ICT and numeracy skills; and generic cognitive skills.

A new list of qualifications provided by the VET system was endorsed by the National VET Council in January 2015 and submitted to the government for adoption.

Validation of non-formal learning and informal learning and links to the NQF

Since 2013 a project has been implemented by the ETF, in cooperation with the Department of Supplementary and Continuing Education of the MoES and the Armenian Culinary Traditions Development and Preservation NGO, to pilot a system for the validation of non-formal and informal learning in the culinary profession. As a result of the project, assessors have been trained, professionals from the sector have been certified as cooks, and a concept paper on how to set up a system of validation of non-formal informal learning, identifying institutional responsibilities and working methods has been produced.

A revision of the law on education was adopted in 2014 to make provision concerning the implementation of supplementary and continuing education policies and as an important contribution to the promotion of continuing vocational education and training (CVET) in the country, including new concepts of, and procedures for, the validation of non-formal and informal learning. The revision of the law, which was based on the Supplementary and Continuing Education Strategy 2013–2017, was adopted upon consultation with other public institutions, NGOs and social partners organisations. However, rules for the implementation of the law, in particular regarding the establishment of a system for validation of non-formal and informal learning, are still pending.

Referencing to regional frameworks

The ANQF is not part of any regional framework, but the country is interested in using the EQF as a reference model. Armenia joined the Bologna Process in 2005. The strong influence of policy developments in the European Union and the direct inspiration of the EQF are the main reasons why Armenia opted for an eight-level framework of qualifications (which is now being revised, see above).

Important lessons and future plans

Based on the developments so far, there are a number of challenges that need to be addressed to move forward with the implementation and operationalization of the ANQF:

- The framework as it is describes the current situation and, therefore, does not support reform or change, such as new routes of progression or widening access to formal education. In addition, there is still a need for a clear implementation plan with defined outcomes and deadlines.
- There is a need to further develop and streamline the level descriptors to enhance the relation to both the EQF and the QF-EHEA.
- Decisions on institutional arrangements and body/bodies responsible for the maintenance and review of the framework need to be taken, and transparent procedures for placing qualifications in the framework needs to be developed.
- Promote and enhance the link between qualifications, learning outcomes and curricula development.

The Ministry of Education has recently set up a working group to review the overall VET qualifications system as part of the implementation of the ANQF. Since the level descriptors in the national qualifications framework form the basis for the development of state educational standards, the existing educational programmes will have to be reviewed in accordance with these descriptors. The ministry is aware of the need for the review to consider the progression route in a coherent way from general secondary, preliminary VET and middle VET in terms of skills, knowledge and competences acquired by the learners.
The Australian Qualifications Framework (AQF) is the national policy for regulated and quality-assured qualifications in Australian education and training, covering the secondary school, vocational education and training, and higher education sectors. One of the earliest and longest-standing frameworks of its kind, the AQF was introduced on 1 January 1995 and was phased in over five years, with full implementation by 2000. It replaced the Register of Australian Tertiary Education (1990–1995) which covered qualifications in the VET and higher education sectors.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

AUSTRALIA

Introduction

The Australian Qualifications Framework (AQF) was reviewed in 2009–2010 in order to keep it relevant to, and consistent with, current national policy directions in education and training and to build confidence in the qualification outcomes. The review process included the development of a more up-to-date levels-based architecture for the framework.

This strengthened AQF was endorsed by Australia's Commonwealth and state and territory education ministers in March 2011. Implementation commenced in July 2011 with a completion date of 31 December 2014.

The development of the AQF needs to be understood within the context of the economic and societal challenges Australia has faced over the past 30 years. In the 1980s the Australian economy was in crisis. Unemployment was high and structural problems rife.

The Training Reform Agenda of 1988 aimed to respond to this situation by reforming VET provision, shifting from a curriculum-based to a skills-based approach in order to standardize training across the nation and make it more responsive to industry needs. The Industry Training Advisory Boards, tripartite bodies comprising employer, employee and Australian Government representatives, played an important role in this process, promoting and developing competency-based training in their respective industry sectors. They continue to play an important role today in their new format as Industry Skills Councils (see section on stakeholders below).

Standardizing VET provision across the nation was not an easy task, as there were significant discrepancies between the different Australian states and territories, and moving across borders was not always straightforward. A number of reforms were put in place to address this, the most significant being the establishment of the National Framework for the Recognition of Training (NFRT). The NFRT set out nationally valid principles and processes for the accreditation of courses, the registration of training providers, credit transfer, and the assessment and recognition of prior learning.

These early steps towards a nationally consistent framework of qualifications across the VET and higher education sectors gave rise to a debate about the application of competence-based standards to higher education. A number of stakeholders in the higher education sector took the view that achievement of competences was a necessary but not a sufficient outcome of learning. In this context, a 1991 consultation paper identified a number of shortcomings in existing VET sector qualifications, including the following:

- An overly rigid time-frame for achieving qualifications. The system according to which courses begin at a fixed entry point and are measured in full-time years (or part-time equivalent) should be replaced by a more flexible one in which qualifications can be achieved in a greater variety of ways, such as by completing a qualification step-by-step or acquiring qualifications formally as well as non-formally.
- Unclear definition of certificate levels and inconsistent use of titles. In some cases, the authors noted, the same certificate might mean anything from basic preparation for employment through to advanced professional-level skills. In particular, the title of 'advanced certificate' was used inconsistently. The titles of 'diploma' and 'associate diploma' were problematic because they are used differently in Australia and overseas (in Australia, the term 'diploma' refers to a professional qualification, in other countries it refers to a para-professional qualification).
- Lack of satisfactory qualifications beyond craft certificates.

A 1993 consultation paper continued the focus on the VET sector, emphasizing the need to provide for more levels of VET qualifications and stressing the importance of improving communication and mobility between the three sectors.

In light of the challenges in the existing VET sector qualifications, the ministers for education, employment and training established a working group to develop a proposal for a national qualifications framework.

Main policy objectives

In implementing the strengthened AQF, Australia's objectives are to provide a contemporary and flexible framework that:

- accommodates the diversity of purposes of Australian education and training now and in the future;
- supports the development and maintenance of pathways which allow learners to move freely between different education and training sectors and between those sectors and the labour market;
- supports individuals' lifelong learning goals by providing mechanisms for the recognition of prior learning and experience;
- allows individuals to gain qualifications which are regulated and quality-assured;
- supports graduates' and workers' national and international mobility;
- brings Australian qualifications into line with the qualifications of other countries, thus increasing the international recognition of Australian qualifications.

Stakeholder involvement

The current AQF is an overarching national framework that continues a well-established system of national tertiary awards dating back to the 1970s. As the responsibility for different educational sectors lies with state and territory governments as well as the Commonwealth, it has been vitally important to involve all stakeholders in developing nationally agreed qualifications in order to maintain quality assurance and consistency. To this end, in 1972 a national registration authority was put in place to standardize qualifications and their nomenclature across the states and territories, and to promote understanding of the qualifications system in Australia and overseas.

In 1990, the Register of Australian Tertiary Education (RATE) was established. The RATE system of qualifications was widely but not exclusively used (for example, it was not used in Western Australia) and did not cover all levels of VET. It was particularly deficient at the level of crafts, with the result that some states (for example New South Wales) continued to use their own systems of craft certificates at that level. This lack of uniformity and comprehensiveness limited mutual recognition between states and territories and acted as a barrier to the emergence of a truly national VET sector.

From 1995 the RATE framework was phased out and replaced by the AQF, largely in response to the growing economic demand for skilled workers and para-professionals and the need for a truly national system of qualifications. Implementation of the AQF was phased in over five years to allow for acceptance by all stakeholders. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) oversaw the development and implementation of the AQF. MCEETYA was composed of ministers with responsibility for education and training from both national and state and territory governments. These ministers agreed to establish the Australian Qualifications Framework Advisory Board (AQFAB) to implement and monitor the AQF and recommend action to be taken to achieve its goals. AQFAB was required to report to the public and to ministers comprising the MCEETYA. To fulfill its functions, AQFAB liaised closely with schools, VET institutes and universities, as well as with the bodies responsible for accrediting courses. This liaison role was crucial in ensuring stakeholder support for the AQF and allowing the reform initiatives to progress. Membership of AQFAB included representatives from all three education sectors as well as from industry, trade unions, government and the community.

In 2008, AQFAB was replaced by the AQF Council with the primary objective of strengthening the AQF and making it up to date and relevant to Australia's needs. The AQF Council's ongoing role is to implement and maintain the AQF, ensuring that it is nationally and internationally robust and supports flexible cross-sectoral linkages and pathways. Further information on the AQF Council, including its terms of reference, is available from the AQF website: www.aqf.edu.au. The AQF Council reports to ministers of the Australian Government and the eight state and territory governments through the Standing Council on Tertiary Education, Skills and Employment (which replaced MCEETYA). The membership of the AQF Council comprises experts from various backgrounds, including unions, industry, private companies, the three education sectors, the Commonwealth and state/territory governments. This differs from the earlier practice of appointing members as 'representatives' of particular organizations.

Industry leadership of VET has been a key feature of the Australian system for almost two decades. Industrial organizations, which are generally

registered under state or federal workplace relations legislation, such as the *Fair Work (Registered Organizations) Act 2009*, participate closely in setting the national training agenda for schools and VET/higher education institutions. This, in turn, influences the direction of the national qualifications framework. Professional organizations also play an important role in Australia's training system.

Industry is also represented on the National Skills Standards Council (NSSC), which is the body charged with the oversight of training packages and training provider quality. The NSSC provides final endorsement to training packages developed by Industry Skills Councils (ISCs), and is central to ensuring that the delivery of VET meets the needs of business and employers. The eleven ISCs are privately registered companies run by industry-led boards of directors and standing committees, but funded substantially by the Australian Government. They give all industries, peak bodies, enterprises, unions, training organizations and governments a voice in Australia's VET system. Through the network of ISCs, industry has a direct say in defining the skills required in the workplace.

A training package is an integrated set of nationally endorsed units of competency, qualifications and assessment guidelines designed for a specific industry, industry sector or enterprise. Training packages provide an important link between the VET sector and the labour market. They are developed through a national consultation and validation process involving industry representatives and other VET stakeholders. A training package describes the skills and knowledge needed to perform effectively in the workplace, but does not prescribe a training programme. Registered Training Organizations (RTOs) develop and deliver training programmes based on training-package specifications to meet the needs of individuals or enterprises.

Table 2 Australian Qualifications Framework

	AQF qualifications mapped across the three education sectors		
	Senior Secondary schooling	**Vocational Education and Training**	**Higher Education**
10			Higher Doctoral Degree
10			Doctoral Degree
9			Master's Degree (coursework/research/extended)
8		Graduate Diploma	Graduate Diploma
8		Graduate Certificate	Graduate Certificate
8			Bachelor Honours Degree
7			Bachelor Degree
6		Advanced Diploma	Associate Degree/Advanced Diploma
5		Diploma	Diploma
4		Certificate IV	
3		Certificate III	
2		Certificate II	
1		Certificate I	
Not located at an	Senior Secondary Certificate of Education		

Source: AQFC, 2011.

Levels and descriptors and use of learning outcomes

The strengthened AQF comprises specifications for 14 qualification types (see Table 2 below). Each of these qualifications is integrated by the relevant sector into a ten-level structure. The Senior Secondary Certificate of Education (SSCE) is included in the AQF but not located at a particular level.

The strengthened AQF incorporates a number of changes to its predecessor. A separate bachelor honours degree has been introduced along with three types of master's degree. Previously, there were only two types of master's degree: the master's degree (research) and the master's degree (coursework). The master's degree (extended) has been added to prepare graduates to engage in a profession. The strengthened AQF also specifies two types of doctorate, the professional doctoral degree and the research doctoral degree.

Recognition and validation of non-formal and informal learning and links to the NQF

An important aspect of the AQF is the development of closer connections between secondary education, VET and higher education. The AQF aims to strengthen the relationships between these three sectors by linking qualifications across and between them in both structured and unstructured ways. Qualification linkages enable individual learners to move efficiently from one qualification to another. They also promote lifelong learning by helping to create a more open, accessible and relevant post-compulsory education system.

The successful creation of qualification linkages is dependent on effective mechanisms for *credit transfer* (between individual components of existing awards) and for the *recognition of prior learning* (by which individuals' existing competences and experience can be harnessed and put towards a formal qualification).

Referencing to regional frameworks

The AQF is not formally linked to a regional qualifications framework or to any other national qualifications frameworks. However, Australia does maintain communications with other nations and regional organizations on matters relating to NQFs. There has been considerable interest internationally in the AQF as a model for NQFs elsewhere, and Australia has participated in a number of international forums to discuss the potential for regional frameworks.

The AQF Council has established an International Alignment Committee to advise it on referencing and/or alignment of the AQF to other frameworks. A theoretical exercise was undertaken in 2010 to explore the possibility of aligning the AQF with the Irish NQF. The project mapped aspects of each framework in order to arrive at a valid comparison between the two. This study did not in itself constitute an alignment or formal referencing of the two frameworks, but it did demonstrate that such an alignment would be feasible, and that Australia is well able to engage in dialogue with countries outside of the Asia-Pacific region.

A policy dialogue was held in December 2010 to discuss common challenges faced by the European Union and Australia in terms of transnational transparency, comparability and recognition of qualifications. The dialogue, preceded by a two-day International Peer Learning Activity on Qualifications Frameworks, aimed to encourage mutual learning from national and transnational developments and to explore how qualifications frameworks can serve as instruments for international cooperation. Australia and the European Commission concluded a joint study exploring the role that qualifications frameworks can play in facilitating the mobility of learners and workers and making qualifications more internationally comparable and transparent. This study focused in particular on the relationships between the AQF and the EQF, as well as the NQFs of individual European countries, and how these relationships might affect the mobility of learners and workers between Australia and Europe.

Australia is also involved in the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA) Capacity Building for National Qualifications Frameworks project, which aims to harmonize the regulatory arrangements which underpin the recognition and quality assurance of qualifications across all AANZFTA countries. The project will explore the scope for development of mutually comparable NQFs in the region, based on a common reference framework.

Important lessons and future plans

Australia has learned a number of important lessons from the development of the AQF in the early 1990s and the strengthening process undertaken during 2010–2011, the most important of which are summarized below.

- A national qualifications framework is only one part of a fully functioning quality-assured training and education system. Addressing national challenges requires all parts of the system to work together, especially when engaging with regulatory bodies.
- An NQF must be relevant to stakeholder and economic needs, and address identified challenges.
- An NQF requires ongoing evaluation and reform in order to remain at the peak of relevance to prevailing economic and social conditions. Changes should, wherever possible, build upon existing structures which already enjoy stakeholder support and engagement.
- Engagement and consultation with stakeholders, particularly within industry, are crucial to the development of an NQF. A bureaucratic, top-heavy process is likely to receive less sector support than one that effectively engages all stakeholders.
- Complex reforms such as those involved in implementing an NQF require a long-term implementation plan that allows the time needed to achieve results. It is important that stakeholders know this and are supported through the implementation process. Information and training sessions about the framework are of paramount importance throughout the development, agreement and implementation phases.
- Effective leadership is crucial. Reforms must be driven by people who are committed, influential and persuasive in order to ensure full implementation and take-up of a framework.

References

AQF website: www.aqf.edu.au

AQFC. 2011. *Australian Qualifications Framework First Edition July 2011.* Australia, Australian Qualifications Framework Council for the Ministerial Council for Tertiary Education and Employment.

AQFC. 2013. *Australian Qualifications Framework Second Edition January 2013*. Australia, Australian Qualifications Framework Council.

Department of Education, Employment and Workplace Relations (DEEWR). 2011. Issues paper: Developments in the area of qualifications frameworks in Australia and in the European Union. Government of Australia.

International Labour Office (ILO). 2010. *The implementation and impact of National Qualifications Frameworks: Report of a study in 16 countries.* Geneva, ILO.

Mernagh, E. 2010. Informing and supporting the Australia-EU Policy Dialogue on Qualifications Frameworks in Australia and the European Union. Issue paper: developments in the area of qualifications frameworks in Australia and in the European Union. Draft. DEEWR (Department of Education, Employment and Workplace Relations) and Australian Embassy to Belgium and Luxembourg and Mission to the European Union.

Quagliata, M. 2011. The Australian Qualifications Framework – strengthening Australia's future. Paper for the *International Conference on Implementation of National Qualifications Frameworks: Policies and Strategies*, April 27–28 2011, Bangkok.

Australian Qualifications Framework Council. 2010. *Final version, September 2010, pending MCTEE approval*. At: http://www.aqf.edu.au

Australian Qualifications Framework Council. 2009a. *Strengthening the AQF proposal: Consultation paper.* At: http://www.aqf.edu.au

Australian Qualifications Framework Council. 2009b. *Strengthening the AQF proposal: Analysis of submissions September 2009.* At: http://www.aqf.edu.au

Australian Qualifications Framework Council. 2009c. *AQF National Policy and Guidelines on Credit Arrangements.* At: http://www.aqf.edu.au

Prepared by:
Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education in collaboration with the UNESCO Institute for Lifelong Learning

AUSTRIA

Introduction

Austria has designed a national qualifications framework (NQF) with an eight-level structure. It aims to include qualifications from all education and training sub-systems and fields and forms of learning (formal, non-formal and informal). Although there seems to be political agreement and support for implementation of the NQF from different stakeholders, including social partners (Die Sozialpartner Österreich, 2013), diverging views on certain aspects and technical details of the NQF have slowed down further NQF implementation. Several questions need to be resolved, notably the legal basis of the NQF and the procedures for inclusion of qualifications in the NQF. A political decision on these issues is expected in the near future.

National qualification levels were referenced to the European Qualifications Framework (EQF) and self-certified against qualification frameworks in the European Higher Education Area in June 2012. However, only Bologna qualifications awarded in higher education and selected 'reference qualifications' from vocational education and training (VET) and a qualification from a pre-vocational programme are currently included in the NQF and linked to the EQF. This selection of 'reference qualifications' serves an illustrative purpose. Comprehensive and formal inclusion of qualifications and adoption of previous level proposals will commence once a political decision has been made.

The NQF has been under development since January 2007. With adoption of the NQF position paper by the council of ministers in late 2009, the Austrian NQF was officially launched. NQF development was characterized by joint cooperation between the Federal Ministry of Education and Women's Affairs and the Federal Ministry of Science, Research and Economy, and by involving a broad group of stakeholders, as well as input from several research-driven pilot projects.

An important feature of the Austrian NQF is that levels 6 to 8 remain open to VET qualifications acquired outside HE institutions. A 'Y-structure' was adopted, introducing parallel descriptors to capture differences between higher education and VET qualifications at these levels.[1] Dublin descriptors are used for qualifications related to Bologna cycles (bachelor degree, master's degree, doctorate) and awarded by higher education institutions (universities, universities of applied sciences [Fachhochschulen] and university colleges for teacher education [Pädagogische Hochschulen]). VET qualifications and qualifications from adult learning ('non-Bologna' strand) will be allocated based on NQF descriptors.

The NQF has been designed to promote transparency and guidance; there is no intention to use the NQF for any kind of regulation. The Austrian education system is already highly regulated in terms of what kind of qualifications give entrance to certain pathways in the education system and access to occupations/professions in the labour market. While qualifications in general play an important role in Austria, the term as defined in an EQF context is not used consistently and is sometimes used to refer to 'curricula' or training programmes.

The overall NQF implementation process is structured into three 'procedural corridors':

- 'Corridor one' deals with allocation of levels to qualifications awarded within the formal education system by the State and based on national legislation;
- 'Corridor two' focuses on development of quality-assured procedures to include qualifications from the non-formal sector (such as occupation-specific and company-based continuing education and training);
- 'Corridor three' develops approaches to validating learning outcomes acquired though informal learning.

Several issues remain to be resolved, one being inclusion of general education and respective school leaving certificates (academic secondary school; *allgemein-bildende höhere Schule Reifeprüfung*) in the NQF.

1 Development of a NQF in Austria (*Aufbau eines Nationalen Qualifikationsrahmens in Österreich*), p. 7 [unpublished].

Main policy objectives

The main objective of the NQF is to map national qualifications, present them in relation to one another, and make implicit levels of the qualification system explicit, nationally as well as internationally. It will have no regulatory function. The NQF's specific objectives are to:

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

The NQF plays an important part in implementing a lifelong learning strategy (BMBF, 2011) that includes and assigns the same value to all contexts of learning (formal, non-formal and informal) (European Commission et al., 2014).

One important objective of the NQF is to strengthen the links between different sub-systems by highlighting existing pathways/ developing new pathways and opening up new progression possibilities. In this context, improved counselling is important and can be helped by the NQF. A national database for qualifications is currently under development to improve guidance and counselling by making qualifications and learning pathways visible and comparable based on their learning outcomes (NQF register).

Austria has a relatively high share of people from migratory backgrounds in the labour force and in education. Raising their participation, education outcomes and qualification levels, and increasing equality of opportunity, remains a main policy challenge and is a focus of current reforms (European Commission, 2013).

Stakeholder involvement

From the beginning, the Austrian approach has been characterized by active stakeholder involvement, and occasional conflicting views on the NQF's role. The General Directorate for VET at the Federal Ministry of Education and Women's Affairs initiated the process and is responsible for coordinating NQF development and implementation in close cooperation with the Federal Ministry of Science, Research and Economy, which is responsible for higher education. Social partner organizations have played an active role in the process (Klenk, 2013).

A national NQF steering group was set up in February 2007. This includes 23 members representing all the main stakeholders (all relevant ministries, social partners and *Länder*) responsible for qualification design and award. This group's main task is to coordinate NQF implementation, reference it to the EQF, and ensure that the framework reflects stakeholders' interests. One important topic of discussion was opening NQF levels 6 to 8 to non-traditional higher education qualification, with VET stakeholders on one side and higher education on the other. Consensus was achieved in form of a 'Y-structure' opening the highest qualification levels to non-academic qualifications. This was very important for parity of esteem of different learning contexts.

The national coordination point (NCP) was set up as an organizational entity at the Austrian Agency for International Cooperation in Education and Research (Österreichischer Austauschdienst) (OeAD). Its main role is to support the development and implementation of the NQF in Austria, develop an NQF information system, including the NQF register, and become the main information desk for citizens and institutions.

Framework implementation

The Austrian NQF was formally launched through adoption of a position paper by the councils of ministers in 2009. Three sets of criteria for linking qualifications to NQF levels were developed:

- Qualifications must meet existing formal requirements (for example, related to assessment procedures and proof of qualification);
- Assignment of a qualification to a level is made based on level descriptors;
- A detailed description of the qualification, using an agreed template, has to be submitted (including qualitative and quantitative data about the qualification).

Based on this classification, a final decision is made on allocating the qualification at an NQF level (national coordination point for the NQF, 2011). Submission for registration is voluntary. Allocation criteria and procedures were tested intensively in 2011. Results however, did not yield the expected

results. A revised model is now being discussed which will clarify procedures, competent bodies and their responsibilities (Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research, 2012*b*).

In addition, with a view to developing a comprehensive and inclusive framework, criteria and procedures for allocating qualifications from non-formal learning contexts (corridor two) to the Austrian NQF were tested and simulated during 2013. A total of fifteen qualifications provided by various adult education institutions were selected and analyzed, focusing on learning outcomes and validity of the respective assessment and validation procedure. Results of this simulation will be used to elaborate further procedures, documents and criteria for allocating qualifications awarded outside the formal education system to the NQF.

The Austrian NQF has not yet reached the operational stage. Important next steps include agreeing on allocation procedures and a legal framework.

Level descriptors and learning outcomes

The NQF has eight levels. The decision on the number of levels was based on a broad consultation process and a study providing information on implicit hierarchy in the national qualification system, using statistical educational research and statistical frameworks (European Commission and Austrian Federal Ministry of Education, the Arts and Culture, 2011). Austrian qualification descriptions (curricula, training regulations, legal acts) were analyzed to feed into the preparation of level descriptors. They are defined as knowledge, skills and competence. Reference qualifications are used to illustrate levels of learning outcomes.

Through implementation of the NQF, Austria is strengthening the learning outcomes approach across education and training: central to positioning qualifications in the NQF. Many qualifications are already oriented to learning outcomes, but the approach has not been applied consistently across all sectors and institutions. This is still ongoing work. Several initiatives are supposed to strengthen learning outcomes orientation. In general education and VET, educational standards were recently introduced. In general education, core subject areas (German, maths and English) are described in terms of learning outcomes.

In school-based VET, learning outcomes are defined in VET educational standards, implemented through a step-by-step approach in recent years (BMBF, 2014). Educational standards for VET schools and colleges define 'content' (subject and knowledge areas and topics with specified goals), 'action' (cognitive achievements required in particular subjects), and personal and social competences related to a specific field. In March 2009, the General Directorate for VET at the Federal Ministry of Education, Arts and Culture started a project (curriculum design – learning outcomes orientation) which aims to integrate educational standards into VET curricula. Thus, some curricula for VET colleges have been revised and learning outcomes have been developed for each subject. This is still an ongoing process. In addition, Austria is preparing a competence-oriented and standardised Matura – upper secondary school leaving examination ('*Reifeprüfung*') as of 2014/15 – meant to increase transparency and access to higher education.[2]

In apprenticeship (dual system), a training regulation is issued for each profile by the Federal Ministry of Science, Research and Economy. They are largely written in terms of learning outcomes and are currently under reform to strengthen the outcome orientation of apprenticeship training. They consist of an occupational competence profile (*Berufsprofil*), with related activities and work descriptions, and a job profile (*Berufsbild*), with knowledge and skills to be acquired by apprentices.

In higher education, implementation of the learning outcomes approach is clearly linked to the Bologna Process and the Dublin descriptors. Higher education institutions have already described their programmes and qualification profiles in terms of learning outcomes (knowledge, skills and competences) established under university autonomy (Bologna follow-up group, 2012). Implementation differs across higher education institutions.

Validation of non-formal and informal learning and links to the NQF[3]

Austria does not have an overall national strategy on validation of non-formal and informal learning, although there are several initiatives and regulations that enable formal education and training institutions to recognize learning outcomes acquired in non-formal and informal learning settings, as well as initiatives outside the

2 http://bit.ly/1iQqtxi [accessed 21.7.2014].
3 This section draws mainly on input from European Commission et al., 2014.

formal system that use validation of non-formal and informal learning. Work towards an integrated national validation strategy only started recently (2013) and is closely linked to both implementation

of the Austrian lifelong learning strategy 2020 (BMBF, 2012) and the NQF. A working group was set up. Within the comprehensive NQF, learning outcomes from non-formal and informal learning contexts should be given the same value as learning outcomes acquired in formal education and training. Work on all three 'corridors' is ongoing and results will feed into achieving the overall objective of implementing a comprehensive NQF, which makes learning from various learning pathways visible.

Almost all certificates and qualifications from the formal education system – corridor one – (except for university degrees) can be obtained by 'external examination' without obligatory participation in education programmes (such as acquisition of a *Hauptschule* qualification by adults, exceptional admission to the final apprenticeship exam, etc.) (European Commission et al., 2014). Validation is also used to obtain exemptions and shorten programmes (such as skipping grades for pupils in general education or VET who demonstrate relevant achievements, shortening degree programmes at universities of applied science based on recognition of professional experience, etc.). It is also possible to gain access to higher education programmes in an 'alternative' way. *Berufsreifeprüfung* (BRP) and the higher education entrance examination (S*tudienberechtigungsprüfung*) (SBP) are both examinations that can be taken by graduates of specific apprenticeships[4] and VET schools, and by early leavers, of VET colleges who traditionally are not granted university access through their initial education. Preparatory courses for BRP are also offered outside the formal education system. It is also possible to acquire certificates/qualifications without any equivalence in the formal education system, such as the professional title *Ingenieur*, and adult education certificates issued by the Academy of Continuing Education. (European Commission et al., 2014).

Development work and pilot projects are being carried out to develop validation procedures and assign levels to qualifications acquired in non-formal contexts (corridor two) to NQF levels. The procedure is still under review and pending finalisation of piloting. Although still under discussion, it seems the procedure will be based in a voluntary formal application procedure that states reasons and furnishes proof for assignment of a qualification to a level. In addition, several quality-assurance checks are being designed and tested.

Austria has also initiated several research projects to investigate the current status quo of validation of learning outcomes from informal learning (corridor three) and how they are (or are not) aligned to the Council recommendation. Results will form the basis of a national consultation leading to a national strategy, making use of the recommendation and the guidelines.

Referencing to regional frameworks

Austria referenced its national qualification levels to the EQF and self-certified to the qualification framework of the European Higher Education Area (QF-EHEA) in June 2012, in one comprehensive report.

Table 3 Level correspondence established between the Austrian qualifications framework and the EQF

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

Source: Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research, 2012*a*.

Important lessons and future plans

First, one strength of Austrian NQF development is the involvement and engagement of a broad range of stakeholders, representing all sub-systems 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 NQF's role. This is a main

4 Graduates from apprenticeship are sometimes granted access to universities of applied science without having to undergo BRP or SBP.

reason for the current lack of movement in NQF implementation. Traditionally, Austria also has a strong separation between different segments of education, in particular between VET and higher education. Some higher education representatives consider that NQF implementation might reduce this segmentation, which they are eager to preserve (Cedefop, 2014).

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

Third, regarding NQF Level 5 there is a political discussion on whether the secondary academic school leaving certificate (general education) will be allocated to the same level as the VET college *Reifeprüfung* certificate and VET diploma, which are assigned to NQF Level 5.

Finally, the NQF was designed to be comprehensive. This is underlined by the following principles: the adopted Y-structure of the NQF; the working structure of three corridors (see above); long-term inclusion of general education; and methodologies being developed for inclusion of non-formal qualifications as well as validation of informal learning (Federal Ministry of Education, Arts and Culture and Federal Ministry of Science and Research, 2012*b*).

Main sources of information

The Austrian NCP was set up as an organizational entity at OeAD. http://www.oead.at/nqr [accessed 5.2.2014].

List of abbreviations

BMBF	Bundesministerium für Bildung und Frauen [Austrian Federal Ministry of Education and Women's Affairs]
BRP	Berufsreifeprüfung [examination providing access to higher education for skilled workers and graduates of three- and four-year full-time VET schools]
EQF	European Qualifications Framework
SBP	Studienberechtigungsprüfung [higher education entrance examination]
NQF	national qualifications framework
OeAD	Österreichischer Austauschdienst [Austrian Agency for International Cooperation in Education and Research]
VET	vocational education and training

References

[URLs accessed 18.7.2014]

BMBF. 2012. *Strategie zum lebensbegleitenden Lernen in Österreich* [Strategy on lifelong learning in Austria]. http://www.aucen.ac.at/fileadmin/user_upload/p_aucen/lllarbeitspapier_ebook_gross.pdf

BMBF. 2014. *Berufsbildende Schulen [Vocational schools]:* downloads. http://www.berufsbildendeschulen.at/de/downloads.html

Bologna follow-up group. 2012. *National report regarding the Bologna process implementation 2009–12: Austria.* http://www.ehea.info/Uploads/National%20reports/Austria.pdf

Cedefop. 2014. *Qualifications at level 5: progressing in a career or to higher education.* Working paper, No. 23. Luxembourg, Publications Office. http://www.cedefop.europa.eu/EN/Files/6123_en.pdf

Die Sozialpartner Österreich [Austrian social partners]. 2013. *Bildungsfundamente: Ziele und Maßnahmen für eine zukunftsorientierte Bildungsreform [Education foundations: objectives and measures for future-oriented education reform].* Vienna, Austrian Economic Chamber p. 12. http://www.sozialpartner.at/sozialpartner/Bildungsfundamente/Bildungsfundamente%202013.pdf

European Commission. 2013. *Education and training monitor 2013. Austria.* http://ec.europa.eu/education/tools/et-monitor_en.htm

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014. Country report: Austria.* https://cumulus.cedefop.europa.eu/files/vetelib/2014/87047_AT.pdf

European Commission; Austrian Federal Ministry of Education, the Arts and Culture. 2011. *EQF referencing process and report.* Vienna: Austrian Federal Ministry of Education, the Arts and Culture, p. 46. http://www.eqf-ref.eu/index.php?option=content&view=article&id=3&Itemid=6

Federal Ministry of Education, Arts and Culture; Federal Ministry of Science and Research. 2012a. *Austrian EQF referencing report*. http://ec.europa.eu/eqf/documentation_en.htm

Federal Ministry of Education, Arts and Culture; Federal Ministry of Science and Research Research. 2012b. *Austrian EQF referencing report: supplementary information.* http://ec.europa.eu/eqf/documentation_en.htm

Klenk, J. 2013. *Nationale Qualifikationsrahmen in dualen Berufsbildungssystemen. Akteure, Interessen und politischer Prozess in Dänemark, Österreich und Deutschland [NQF in dual VET systems. Actors, interests and political process in Denmark, Austria and Germany].* Bielefeld, Bertelsmann W.

National Coordination Point for the NQF. 2011. *Manual for including formal qualifications in the NQF: criteria.* http://bit.ly/1hfoNfO

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

BANGLADESH

Introduction

The National Technical and Vocational Qualifications Framework (NTVQF) is currently being implemented in Bangladesh. It was initiated in 2008 as one of the most important building blocks of the Technical and Vocational Education and Training (TVET) Reform Project, funded by the European Commission (EC) and implemented by the International Labour Organization (ILO) in collaboration with the Government of Bangladesh[5] (Ministry of Education, 2011).

The NTVQF is intended to cover the existing workforce and those entering the workforce. The framework allows for the recognition of skills workers have acquired in the informal sector, and includes post-secondary qualifications up to diploma level. The new qualifications are to be offered in formal education and training, as well as workplace training and all training provided by public and private organizations, whether officially recognized or not (Ministry of Education, 2011).

Bangladesh has a large informal economy and an illiteracy rate of 65 per cent. Three-quarters of the population is rural; about 31 per cent lives below the international poverty line. This means that every third person is struggling every day to survive.

Bangladesh is highly dependent on the remittances migrant workers send back to the country (indeed, these constitute the largest source of foreign capital [Ministry of Education, 2011]). Numerous government reports and industry bodies have called for improvements to the skill levels of Bangladeshi workers so that the value of these remittances will increase (BMET, 2008).

The technical and vocational education and training sector is beset by a number of difficulties. These include: insufficient quality assurance; lack of autonomy for training centres to adapt courses to local needs; overly rigid traditional school-based curricula and vocational standards; excessively long course durations; lack of continuing professional teacher training; lack of access to skills for underprivileged groups; lack of regulation and certification of informal apprenticeships; and insufficient recognition of existing skills and informal learning, preventing labour mobility. The government recognizes that these shortcomings lead to a serious wastage of skills in the economy (Ministry of Education, 2011).

At present, underprivileged youth and adults constitute the majority of the workforce in export-oriented industries (such as the garment business, light engineering, electronics, construction, services and transport), where they frequently underperform or remain underemployed because they lack the requisite skills (ILO/Mia, 2010).

Main policy objectives

The NTVQF, an essential component of the government's National Skills Development Policy (Ministry of Education, 2011), is intended to accomplish a wide range of goals in relation to TVET reform, the introduction of competency-based training and assessment, and quality assurance. The NTVQF aims specifically to:

- expand the number of qualifications available to reflect the changing occupational and skills profiles in both domestic and international labour markets;
- support stronger integration of skills training in community organizations, schools, training institutions and the workplace by providing a common national benchmark for qualifications up to, but not including, university degrees;
- provide formal recognition of workplace skills obtained in both the formal and informal economies;
- improve employability skills and increase their productivity;
- provide a new benchmark for international recognition of the skills and knowledge of Bangladeshi workers, who are recognized as an increasingly important export for the country;

5 Ministry of Education in coordination with the Ministry of Labour and the Ministry of Overseas Workers.

- introduce consistent naming of credentials for formal skills-based education and training;
- encourage employers to participate in the development of the NQF;
- improve the alignment of formal training programmes with industry requirements;
- support lifelong learning by providing recognized pathways for workers to raise the level of their knowledge and skills throughout their working lives and beyond (Ministry of Education, 2011).

The NTVQF is aligned with other broader national policies for the expansion of TVET opportunities at post-primary level, focusing on improving the employability and income level of adolescents, youth and adults (of both sexes), child labourers, those with low levels of literacy, and those in rural areas (ILO, 2009). These other national policies are the Education Policy of 2009, the Non-Formal Education Policy of 2006, the Youth Policy of 2003, the National Training Policy of 2008 and the NSDC Action Plan of 2008 (Ministry of Education, 2011).

Stakeholder involvement

The Government of Bangladesh is committed to working with the International Labour Organization and the European Union to develop the NTVQF. The International Labour Organization (ILO) is working in coordination with the Directorate of Technical Education (DTE), and the Bureau of Manpower, Employment and Training (BMET), as well as several NGOs. These organizations are now familiar with the NTVQF. A new project with the Canadian International Development Agency (CIDA) will expand the implementation of the NTVQF into another four industry sectors.

The NTVQF was developed through a series of consultations and meetings in late 2008 and 2009. During the development of the NTVQF a number of reference documents were produced by the TVET Reform Project. At present, nine Industry Skills Councils (ISCs) have contributed to the development of standards in at least nine industry sectors (ILO, 2013.) Technical committees on all nine ISCs have developed measurable quality benchmarks which must be achieved for domestic and international recognition. ISCs are responsible for aligning their skills needs in accordance with the NTVQF levels and occupations. They are also responsible for the Skills Data System, which has been operational for three years, enabling training institutions to prioritize courses with high industry demand.

The National Skills Development Council (NSDC) replaced the old National Council for Skills Development and Training in 1979. The Council oversees and monitors all skills development initiatives, including the NTVQF, particularly in relation to its market-responsiveness. The Bangladesh Technical Education Board (BTEB), under the direction of the NSDC, is the major implementing authority for the NTVQF and will be responsible for its periodic review. To safeguard the integrity of the NTVQF, the Technical Education Regulations of 1975 will be revised to ensure that the BTEB is empowered to take action against private training organizations that inappropriately use either the new NTVQF qualification titles or the nationally recognized training logo.

Competency-based courses are registered with the BTEB. Major government line ministries have now accepted the NTVQF as a model for future development of qualifications and have made moves to change their old curriculum-based courses into fully recognized competency-based ones. Approximately 50 per cent of training providers are registered with the BTEB and are delivering recognized competency-based training and assessment. Recently, the BTEB also accepted the competency-based qualification for the training of trainers. As a result, industry-based trainers are for the first time outnumbering TVET institution-based trainers. The BTEB is also implementing the Skills Quality Assurance System and reports to the NSDC twice yearly. Private training providers who wish to issue nationally recognized qualifications under the NTVQF must be registered and accredited under the new Bangladesh Skills Quality Assurance System (ILO, 2013). The NSDC will work with key institutions, including the National Productivity Organization (NPO) under the Ministry of Industries, to ensure that skills upgrading translates into high-performance work practices and improved productivity.

Level descriptors and learning outcomes

The National Technical and Vocational Qualifications Framework consists of six levels plus two pre-vocational levels, making it an eight-level framework (see Table 4 below). The descriptors for each of the six main levels are knowledge, skills and responsibility. The table also illustrates the relationship of the NTVQF to the existing qualifications structure.

The two pre-vocational levels cater to the underprivileged and low-educated groups in society who have not completed eight years of school (eight years is the minimum to gain entry into a vocational training institute) and who lack the basic literacy and numeracy skills necessary to enter the lowest level of the qualifications

Table 4 Bangladesh National Technical and Vocational Qualifications Framework

NTVQF Levels	Pre-vocational education	Vocational education	Technical education	Job classification
NTVQF 6			Diploma in engineering or equivalent	Middle-level manager
NTVQF 5		National Skill Certifícate 5 (NSC 5)		Highly skilled worker/ supervisor
NTVQF 4		National Skill Certifícate 4 (NSC 4)		Skilled worker
NTVQF 3		National Skill Certifícate 3 (NSC 3)		Basic-skilled worker
NTVQF 2		National Skill Certifícate 2 (NSC 2)		Basic-skilled worker
NTVQF 1		National Skill Certifícate 1 (NSC 1)		Basic worker
Pre-Voc. 2	National Pre-Vocational Certificate NPVC 2			Pre-vocational trainee (2)
Pre-Voc. 1	National Pre-Vocational Certificate NPVC 1			Pre-vocational trainee (1)

Source: ILO, 2011

framework. The following five levels, NTVQF 1–5, lead to certificates that closely align with existing TVET programmes for school students. Under the NTVQF, registered training organizations will also be able to conduct training for specific units of competences.

In general education, a new system of dual certification will be introduced so that students who achieve the skills component of vocational education programmes will receive an NTVQF qualification in addition to, and separate from, the school qualification (Ministry of Education, 2011).

Recognition and validation of non-formal and informal learning

Many Bangladeshis leave school before completing Grade 8 of general education, and as a result are not able to enrol in formal skills programmes. In order to overcome this barrier, the government will work with its partners to introduce reforms to remove the Grade 8 prerequisite from formal courses and replace it with course-specific entry requirements and challenge tests in which workers are challenged to demonstrate what they say they know with respect to the courses they expect to be admitted into. They help to determine the level of the qualification the worker is expected to acquire and the courses they can enter.

In this way, the NTVQF will allow those with limited education to undertake formal courses leading to nationally recognized qualifications.

The NTVQF is related to the existing qualifications structure. This permits transfer between general education and TVET. Students who fail the academic component of the Senior Secondary School Certificate (Vocational) or Higher Secondary School Certificate (Vocational) may nevertheless be assessed as competent in the National Skills Certificate of the NTVQF. They will receive the appropriate NSC award and can continue their studies to gain National Skills Certificates at the higher NTVQF levels. Vocational education programmes in schools, such as the SSC (Voc), HSC (Voc) and HSC (BM), will be revised to ensure that their vocational components are based on industry competency standards, and that students only receive NTVQF qualifications if they have been assessed as competent. Pre-vocational Levels 1 and 2 are available in all training institutions to encourage students with low education levels to enter skills training courses.

The NSDC, with the support of the BMET, is improving the level of skills in the informal economy. In coordination with the ILO, a project on the recognition of prior learning has been undertaken. This is a sub-component of a larger project dealing with increased access of underprivileged groups to TVET (Arthur, 2009). The NTVQF is expected to provide a uniform framework for establishing course assessment requirements and entry points. The recognition of prior learning (RPL) processes for the informal sector should result in the recognition of competences gained but not previously recognized in the informal sector of the Bangladeshi economy. This should provide some of these participants with opportunities to enter formal sector employment that had previously been unavailable to them. In this way, RPL processes should result in access to both employment and qualifications, or credits towards them (especially in the light of Year 8 requirements to access formal skills courses). Arthur (2009) draws attention to the importance in the informal sector of the portfolio system, known as the Competency Log Book. This documents evidence of competences using master craftspeople, technical training and skills centres and NGOs as assessors, and incorporating reasonable adjustment processes for informal sector workers.

Skills acquired through informal and non-formal training have been identified each year since 2011 and more than 100,000 people per year are having their skills recognized. In the future, it is predicted that this figure will rise to at least 200,000 per year. Trainers are equipped to identify and assess all new students for skills they already possess and to support them through the RPL process. Assessment centres are available in a number of locations. Some centres stand alone; others form part of existing TVET institutions. Seventy-five per cent of government training institutions have been restructured to offer flexible learning options through courses scheduled at night (ILO, 2013).

Currently, about 80 per cent of new formal apprentices are enrolled in an NTVQF qualification with the BTEB; 90,000 informal apprentices are also registered for a qualification. These are people who have been assessed as competent in one or more standard units (making up a full qualification) through an RPL process, and who have the option in future to complete a full qualification (ILO, 2013).

Barriers are being removed for skilled workers who want to migrate overseas, or who want to move back to Bangladesh and have the skills they gained overseas recognized. A number of host countries now recognize NTVQF qualifications. Skilled workers returning to Bangladesh are offered RPL assessment to recognize any new skills they have gained overseas. Under the 'ladderisation' system, they receive either a formal qualification or credit towards one. The processes of workplace learning, recognition of learning and certification can be repeated in several cycles until, after some years, the skilled worker is able to move into a supervisory role. This 'ladderisation' system will be based on modularized competency-based training within the NTVQF (Ministry of Education, 2011).

It is hoped that public-sector training will change greatly. Job descriptions are now required to feature descriptions of opportunities for training and promotion. This requirement includes general TVET-level qualifications in management, planning, leadership, budgeting and communication. Private providers affiliated with the BTEB will be required to offer RPL to all prospective students.

Referencing to other regional frameworks

The experts and consultants who worked on the NTVQF project claim that it draws on similar frameworks in Sri Lanka and the Maldives, which together with Bangladesh are members of the South Asian Association for Regional Cooperation (SAARC). The NTVQF is also similar to the frameworks of Vanuatu, Sri Lanka and Malaysia (ILO/Mia, 2010, p. 30).

Important Lessons and future plans

The present NTVQF initiative represents a significant step towards meeting national goals for poverty reduction and economic development. The Bangladesh NTVQF supports a nationally consistent and transparent system for skills training and qualifications that is acceptable for both national and international employment.

The NTVQF has generated enthusiasm among stakeholders, which include not only government and NGOs but also Industry Skills Councils. There was some initial scepticism about going to scale (i.e. full implementation across all occupations, curricula and institutions) (ILO/Mia, 2010). In the future, Bangladesh will take the following key steps to implement the NTVQF:

- Create awareness-raising and social-marketing campaigns to promote the NTVQF for industries and parents of secondary school students.
- Include relevant targets from Policy Review Sector Papers (PRSP) in the NSDC Action Plan,

the most important component of which is the NTVQF. These targets are: that TVET students should comprise 20 per cent of all secondary school students (they currently comprise 3 per cent); that total enrolment in TVET should increase by 50 per cent; and that women's enrolment should increase by 60 per cent.

- Formulate a new approach to the management of skills development, including a skills development investment plan which clearly links the NSDC Action Plan (including the NTVQF) to government budget allocations (ILO, 2013).

References

Arthur, J. 2009. Recognition of Prior Learning. A Sub-component of Component 5. Increased Access of Underprivileged Groups to TVET. (Unpublished). Dhaka, International Labour Organization.

Asian Development Bank. 2008. *Bangladesh Vocational Education System: Improvements to Increase Job Prospects.* Manila, ADB.

Bureau of Manpower, Employment and Training (BMET). 2008. *National Forum on Improved Skills for Overseas Workers in Dhaka, Bangladesh.* Dhaka, Directorate of Technical Education (DTE), Government of Bangladesh.

European Union/International Labour Organization/Government of Bangladesh. 2009. *Bangladesh Skills Development Policy. Final Draft. Decent Work.* Dhaka, Government of Bangladesh and ILO.

International Labour Organization/Mia, A. 2010. *Qualifications Frameworks: Implementation and Impact. Background Case Study on Bangladesh.* (Skills and Employability Department). Geneva, ILO

International Labour Organization. 2011. *TVET Reform Project. Technical and Vocational Education and Training (TVET) Reform and Development – Component 5.* Dhaka, ILO.

International Labour Organization. 2013. *Bangladesh: Skills Vision 2016.* Dhaka, Ministry of Education and ILO. http://www.moedu.gov.bd (Accessed 14 August 2013.)

Ministry of Education. 2011. National Skills Development Policy: 2011. Dhaka, Ministry of Education.

World Bank. 2006. *The Bangladesh Vocational Education and Training System: An Assessment.* Washington DC, World Bank.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

BELARUS

Introduction

Belarus's population is just under 9.5 million and is predominantly (three-quarters) urban. The country is aging, and the population is in decline, putting pressure on younger generations. Due to relatively low wages in comparison to most of its neighbours, migration has aggravated this decline. Internal migration from the countryside to cities has contributed to lower birth rates.

The Belarusian labour market is characterized by low levels of unemployment, and a shrinking labour force. The working-age population still makes up 60 per cent of the total population but is in decline. Labour shortages are increasing. The employment rate is over 80 per cent. The proportion of the population over the retirement age is 6.7 per cent. Unemployment is very low. The assignment of the labour force to certain jobs and the labour demand forecast based on vacancies are a legacy of Soviet times. The practice of job placement of VET graduates in state enterprises also still continues. The problem is not that people cannot find jobs in their field of specialisation, but that the skills of the labour force are not sufficiently developed to support innovation of the economy and make it competitive at a global level.

Between 2000 and 2008 Belarus's GDP grew more than 8 per cent per year, but the crisis affected exports from Belarus, and only since 2012 has the economy recovered and there been modest growth. The principal contribution to GDP comes from industry and trade. Given the dominance of state-owned enterprises, the private sector and especially small and medium-sized enterprises remain marginalized.

Today, Belarus is in what analysts term a 'middle-income trap': economic growth in the country becomes slower and eventually stops after reaching the middle-income level. In order to overcome this situation the country is shifting to a strategy of innovation and a search for new market outlets to support the rise in exports, as well as growth in domestic demand. The biggest challenge is to make a transition from economic growth focused on resources and depending on low-cost labour and capital, to growth, based on high-rate productivity and innovation. This requires investment in infrastructure and education.

President Lukashenko has set out a vision of what is needed: 'Tomorrow Belarus will be in the hands of people who are full of initiative and sense of purpose, those who want to make life better and are ready to do their best for this. Their efforts will be rewarded. A new course of action requires original ideas, developments, materials, software products. And there is a need for wise heads to generate these.'

Education and training is being reformed, by increasing relevance to the labour market, revising curricula and teaching materials, renovating buildings and modernising equipment. Special attention is paid to upgrading the skills of teachers and trainers, and increasing teacher salaries to prevent shortages. The flows of young people entering higher, secondary specialized and technical vocational schools are regulated by the Ministry of Education. Two-thirds of lower-secondary graduates continue their education in general secondary schools, while one-third go to technical vocational schools (18 per cent) and secondary specialized schools (16 per cent). After finishing general secondary education, 55 per cent of graduates go to higher education, about 25 per cent to secondary specialized schools, and 16 per cent to secondary VET schools. More than 70 per cent of vocational education institutions are involved in delivering adult learning. Annually, more than 10 per cent of employees undergo further training.

Main policy objectives

So far, Belarus has maintained a traditional system based on the classification of specialities and qualifications, the qualifications characteristics of workers and educational standards. But new elements have been introduced in the coordination councils of the Ministry of Education and its regional structures. These include efforts to improve the analysis of labour-market needs, including the computerized management of job vacancies and schools' quality assurance through ISO certification.

The implementation of policies to make the economy more innovative implies more investment in initial and continuing education and training. Transition from a technology-based economy to a knowledge-based economy requires training of appropriate highly skilled specialists and workers who are capable of delivering the strategic and innovative development of the economy, primarily for its real sector. The Programme of Social and Economic Development of the Republic of Belarus for the period 2011–2015, includes measures to create a flexible system of training, retraining and further development in compliance with the requirements of the innovative development of the country.

The national system of qualifications is seen as a key element for the innovation of the education and training system in Belarus. There is an expectation that improvement of the national system of qualifications will lead to more transparency of qualifications, and increase the trust of employees and society in qualifications, providing a mechanism to ensure that VET corresponds to labour-market needs.

Stakeholder involvement

The first steps towards a NQF in Belarus started in March 2010, when, under the mandate of the Council of Ministers of the Republic of Belarus, an inter-agency working group was established comprising seventeen government bodies, as well as experts and representatives of employers. With the establishment of this inter-agency working group, a new momentum has been created for conducting the necessary research and preparation work before adopting decisions at state level. This group worked in 2011/12 on a conceptual terminological framework for the national qualifications system and produced draft recommendations on the following topics:

- The national qualifications framework development;
- Sectoral qualifications framework development;
- Occupational standards development;
- The development of the national assessment and certification system for education outcomes.

In May 2011 the Ministry of Labour and Social Protection (MoLSP) prepared a draft action plan for the implementation of the proposals of the inter-agency workgroup for the transition of the Republic of Belarus to a national qualifications system, taking into account the experience of the European Union. The government declared its intention in 2012 to develop an NQF.
The action plan of the Ministry of Labour and Social Protection for the period 2011–2015 included:

- A pilot project on the improvement of the national system of qualifications;
- Development of the draft NQF and preparation of proposals for its approval.

The same action plan contained measures for the development of information and analytical materials on professions and qualifications structure, on anticipation of demand of the regional labour markets, the structure of vocational education supply and so on. In 2013 the National Research Institute of Labour, under the Ministry of Labour and Social Protection of the Republic of Belarus, prepared a National Innovation Project on the development of the NQF. The European Training Foundation (ETF) supported the Institute of Labour in 2013 in the piloting of the establishment of Sector Skills Councils, including the preparation of the main statutory documents and supervising the first phase of the establishment and operation of the councils.

In January 2014, the Council of Belarus issued Decree No. 34, setting out the key issues to be addressed in developing a national qualifications system for Belarus in certain pilot sectors. According to the decree, the Ministry of Labour and Social Protection should test and develop new elements of the national qualifications system in the Republic of Belarus, through:

- Establishment of sector councils for qualifications;
- Development of sectoral qualifications frameworks in accordance with the national framework of qualifications for the pilot economic sectors;
- Development of occupational standards;
- Development of standard cards for professional development and career growth.

The decree states that the Ministry of Labour and Social Protection should ensure coordination of sectoral councils for qualifications and provide methodological support for their work. It should analyze the results of practical testing by December 31 2015 and prepare a proposal for the Council of Ministers on the structure and functional mechanisms of the national qualifications system.

The Ministry of Labour and Social Protection has given a coordinating role to the Institute of Labour (IoL) to provide methodological support to the sector qualifications councils, to pilot implementation of sectoral qualifications frameworks for management and ICT, and to act as a secretariat of sector qualifications councils.

The Institute of Labour provides methodological support to the process of developing occupational standards. It steers the activity of working groups within the sector qualifications councils and the scientific councils, under the innovation project, and provides recommendations to sector qualifications councils on the process and work to be carried out. It is in charge of communicating with the presidents of the sector qualifications councils and of the provision of needed information. In 2014, authorized organizations were nominated to lead the pilot sector qualifications councils: the Hi-Tech Park Belarus was selected for the IT sector and the Academy of Public Administration, under the aegis of the President of the Republic of Belarus, for the managerial activities sector. The authorized organizations established the sector qualifications councils after consultation with IoL about their membership. Appointed members of the sector qualifications council, together with IoL, developed a work plan for the sector qualifications council. The authorised organizations arrange meetings of the sector qualifications council, prepare working materials in coordination with IoL, and draft minutes of sector qualification council meetings.

Analytical work was carried out by the Institute of Labour as part of the innovation project. This included analysis of the role and purpose of NQF, analysis of other countries' experiences and a description of the principles for the NQF development in pilot sectors in order to support the conceptualization of a new model of the national qualifications system in Belarus. Model regulations for the Sector Skills Councils were developed, as well as an analysis of the key elements of the national qualifications system (levels, forms of education) and their link to the NQF levels, as well as an analysis of educational provision in the pilot sectors.

IoL has also been leading the modernization and revision of the system of classification, involving the United Qualification Guide for Positions of Employees, and the United Tariff Qualification Guide for Works and Worker Professions, as indicated in the 2013 State Programme for Employment Promotion.

Stakeholder involvement in education policy development is traditionally rather weak, but social partnership in education and employment development is now a key priority in strategic documents, including the new Code of Education.

Better information exchange and improvement of communication between the education community, stakeholders, non-governmental organizations and employers' bodies is an issue that needs to be addressed more urgently. Employers have difficulty indicating what they expect from VET. Labour-market needs analysis is missing, and there are no consolidated structures for dialogue between education and the labour market.

Level descriptors and learning outcomes

The draft level structure that is annexed to the Council of Ministers' decree for the development of the national qualifications system in Belarus contains eight levels that follow the European Qualifications Framework (EQF) structure, with three domain descriptors for learning outcomes: for knowledge (theoretical and/or practical), skills (cognitive and/or practical), and the level of responsibility and degree of autonomy.

Although the decree foresees as well the development of sector qualifications frameworks, the two pilot sectors have been using the draft NQF descriptors for defining the levels. Currently, there are only draft occupational standards for both sectors. Qualifications standards have not been formulated.

The education system is beginning to introduce competence-based approaches in selected curricula and the VET system plans to initiate a discussion on quality assurance in VET. There is a growing understanding among policy-makers and practitioners that the education system needs a major re-focusing on results and that quality and relevance should drive the VET modernization agenda. Therefore, introducing the learning outcomes approach remains a major challenge for the system in the coming years.

Validation of non-formal learning and links to the NQF

Recognition and validation of non-formal and informal learning is starting to attract interest among stakeholders in Belarus but there is currently no systemic provision for it. However, it is included within the government's reform plans and will be subject to recommendations for the government upon completion of the innovation project.

Referencing to regional frameworks

It is expected that the NQF will be adopted in 2016/2017 and that standards will be developed in the years to come. According to the Belarussian representatives in the national NQF correspondents' network meeting, organised by the Council of Europe in October 2014, Belarus considers that it would need five years at least to complete all

necessary steps for self-certification. Much depends on how Belarus will be able to adhere to the principles of the Bologna Process. A conference of education ministers, held in Yerevan in May 2015, approved Belarus's accession to the Bologna Process.

Important lessons and future plans

Belarus has started to move towards a new qualifications system that is based on learning outcomes, emphasizes core skills and innovation, and improves the links with economic sectors. The Council of Ministers' decree in January 2014 is a sign of commitment and outlines a roadmap towards a new national qualifications system. Using the draft NQF levels, clear links are made to the EQF. Accession to the Bologna Process, and the implementation of the EU-funded VET reform project (expected to start in 2016), with a strong emphasis on improving quality and qualifications for vocational education, are likely to widen the process for developing a new qualifications systems concept beyond the innovation project led by the Institute of Labour. The current timetable for adopting a national qualifications system (NQS) at the end of 2015 seems over-optimistic, as the on going work is unlikely to produce a viable outcome without significant changes in the current approach.

The innovation project focuses currently only on two sectors (management and ICT) that are not clearly defined economic sectors and cover mainly higher- level jobs. From the point of view of innovation policies, it is understandable that these areas are of critical importance, but it is not feasible to develop a national qualifications system based only on these two examples that could incorporate all the qualifications in the country. The way the current sector qualifications councils have been established through the authorized organizations does not seem to create a sufficient basis for sustainable cooperation with the world of work. It is important to clarify their structure and status, taking into account the recommendations made by ETF in 2014.

The emphasis on the scientific nature of the scoping work may impede the development of more practical approaches to progress towards occupational standards and qualifications. The widening of developments in HE and VET, involving the Republican Institute for Higher Education (RIVSh) and the Republican Institute for Vocational Education (RIPO), could lead to competing rather than coordinated approaches. Strong political leadership will be needed to ensure the synergy of approaches. The current division of responsibilities between the Ministry of Labour and Social Policy and the Ministry of Education in leading the development towards the adoption of the NQS seems unbalanced. Moreover, there are still many open issues concerning the institutional and legal set-up for implementing the NQS. There is a need for a wider understanding of current arrangements for qualifications and how they may change after the adoption of the new national qualifications system concept. There is a need to see how the NQS will fit within the existing regulatory framework. In particular, the role of the NQS vis-à-vis the existing classifiers of occupations and educational programmes, needs to be clarified. On the other hand, the Belarusian government has an opportunity to stimulate and speed up the development of new occupational standards and qualifications in other sectors, particularly in those with strong public control and ownership.

It is important to clarify which types of qualifications should be part of the new qualifications system. The focus of the innovation project seems to point at a lifelong learning approach that should incorporate qualifications that have a particular labour-market value. The link to professional development and career growth mentioned in the decree is promising in this context. In particular, the area of 'additional education' (adult learning) needs further development. There has not always been a clear and shared understanding of terminology and it is important to clarify concepts between all stakeholders, starting from the qualifications themselves.

Belarus's accession to the Bologna Process is expected to have a strong impact on the direction of developments as the Bologna requirements set clear international benchmarks for quality-assuring qualifications, defining learning outcomes, the introduction of European Credit Transfer and Accumulation System (ECTS) and the diploma supplement, and for widening stakeholder involvement. At the same time, the Bologna requirements will strengthen the international dimension of the NQS developments.

The EU project for enhancing quality assurance in VET will create also a stronger basis for further reform. In particular, it should support the involvement of economic sectors, more in-company training, the creation of links between adult learning and the provision of vocational education, a stronger modularization of VET curricula and the unitization of qualifications, which is a requirement for the introduction of validation for non-formal and informal learning.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

BELGIUM

Due to the state's federal structure, Belgium is facing the challenge of developing and implementing more than one national qualifications framework (NQF). The federal state comprises three regions (Flanders, the region and the Brussels-capital region) and three communities (Dutch-, French- and German-speaking). Education is delegated to community level, giving each community wide responsibilities for financing and organizing their respective education, training and qualifications systems.

While the Dutch- and French-speaking communities have been working on national frameworks since 2005/06, the German-speaking community started developing its own qualifications framework (*Qualifikationsrahmen Deutschsprachiger Gemeinschaft*) (QDG) only recently, the decree establishing the QDG having been adopted by parliament in 2013. In the development phase, the Dutch- and French-speaking communities have been following different pathways, reflecting the substantial institutional and political differences in education and training between the two.

Despite adaptation to each specific context, all three frameworks present substantial similarities. Further, an amendment to Belgian federal law on the general structure of the education system was adopted in 2012, stating that European Qualifications Framework (EQF) levels will be used as a common reference for the three communities in Belgium, addressing the challenge of linking the three frameworks, and potentially easing mobility of Belgian citizens within the country. At this stage, however, all three frameworks will be referenced separately to the EQF.

Belgium (Flanders)

Introduction

On 30 April 2009 the Flemish Parliament and Government in Belgium adopted an act on the qualification structure (*kwalificatiestructuur*) (Government of Flanders, 2009)[6] introducing a comprehensive qualifications framework. The framework, based on an eight-level structure, described in two main categories of knowledge/skills and context/autonomy/responsibility, was formally referenced to the EQF in June 2011. To be put into practice, however, the original 2009 act required additional political and legal clarifications. Most remaining issues were addressed during 2011, paving the way for a six-month pilot phase from autumn 2011. Actual implementation of the framework started in January/February 2012 and has gained speed since then. The Flemish qualifications framework (FQF) can now be deemed fully operational. Unlike in most other countries, qualifications are assessed individually (as opposed to 'block-wise' placement). This is clearly time - and resource - demanding, but can strengthen the credibility of the framework.

The road from formal adoption to implementation has proved more time-consuming than originally predicted. These delays have partly been caused by a need for further legal instruments (implementation decrees on professional as well as educational qualifications), and partly by negotiations with the social partners on how to link and level professional qualifications to the framework. The March 2014 update of the European Qualifications Framework (EQF) referencing report (Government of Flanders and AKOV, 2014), reports on significant progress during 2013 and 2014; by mid-2014 approximately 120 professional qualifications had been included in the framework. The number of educational qualifications is now also increasing.

Main policy objectives

The 2009 act on the qualifications structure defines the Flemish qualification system as 'a systematic classification of recognized qualifications based

6 The Flemish community of Belgium is responsible for education and training policy and legislation in the Flemish region and for Dutch-speaking education institutions within the Brussels-capital region. The Flemish qualification structure is a classification of Flemish qualifications using an eight-level qualification framework.

on a generally adopted qualifications framework (FQF)'. The qualification structure (including the qualifications framework) aims at making qualifications and their common relations transparent, so that stakeholders in education (students, pupils and providers) and the labour market (social partners) 'can communicate unambiguously about qualifications and the associated competences' (2009 act on the qualifications structure, Chapter I, Article 3).

The act underlines that the qualification structure (including the qualifications framework) should act as a reference for quality assurance, developing and renewing courses, developing and aligning procedures for recognizing acquired competences, and for comparison (nationally and at European level) of qualifications. Quality assurance of pathways leading to recognised qualifications is being followed up by the Flemish Agency for Quality Assurance in Education and Training (Agentschap voor Kwaliteitszorg in Onderwijs en Vorming) (AKOV). This agency now covers all types and levels of qualification, except higher education qualifications at levels 5–8, and is crucial to overall credibility and success of the overarching framework, domestically as well as at European level (in relation to the EQF).[7] For qualifications at levels 5–8 a joint accreditation organization has been set up with the Accreditation Organization of the Netherlands and Flanders (Nederlands-Vlaamse Accreditatieorganisatie) (NVAO).

Stakeholder involvement

The FQF process has involved a broad range of stakeholders at all stages, coordinated by the Ministry of Education and Training. Other relevant ministries (Ministry of Labour and Social Economy and Ministry of Culture, Youth, Sports and Media) have also been involved. From the education and training side, participation 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[8] between professional and higher or general educational qualifications has been a challenge and involvement of stakeholders representing different levels and types of qualifications has been important. A qualification framework for higher education linked to the Bologna Process was developed and put in place in 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.

Framework implementation

The road from adoption to implementation and operational status has proved to be complex for the Flemish NQF.

First, transformation of the 2009 law into practice required further legal steps and the introduction of a series of 'implementation decrees': a decree covering professional qualifications at levels 4 and 5 came into force in January 2012 and gave a mandate to start linking these professional qualifications to the FQF. A second and third decree – covering professional qualifications above level 5 and educational qualifications at levels 1–4 – came into force in 2014. These legal amendments have made it possible to put in place precise and detailed procedures for placing and including qualifications in the framework.

Second, clarification of the social partners' role in relation to linking professional qualifications to the framework was needed and required substantial effort to be resolved. Flemish professional qualifications are developed within a tripartite system giving the social partners in the Flanders Social and Economic Committee (SERV) a decisive role. All professional qualifications build on competence standards defined and approved by the social partners. Professional qualifications have to reflect these competences and no single qualification can be approved without input and approval from the social partners. The 2009 law did not specify how the social partners contribute to allocating qualifications to NQF levels so it was necessary to agree on how to approach this task. A general agreement between the government and SERV on how to proceed was reached in 2011 and provides the basis for the ongoing process. In January 2014, a total of 116 professional qualifications had been included in the framework. A total of 30 qualifications were at that stage considered for inclusion. A further 100 professional qualifications were also under development and will be considered for inclusion at a later stage.

While time-consuming and challenging, continuing inclusion of professional qualifications in the FQF can be deemed a success as it demonstrates that stakeholders are fully involved and responsible for

7 In October 2014, following Belgian federal and regional elections, it became clear that AKOV would be discontinued. It is now not clear how this will influence future work on the qualifications framework.

8 This overlap results because professional qualifications are integrated into educational qualifications, outside higher education at levels 6–8. It is acknowledged that further alignment between professional and educational qualifications is needed.

implementation of the framework. The Flemish approach is also interesting as it demonstrates how competence standards developed for occupational purposes are being translated into professional qualifications. Whether it is possible to continue this process for professional qualifications above Level 5 remains to be seen and will demonstrate whether the opening up – in principle – towards professional qualifications at levels 6–8 can be translated into practice.

Level descriptors and learning outcomes

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

Descriptors

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

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, start further education and/or 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 potential for high-level professional qualifications in parallel with qualifications from traditional academic institutions.

Learning outcomes and competences

Progress on practical implementation of principles of learning outcomes/competences has been notable in recent years. The 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. Use of competences in initial VET in recent years has been inspired by Dutch developments (in particular the upper secondary vocational education [*middelbaar beroepsonderwijs*] [MBO] reform). Discussions between SERV and the government in 2010 and 2011 on implementing the framework can be seen as part of this process: how can occupational competence standards be translated into professional qualifications based on learning outcomes and then attributed a level in the FQF? Learning outcomes are also present in general education, for example in setting learning objectives in national core curricula. 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 has taken place in recent years in Flanders.

Validation of non-formal and informal learning and links to the NQF[9]

In Flanders, the term *Erkennen van Verworven Competenties* – recognition of acquired competences (RAC) – is used to refer to validation of non-formal and informal learning. RAC can be used to gain admission to an education and training programme, to request exemptions from (parts of) the study programme and to obtain a work experience certificate. Each sector – education, work, culture, sports, etc. – have their own policies for RAC and, thus, arrangements in each sector differ. A concrete step in the development of an integrated policy was the approval of the NQF and subsequent implementation aimed at integrating different systems for validation. There has been increased cooperation between sectors and willingness to create a single framework linking validation processes to the Flemish qualifications structure. The NQF describes eight levels of qualifications that can be obtained through formal, informal or non-formal learning. Since 2011, the departments of education and training, work and social economy, and culture, youth, media and sports started discussing development of an integrated approach towards RAC, based on qualifications from the NQF.

9 This section draws mainly on input from European Commission et al., 2014.

A secondary school diploma can be obtained through an exam committee if not finished within the prescribed years. A process for recognising non-formal and informal learning has been in place in universities and university colleges since September 2005. Each institution elaborates its own rules of procedure. Procedures result in proof of acquired competences (*bewijs van bekwaamheid*) which can then lead to appropriate exemptions/shortened study duration and credit certificates and/or a proof of qualification. There are also exams for people over 21 to access higher education, although there is debate as to whether this constitutes RAC of the secondary school diploma or not.

On formal education, the Flemish decree of 15 June 2007 defines exemptions linked to modular organization of educational programmes. All programmes (modules) at centres for adult education are developed based on course profiles approved by the Flemish Government. Centres for adult education provide an evaluation for each module. Exemptions can be granted based on credits for prior learning and/or evaluation of competences.

Arrangements set up by the departments essentially aim at recognition of non-formal and informal learning through a 'certificate of work experience' (*Ervaringsbewijs*) created by a decree approved on 30 April 2004. People can receive a certificate of work experience if they demonstrate they have acquired the skills needed to perform an occupation. Professional competence profiles are translated into standards by SERV and the social partners. Although certificates of work experience are granted by the government, they are, at this stage, not equivalent to a diploma. While awaiting a new integrated framework (RAC based on the NQF), certificates of work experience services will be continued.

Referencing to regional frameworks

Referencing of the FQF to the EQF was completed in June 2011 (Government of Flanders and AKOV, 2011). The referencing process was coordinated by AKOV. AKOV is also the EQF national coordination point for Flanders. Self-certification of the Dutch and Flemish national qualifications frameworks for higher education vis-à-vis the overarching framework for QF-EHEA was completed in 2009.

Table 5 Level correspondences between the FQF and the EQF

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

Source: Government of Flanders and AKOV, 2011.

Important lessons and the way forward

Although there is a long tradition in Flanders and Belgium of involving stakeholders and social partners in education and training policy and legislation, development and implementation of the FQF required extensive dialogue with all stakeholders. Given progress made in the past two years, this delay seems now to have been turned into a strength. Acceptance and involvement of social partners in implementation of the framework provides a good basis for future developments. The FQF can be seen as one of the first new European NQFs – established in response to the EQF – now reaching full operational stage. While far from complete, the Flemish process illustrates the long-term character of NQF developments.

Main sources of information

Government of Flanders, 2009.
AKOV acts as national contact point: http://www.ond.vlaanderen.be/wegwijs/AKOV/# [accessed 22.10.2014].

List of abbreviations

AKOV Agentschap voor Kwaliteitszorg in Onderwijs en Vorming [Agency for Quality Assurance in Education and Training]
EQF European Qualifications Framework
FQF Flemish Qualifications Framework
MBO middelbaar beroepsonderwijs [upper-secondary vocational education]

NQF national qualifications framework
NVAO De Nederlands-Vlaamse Accreditatieorganisatie [Accreditation Organisation of the Netherlands and Flanders]
RAC recognition of acquired competences
SERV Flemish Social and Economic Committee
VET vocational education and training

References

[URLs accessed 29.9.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014.* Country report: Belgium (Flanders). http://bit.ly/1YOoOti

Government of Flanders. 2009. *Flemish Act of 30 April 2009 on the qualifications structure.* http://bit.ly/1YOoOti

Government of Flanders; AKOV. 2011. *Referencing the Flemish Qualifications Framework to the European Qualification Framework.* http://www.ond.vlaanderen.be/kwalificatiestructuur/european-qualifications-framework/koppelingsrapport-vks-eqf/files/Koppelingsrapport_EN_2014-FINAAL.pdf

Government of Flanders; AKOV. 2014. *Referencing the Flemish Qualifications Framework to the European Qualifications Framework.* Update of the referencing report, July 2011 [unpublished].

Prepared by:
The European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts

Belgium (French-speaking community)

Introduction

The French community of Belgium has been working on an NQF in reference to the EQF since 2006. Three distinct political authorities are involved in the work:

- the French community (consisting of inhabitants of the French-speaking area of the Walloon region and the French-speaking inhabitants of Brussels);
- the Walloon region;
- the French Community Commission in the Brussels-Capital region (Commission communautaire française de la Région de Bruxelles-Capitale) (COCOF).

Responsibility for compulsory, adult and higher education lies with the French community, while the Walloon region and the COCOF are responsible for continuous vocational training in their respective areas. Work on a qualifications framework for higher education, linked to the Bologna Process, has been going on in parallel. Although the idea of an NQF (and its link to the EQF) received support, how to integrate the qualifications framework for higher education within a comprehensive NQF has been much debated and has delayed the process.

The current proposal dates from 2010 when the three governments of the French community agreed on the principle of creating a qualifications framework with double entry, one for educational qualifications and one for professional qualifications, placed into eight levels and consistent with descriptors of the EQF. The proposed framework structure is close to that applied by the Flemish community. All major stakeholders agreed in mid-2011 on these main principles of the framework. An expert working group has been responsible for preparing a draft referencing report, which was presented to the EQF advisory group in December 2013.

Full implementation of the framework requires that progress is made on adoption of the legal basis. The legislative process has been delayed from the original deadline of early 2014. This means that the framework has yet to move into an operational stage.

Main policy objectives

Development of the French-speaking qualifications framework for lifelong learning (*cadre francophone des certifications pour l'apprentissage tout au long de la vie*) (CFC) is seen as an integral part of the evolution of the existing education and training system, to improve overall transparency and collaboration, easing mobility and supporting individual learning pathways for citizens.

The CFC is an important instrument for strengthening the use of learning outcomes and for referencing to the EQF, but it is neither seen as an instrument for reform of existing institutions and structures, nor is it perceived as having any regulatory role. At this stage of development it has been decided to include only qualifications delivered by public providers; however, the

possibility of considering opening up later to other qualifications is mentioned in the 2013 referencing report.

Stakeholder involvement

French-speaking Belgium's three executive bodies (French community, Walloon region and COCOF) initiated CFC development and established an expert group for the preparatory work. This group includes representatives from all levels of education and regional bodies for vocational training. In future, national coordination point (NCP) responsibilities will lie with a steering and positioning authority yet to be established.

The NQF initiative can be divided into two distinct phases: before and after 2010. While the period before 2010 was characterised by high-quality technical work, lack of clarity over higher education's role in the comprehensive framework created tension and caused delays. The process was revitalized after 2010 and a new steering group was set up, including stakeholders from general education (at all levels and of all types, including universities) and vocational/professional education and training (including social partners). Four technical working groups were established, to work on writing level descriptors, positioning of qualifications in the framework, linking the framework to quality-assurance arrangements, and communication. The results were shared among all stakeholders, and recommendations from these groups were followed up by decisions at inter-governmental level.

Division of the framework into two main strands – educational and professional qualifications – has implications for stakeholder involvement. The French service for trades and qualifications (Service Francophone des Metiers et Qualifications) (SFMQ) will play a key role in defining and positioning professional qualifications at levels 1–4. The SFMQ is well placed to play this role as its overall task is to develop occupational profiles based on input from the social partners and in collaboration with employment services. Its role is also to develop training profiles with reference to these occupational profiles, in close liaison with education and training providers. The Academy of Research and Higher Education (Académie de Recherche et d'Enseignement supérieur) (ARES) will be responsible for defining and positioning educational qualifications at levels 6–8. ARES and SFMQ will share responsibility for qualifications at Level 5, reflecting an extensive 'mix' of professional and educational qualifications at this level.

Framework implementation

A 2008 decree introduced a higher education qualifications framework for the French community. This work is still in progress and self-certification to the European Higher Education Area (EHEA) is pending.

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

Legal adoption of the CFC is still (mid-2014) pending, and concrete qualifications have yet to be placed in the framework. A steering and positioning authority will be created, as a responsible authority for implementation and follow-up of the CFC, including positioning qualifications. The delay has clearly slowed down progress and is for the moment hindering the CFC in moving into an early operational stage.

Level descriptors and learning outcomes

An eight-level structure has been designed, using two blocks of terms: knowledge/skills and context/autonomy/responsibility. The descriptors developed by the Flemish qualifications framework have been used as a basis, but adjusted according to conditions of the region. For levels 5–8, descriptors are designed based on the Dublin descriptors.

The CFC development process is seen as part of recent and continuing reforms, and the shift to learning outcomes is central in this change. Progression in use of learning outcomes is described in the recent referencing report.

In higher education, a guide has been produced, to help higher education institutions define their learning outcomes to fit into common competence reference systems. Autonomy of universities means that the decision to apply learning outcomes has to be made by the institution itself, resulting in varying approaches. There is little information on extents of actual use of learning

outcomes, apart from in university colleges. Here, the new competences reference systems are gradually being implemented.

In compulsory education and training, a competence-based approach is well established. Learning outcomes are described in terms of *socles de competences* and *competences terminales*. For adult education (including higher education short cycles, bachelor's and master's degrees) the term used is *capacités terminales.*

In vocational education and training (VET), work is continuing to define and describe qualifications in terms of learning outcomes, to meet the need for shared reference systems for VET. Since 2010, regional continuing vocational education and training (CVET) providers have developed a common procedure of certification (recognition of prior learning [*reconnaissance des acquis de formation*] [RECAF]), based on common standards and common standards for assessment, with a competence-based approach. The SFMQ is playing a particularly important role as regards learning outcomes, both for initial VET (vocational compulsory education) and CVET (education for adults and public providers of vocational training in Wallonia and Brussels). Descriptions of qualifications are based on the job profiles (professional standards) defined by the social partners. Common training profiles are then defined by providers. These profiles are declined in units of learning outcomes compatible with the European credit system for vocational education and training (ECVET) specifications.

Validation of non-formal and informal learning and links to the NQF[10]

Two terms are used in the French-speaking community of Belgium to refer to validation of non-formal and informal learning: validation and valorisation. Validation refers to a possibility of obtaining a recognized title or certification, while valorisation of experience refers to procedures that allow access to education and granting credits for prior experience. Validation is used in the so-called system of validation of competences (*validation des competences*) in continuous vocational training. This provides a certificate, called a *titre de compétences,* which is a legal document, recognized by the Walloon region, French community and COCOF. It can be used to obtain a qualification and it also holds value in the labour market. At the moment there is discussion of how these *titres de compétences* will be linked or not to the NQF and EQF. Valorisation of experience (*validation des acquis de l'expérience*) (VAE) relates to adult education (enseignement de promotion sociale), universities and higher education (*hautes écoles*). These four, validation of competences and three VAEs, constitute four different systems governed by different legal frameworks, guidelines and procedures.

The standards for validation are now the same as those in the formal system. SFMQ is responsible for drawing up these standards. They are based on occupation standards elaborated by social partners (*profils metiers*), and corresponding training standards (*profils de formation*) elaborated by education and training stakeholders. The different training providers (initial and continuous education) and the validation of competences consortium are supposed to base their programmes on using the profiles drawn up by SFMQ as common reference standards. They are expressed in learning outcomes and a system of units compatible with ECVET. Qualification and training profiles are developed in close consultation with sector representatives and the unions. These profiles specify the competences required for each occupational profile, with associated indicators.

Discussions continue on how the four systems can be further integrated and how to create bridges between them. The four different systems are working together in four areas:

- Statistics: looking into what indicators can be used and carrying out impact analysis of validation practices;
- Network of researchers: a network of people at universities or other bodies interested in and doing research on validation issues;
- Common portfolio: creating a common online way of recording all the learning experiences;
- Common guidance: common guidelines are developed that can be used for all the four systems.

Referencing to regional frameworks

Referencing to the EQF is an integral part of the overall work on the NQF, and, for French-speaking Belgium, the referencing process is ongoing. An NCP for EQF referencing was established in September 2010. Once established (following legal adoption of the framework), the steering and positioning authority will take on these responsibilities.

The draft referencing report (referencing the CFC levels to the EQF) was presented to the EQF advisory group in December 2013. The

10 This section draws mainly on input from European Commission et al., 2014.

report encompasses a thorough description of the education and training system in French-speaking Belgium, an account of the context and development of the CFC, and a section on how the CFC and adjoining development processes and responsibilities meet the 10 referencing criteria. There is no overview of where the concrete qualifications are to be placed in the CFC so far, reflecting the ongoing process of legal formalization, but plans for the positioning and implementation process are described.

Table 6 Level correspondence between the CFC and the EQF

CFC	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Malarme, 2013.

Important lessons and future plans

Adaptation of the legal basis for the CFC is now of critical importance. Postponement of this process means that qualifications are yet to be included in the framework and the new steering and positioning authority is still not operational. Plans have been made for information and communication regarding the framework, including a database of all positioned qualifications.

Development of the CFC demonstrates the importance of finding a workable link between higher education and other forms of education and training. Distinguishing between educational and professional qualifications at all levels has been instrumental in making progress. Whether this structure can be used to open up future developments of professional qualifications at higher levels and establish stronger links between educational and professional sectors remains to be seen.

Different systems of modules and units in the sub-systems and institutions are described in the referencing report, but little information is available on how the systems work across levels and subsystems. It remains a challenge to convey the possible learning pathways that follow non-traditional routes. Another challenge is defining and describing in detail the relationship between the CFC and the already established higher education qualifications framework for the French community.

Main sources of information

The NCP was set up under the responsibility of SFMQ: http://bit.ly/1iLhBsX [accessed 29.9.2014]. Malarme, 2013 (see list of references).

List of abbreviations

ARES Académie de Recherche et d'Enseignement supérieur [academy of research and higher education]
CFC Cadre francophone des certifications pour l'apprentissage tout au long de la vie [French-speaking qualifications framework for lifelong learning]
COCOF Commission communautaire française de la Région de Bruxelles-Capitale [French community commission in the Brussels-capital region]
CVET continuous vocational education and training
ECVET European Credit System for Vocational Education and Training
EEA European Economic Area
EQF European Qualifications Framework
NCP national coordination point
NQF national qualifications framework
QDG Qualifikationsrahmen Deutschsprachiger Gemeinschaft [qualifications framework for the German-speaking community]
RECAF Reconnaissance des acquis de formation [recognition of prior learning]
SFMQ Service francophone des métiers et qualifications [French service for trades and qualifications]
VAE validation des acquis de l'expérience [valorisation of experience]
VET vocational education and training

References

[URLs accessed 29.9.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014.* Country report: Belgium (French community). http://bit.ly/1Vrmcgc

Malarme (ed.) 2013. Report on referencing the French-speaking qualifications framework for lifelong learning to the European qualifications framework for lifelong-learning [unpublished].

Prepared by:
The European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts

Belgium (German-speaking community)

Introduction

The German-speaking community of Belgium adopted its qualifications framework (Qualifikationsrahmen Deutschsprachiger Gemeinschaft, QDG) on 18 November 2013. Being the smallest part of Belgium (geographically and in terms of population) the framework reflects the work done in the Flemish- and French-speaking parts of Belgium but is also inspired by the German Qualifications Framework (DQR). The 2013 decision envisages that a system of validation of non-formal and informal learning will be linked to the QDG, stating that a central validation point will be set up within the next five years.

Main policy objectives

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

Stakeholder involvement and implementation

The framework has been developed over a relatively short time, involving all main education and training stakeholders in the region. This includes the social partners who normally play a key role in an education and training system inspired by that of Germany, both for general and vocational education and training.

Level descriptors and learning outcomes

An eight-level framework based on learning outcomes has been introduced. The framework builds on the concept of *Handlungskompetenz* (action competence) and distinguishes between subject/occupational specific and personal competences. Level descriptors are based on the categories outlined in Table 7.

The framework is seen as an instrument for promoting an approach based on learning outcomes or competences across the different parts of education and training in the region. It distinguishes between general and vocational qualifications. General upper-secondary education (Abitur) is placed at Level 4 while the three cycles of bachelor, master and doctor are placed at levels 6–8. In vocational education and training, completed apprenticeship (dual system) is at Level 4. A master craftsman with two years of training is placed at Level 5, one with three years of training at Level 6.

Table 7 Level descriptors of the German-speaking community of Belgium: main categories

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

Source: Ministry of the German-speaking community, 2013.

Validation of non-formal and informal learning

A system for validating non-formal and informal learning is seen as an integrated part of the QDR (see chapter 5, articles 14–15, of the decree).

Referencing to regional frameworks

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

List of abbreviations

EQF	European Qualifications Framework
DQR	German Qualifications Framework
NQF	national qualifications framework
QDG	Qualifikationsrahmen Deutschsprachiger Gemeinschaft [German-speaking community's qualifications framework]

References

[URL accessed 6.2.2015]

Ministry of the German-speaking community. 2013. Dekret zur Einführung eines Qualifikationsrahmens der Deutschsprachigen Gemeinschaft [Decree establishing a qualifications framework for the German-speaking community]. http://bit.ly/1O1VqKN

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

BHUTAN

The development of the Bhutan Qualifications Framework (BQF) was mandated in 2010 by the Tertiary Education Policy of the Kingdom of Bhutan (BAC, 2012). The BQF is intended to build on the work already done by the Bhutan Vocational Qualifications Framework (BVQF), a qualifications framework for the technical and vocational education and training (TVET) sector which was developed in 2003. The BVQF was intended to reform the TVET system by developing qualifications with input from employers and training providers, thus ensuring quality of skills and establishing a benchmark for comparison with international standards (Ministry of Labour and Human Resources, 2010). This chapter will therefore discuss both the BQF and the BVQF (sometimes referred to as the 'BVQ sub-framework').

Introduction

Bhutan has a total population of 738,267 and an Human Development Index ranking of 141st in the world. The gross national income based on purchasing power parity (GNI PPP) is USD 4.05 billion. The literacy rate in 2005 was 59.5 per cent (Lhazom, n.d., p. 9). The country is still primarily an agrarian society based on subsistence farming. The major economic sectors, apart from farming, are electricity and construction. These represent a vital source of both hard currency and employment. A large proportion of the workers in these sectors are migrants, particularly at the highest and lowest extremes of the skill spectrum. Middle-level and management-level jobs are occupied mainly by Bhutanese.

Greater enrolment in primary and secondary education has increased demand for post-secondary education and training (after Years 12 and 13). However, the shortage of tertiary education institutions in Bhutan has led to an exodus of students to foreign universities, particularly in India (Thinley, 2009).

The TVET and post-secondary sectors are administered by a bewildering variety of different bodies, making it difficult for students to progress either within a field or from one field to another. Whilst most TVET courses are under the administration of the Ministry of Labour and Human Resources (MoLHR), diploma courses in TVET are administered by the Royal University of Bhutan (RUB) and academic courses by the Ministry of Education. Other ministries, such as the Ministry of Health and Ministry of Agriculture, also provide vocational education and training as well as employment opportunities to school leavers. A system is therefore needed that recognizes diverse kinds of qualifications and clarifies equivalences between them.

Unemployment among TVET graduates has become a much more acute problem in recent years. Limited job growth in government has made it more difficult for graduates to obtain jobs in the government and corporate sectors; meanwhile, the number of students leaving school without employable skills has increased, even among those completing training in Vocational Training Institutes (VTIs). Despite efforts to promote the growth of the private sector, creating attractive jobs has proved difficult. Supply of and demand for skills thus remain mismatched.

The low status of TVET means that it is the least preferred route among young people. Private training providers (particularly in ICT and services) often seek to fill the gap left by inadequate TVET provision. They then look to the government for guidance and regulations to make their qualifications more marketable, for example through affiliation or official endorsements of certificates.

A further challenge is the supply-driven orientation of non-formal skills training initiatives for rural people rather than a demand-driven orientation highlighting, for example, how a person's competences can be utilised in the labour market and in society.

Main policy objectives

The BQF aims to provide an up-to-date and flexible framework that:

- guarantees the quality of education and training;
- accommodates the diverse educational and career goals of Bhutanese people, including those who aspire to work outside Bhutan;
- enables comparison and ensures consistency between qualifications offered by academic, vocational and monastic institutions;
- allows Bhutanese qualifications to be recognized and valued internationally, promoting workers' international mobility;
- facilitates lifelong learning;
- allows for lateral movement between different fields;
- enables human resources to be more effectively deployed;
- provides for the recognition and accreditation of prior learning;
- promotes higher 'gross national happiness' (GNH).

The BVQ sub-framework

The BVQ sub-framework (Ministry of Labour and Human Resources, 2010) aims to:

- increase learners' and workers' mobility within both the job market and higher education;
- increase learners' and workers' international mobility by making qualifications internationally comparable and transferable;
- improve young people's perception of the status of TVET;
- improve the quality of training by introducing curricula formulated with input from industry stakeholders;
- recognise non-formal and informal learning;
- make qualifications more transparent;
- facilitate 'learner-centred' teaching (Lhazom, n.d., p. 3).

Educational policy in Bhutan is strongly influenced by the theory of gross national happiness (GNH) (Thinley, 1999). In GNH-inspired learning, the learner is seen as a whole individual. Instead of focusing on a narrow set of job-specific skills, GNH-inspired learning seeks to inculcate a common set of core skills (Thinley, 2009), which include:

- knowledge of a subject area;
- practical skills, including information management;
- social skills and responsibilities;
- GNH values and principles, including mindful leadership;
- communication and ICT skills;
- accountability and autonomy;
- problem-solving and scientific skills;
- innovation and entrepreneurial skills.

Stakeholder involvement

The BQF was developed by the Ministry of Education. The Bhutan Accreditation Council (BAC) is responsible for establishing the relationship between tertiary academic education, TVET and the school system. The BAC recently produced a document on the BQF for the use of local and international stakeholders containing information on each qualification (BAC, 2012). This document provides basic guidelines for providers to develop clearly defined and suitably named qualifications programmes.

The BVQF was initiated between October 2000 and June 2003 as one of the programmes of the National Technical Training Authority (NTTA), under the Ministry of Labour and Human Resources (MoLHR) and in collaboration with the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), now called the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

In 2003, the Bhutan Vocational Qualifications Authority (BVQA) was established as a regulatory department under the MoLHR in coordination with the Department of Employment and Labour (DEL) and the NTTA. This was intended to dissolve the division between the training delivery and regulatory functions of the NTTA. In January 2006, however, the BVQA was replaced by the Department of Occupational Standards (DOS) in accordance with government directives. The DOS, which is one of four departments under the MoLHR, currently has the mandate to:

- improve and monitor the quality of vocational skills;
- develop policies and procedures of quality assurance;
- develop qualifications;
- develop the National Assessment and Certification System;
- develop and implement the National Accreditation System.

These objectives are pursued through a departmental structure comprised of three divisions: the Standards and Qualifications Division; the Assessment and Certification Division; and the Review and Audit Division.

The DOS is responsible for the development of Occupational Profiles (OP). There is an OP for each discipline or disciplines covered by a qualification. For example, a student may obtain a bachelor's degree majoring in English and Environmental Sciences (BAC, 2012). Occupational Profiles incorporate information from industry experts about the skills they require from their workers

in the light of current economic and technological conditions. A technical advisory committee advises the DOS on the identification of priority occupations, taking into account international and regional comparability of qualifications.

Occupational Profiles provide employers, employees and job-seekers with a common understanding of the knowledge, skills and competences required for a particular job. Occupational Profiles also help curriculum developers create curricula for qualifications programmes. They support educational services such as occupational training, exchange and promotion, as well as supporting a reliable testing and certification system that complies with international standards. The goal is to increase the proportion of the labour force holding National Competency Certificates.

Occupational Profiles are developed at three occupational levels: NC1, NC2 and NC3 (see section below on levels and descriptors). They take into account the following criteria:

- complexity of skills;
- knowledge and competences;
- duties and tasks;
- working environment;
- complexity of task sequences and junctures;
- degree of routine;
- teamwork;
- leadership;
- degree of autonomy;
- degree of control of financial and physical resources;
- degree of analysis and diagnosis involved.

Level and descriptors and the use of learning outcomes

The BQF has eight qualification levels, each of which assesses:

- depth, complexity and comprehension of knowledge;
- application of knowledge and skills;
- degree of autonomy and creativity in decision making;
- communication skills; and
- breadth and sophistication of practices (BAC, 2012).

The BQF caters for all types of qualifications, whether certificates, diplomas or degrees. Qualifications are awarded by a competent authority which affirms successful completion of the course of study in question and achievement of the expected standard. This guarantees the holder's ability to perform the job for which he/she is qualified.

The BQF includes three qualification levels relating to vocational education. National Certificate NC1 (semi-skilled work) is equivalent to qualification Level 3. National Certificates NC2 (skilled work) and NC3 (highly skilled work) correspond to qualification Level 4. National Diplomas 1 and 2 (for supervisory personnel) make up qualification Level 5.

Credit is awarded where candidates demonstrate knowledge and understanding of a field and show that they are able to apply this knowledge to practical situations. The amount of time and effort

Table 8 Bhutan Qualifications Framework

BQF Level	School education	Vocational education	Vocational education	Monastic education
8			Doctorate	Khenpo
7			Master's degree	Geshey
6			Bachelor's degree	Tenchoe
5		ND1 and ND2	Diploma	Madhyamik
4	BHSEC	NC2 and NC3		
3	BCSE	NC1		
2	LSE			
1	PE			

PE= Primary education; LSE= Lower secondary education; BCSE = Bhutan Certificate for Secondary Education; BHSEC= Bhutan Higher Secondary Education Certificate; NC= National Certificate; ND= National Diploma

Source: BAC, 2012.

the candidate invests in carrying out required activities is also taken into consideration. Credit is awarded not on the basis of experience *per se*, but rather on the basis of what has been learned through reflecting on experience (BAC, 2012).

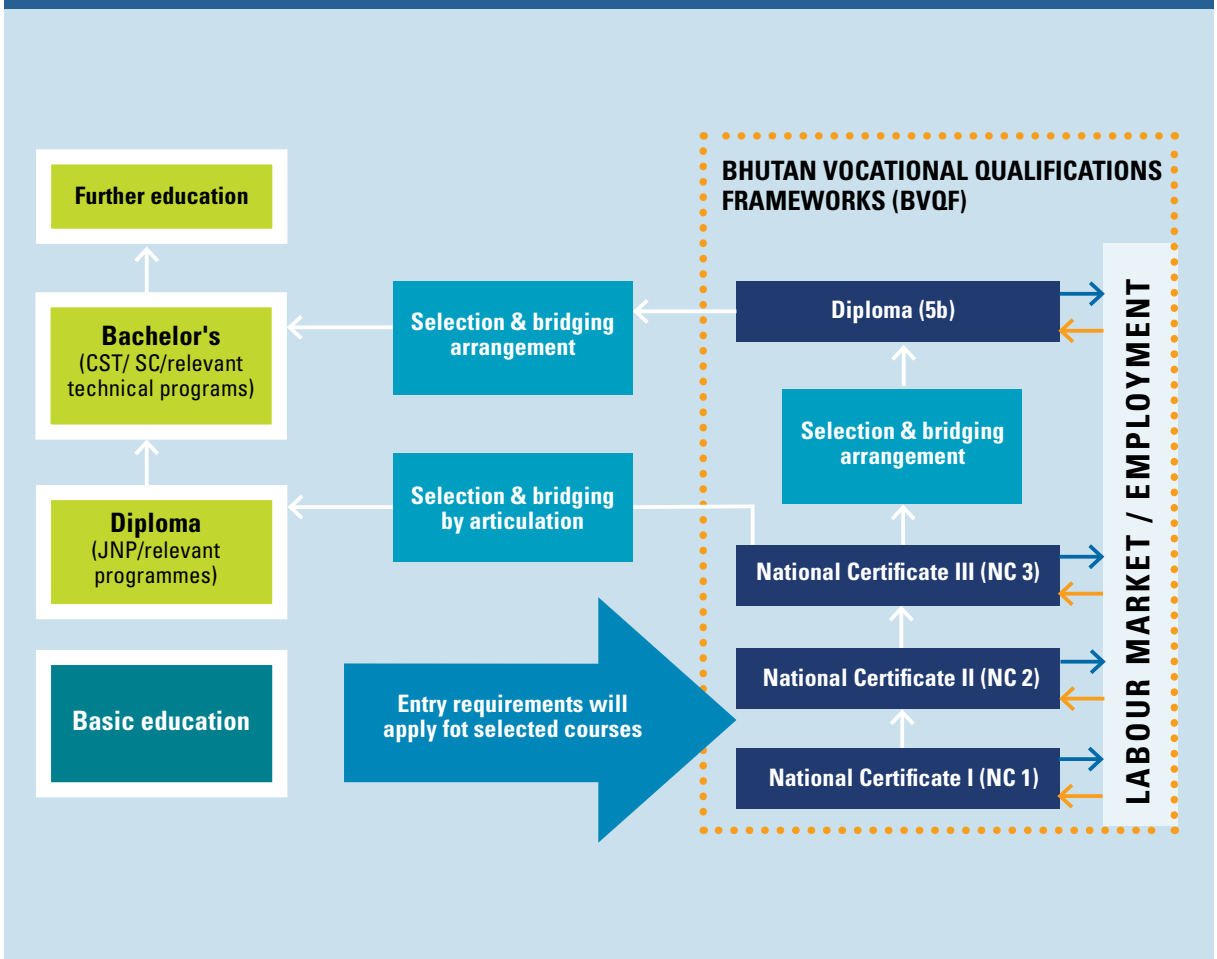
Recognition and validation of non-formal and informal learning

The BQF was designed to support the building of pathways between different sub-sectors of education and training. Pathways between vocational and academic qualifications will allow for the recognition of non-formal and informal learning; credit transfer and work experience programmes will promote career planning and continuous learning. The BQF provides equivalences between qualifications of different types and at different levels. It also introduces regulations on the accumulation and transfer of credits and the accreditation of prior learning, as well as on entry requirements and the use of certificates and diplomas. Diploma programmes may be designed in conjunction with degree programmes so as to enable graduates of a diploma programme to enter the second year of a degree programme.

The BVQF already determines entry to formal TVET courses after basic education (that is, after seven years' primary and four years' secondary education) (MoLHR, 2010, p. 7). The TVET courses are assessed against National Certificate (NC) levels. These are supported by level descriptors elaborating the range of responsibilities and learning demands at each level (see discussion of levels and descriptors above). The BVQF structure also makes provision for progression from National Certificate to diploma and degree levels. This has been made possible by the Royal University of Bhutan and the Ministry of Education, along with other organizations under different jurisdictions.

The illustration (Figure 2) depicts the various bridging arrangements which will enable movement both within and between education and the job market. The government expects that these pathways will enable lifelong learning and upgrade the qualifications of those who might otherwise be in danger of social and educational marginalization.

Figure 2 Bhutan Vocational Qualifications Framework (BVQF)



Source: MoLHR, 2006; Lhazom, n.d., p. 34

There is potentially great scope for the recognition of non-formal and informal learning in Bhutan. Bhutan distinguishes between Accreditation of Prior Learning (APL), Accreditation of Prior Certificated Learning (APCL), and Accreditation of Prior Experiential Learning (APEL). APL concerns learning gained through formally assessed and certified programmes outside the university. APCL covers learning achieved and assessed through a formal programme of study in a higher education or professional institution. APEL refers to learning gained in informal and non-formal settings such as the workplace or the community.

Referencing to regional frameworks

Formal education in Bhutan is already recognised by Indian bodies. The BCSE (Class 10) and BHSEC (Class 12) administered by the Bhutan Council for School Examinations and Assessment are recognized by the Association of Indian Universities (AIU) in Delhi, the Council of the Boards of School Education in India (COBSE), the Central Board of Secondary Education (CBSE) and the Council for the Indian School Certificate Examination (CISCE). It is hoped that the BQF will help extend this recognition to other countries, as well as attracting international scholars and students to Bhutan. The BQF will provide tools for the establishment of mutually beneficial alliances with top-quality universities and institutions around the world (BAC, 2012). In order to achieve these goals, the BQF will be closely related to other regional and international qualifications frameworks (BAC, 2012).

Important lessons and future plans

The adoption of the BQF (levels and descriptors) in 2012 represents a major step in the development of a reference framework. Important issues of governance have also been solved. While the Bhutan Accreditation Council is responsible for the school, tertiary education and continuing education sectors, the Department of Occupational Standards in the Ministry of Labour assumes responsibility for setting standards in vocational qualifications and developing occupational profiles.

Bhutan is making great efforts to overcome hurdles in the implementation of the BQF by improving institutional capacity of public authorities (administrative) and other stakeholders, as well as nurturing stakeholders' awareness of the importance of shifting from a curriculum-based to a competency-based approach to education (Lhazom, n.d.). While still striving towards a modern knowledge-based economy, Bhutan has made its policy on BQF appropriate to the local context, focusing on training TVET teachers, improving curricula and teaching resources, building partnerships with industries and employers, and smoothing out differences among the different organizations responsible for TVET and higher education.

References

Bhutan Accreditation Council (BAC). 2012. *Bhutan Qualifications Framework. Point of Reference and Tertiary Education Qualifications in Bhutan*. Thimphu, Bhutan Accreditation Council.

Bhutan Board of Examinations (BBE). (n.d.). *Bhutan Board of Examinations.* http://www.education.gov.bt/Secretariat/bbe/recognition.htm (Accessed 4 August 2011.)

Dorjee, S. (n.d.) *Experiences with TVET Reforms and Bhutan Vocational Qualifications Framework in Bhutan.* Thimphu, Department of Occupational Standards, Ministry of Labour and Human Resources. http://www.molhr.gov.bt/molhr_site/wp-content/uploads/2013/03/bvqaorganogram.pdf (Accessed September 2013.)

Lhazom, K. (n.d.) The Bhutan Vocational Qualifications Framework: Is it a case of 'putting the cart before the horse'? MA Dissertation. London, University of London.

Ministry of Labour and Human Resources (MoLHR). 2006. *BVQF Report.* Thimphu, Ministry of Labour and Human Resources.

Ministry of Labour and Human Resources (MoLHR). 2010. *National Human Resource Development Policy of the Kingdom of Bhutan.* Thimphu, Royal Government of Bhutan, Ministry of Labour and Human Resources. http://www.gnhc.gov.bt/wp- ontent/uploads/2011/05/NHRD.pdf (Accessed 4 August 2011.)

Thinley, J. Y. 1999, Values and Development: 'Gross National Happiness', in: Sonam Kinga, Karma Galay, Phuntsho Rapten und Adam Pain (Hrsg.), *Gross National Happiness – A Set of Discussion Papers,* Thimphu, pp, 12–23.

Thinley, K. 2009. *A Country Report: Higher Education in The Kingdom Of Bhutan: Cherishing Dreams and Confronting Challenges.* Thimphu, Tertiary Education Division Department of Adult and Higher Education, Ministry of Education. http://portal.unesco.org/geography/en/files/10897/12351203545Bhutan.pdf/Bhutan.pdf (Accessed 4 August 2011.)

Prepared by: UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

BOSNIA AND HERZEGOVINA

Introduction

Bosnia and Herzegovina is a potential candidate country for entry to the European Union (EU).

With a population of around 3.83 million inhabitants Bosnia and Herzegovina is an upper-middle-income market economy. Nearly half (48 per cent) of the population live in urban areas, while 13.4 per cent of the population is aged 15–24 years old. The literacy rate is very high, at 99.65 per cent in 2009; and most of the population has primary or secondary school education (41.7 per cent and 48.6 per cent, respectively), while 9.7 per cent has higher education. There is a low early school leaver rate (6.7 per cent). People tend to postpone entering an uncertain labour market. Participation in higher education has almost doubled since 2000, but this has not led to better employment opportunities.

The labour market in the country continues to be characterized by a low activity rate, high unemployment and long-term unemployment, especially among young people, including a high level of informality. Young people (15–24 years) have the lowest activity rate with less than one third (28.3 per cent) participating in the labour market. There are marked gender differences in this age group, with 36.3 per cent of males participating, and 19.4 per cent of females.

Bosnia and Herzegovina, like many developed and transition countries, is facing population growth stagnation, with negative annual growth of -0.12 per cent in 2013. Demographic projections show that the labour force will shrink considerably in the next forty years. Bosnia and Herzegovina will be ageing rapidly with the dependency ratio rising to 55.1 per cent by 2050 (from 45.5 per cent in 2013). The main cause is lack of confidence in the future. Highly skilled workers, in particular, are keen to look for further and better work possibilities abroad, adding to the problem of brain drain; More than 20 per cent of graduates from tertiary education in the 25+ age group are estimated to currently live in OECD countries. The national labour market clearly needs more jobs and more attractive jobs in order to ensure sustainable social and economic development.

Career and development opportunities for people in Bosnia and Herzegovinaare clearly worse than in most other European countries. The education attainment levels of the population are still lagging behind those of the EU, although they are improving. In addition, there are high levels of structural unemployment.

Bosnia and Herzegovina is also a complex country. Following the Dayton peace agreement in 1995, responsibilities for education and training policies have been delegated to the level of political entity and, in the case of the Federation of Bosnia and Herzegovina, even cantonal level. This has resulted in an organizational structure where there are ten cantonal ministries of education in the Federation and a federal ministry to coordinate the work between them; one ministry of education in the Republika Srpska; and one ministry of education for Brcko district. The Ministry of Civil Affairs is a state institution coordinating and supporting international and European cooperation. This means that, in total, fourteen institutions are involved in the shaping and coordination of education policies.

The complex institutional arrangements, with state institutions which have very limited mandates, makes the overall pace of reform slower than in other pre-accession countries. The EU has indicated that in order to meet EU accession requirements, Bosnia and Herzegovina has to create more effective and efficient mechanisms that take full responsibility for advancing the reform processes.

A VET Development Strategy 2007–13 was adopted by the Council of Ministers in 2007 and the global education strategy (2008–2015) was adopted in June 2008. To date, the education reform process has largely focused on the adoption of appropriate legislation. The following laws have been adopted at the state level: the Framework Law on Primary and Secondary education (2003), the Framework Law on Pre-primary Education, the Framework Law on Higher Education and the Law on the Agency for Pre-primary, Primary and Secondary Education (all adopted in 2007), and the Framework Law on VET (2008). In 2014, the Council of Ministers of Bosnia and Herzegovina adopted 'Principles and Standards in the Field of Adult Education in

Bosnia and Herzegovina' and a 'Strategic Adult Education Development Platform in the Context of Lifelong Learning for the Period 2014–2020', which constitutes pre-requisites for regulating the field of adult leaning and development of lifelong learning in Bosnia and Herzegovina. The adoption of these framework documents at the political entity and cantonal levels is a lengthy process. A new VET strategy for the period 2015–2020 is in preparation.

The vocational training reform process initiated changes in almost all education functions, but its quality remains a challenge, particularly in terms of learning outcomes, the accreditation of training providers, and the teaching and learning process. The reform process has continued to focus on bringing vocational training closer to labour-market needs. In this respect, substantial support has been provided by the EU through institution-building, staff and curriculum development, and teacher training. However, social partners have only recently been involved in the reform process and they need to enhance their capacities if they are to play an equal role in the process. The process of developing the overarching qualifications framework started in 2008. Bosnia and Herzegovina already had a classification system of qualifications, the 'nomenclatura', which comprehensively reflected the world of education, but did not provide meaningful links to the world of work. The EU VET IV project and the national stakeholders with a coordinating role for the VET department of the Agency for Pre-primary, Primary and Secondary Education (APOSO) have made some progress in developing vocational qualifications and core curricula based on occupational standards in the field of agriculture and food processing. The involvement of sector representatives remains weak and the development of occupational standards is carried out mainly with the support of teachers from schools, who visit a large number of enterprises.

In higher education, the reform process has been influenced by the Bologna Declaration and the Lisbon Convention on the Recognition of Qualifications Concerning Higher Education in the European Region. Higher education reform is supported by the EU and the Council of Europe. All state universities started to implement the first and the second cycle in 2006, according to the Bologna Process, and the European Credit Transfer and Accumulation System (ECTS) has been introduced in all new study programmes. Though the Framework Law on Higher Education was adopted in 2007, its full implementation is taking time and the fact that many amendments were incorporated in the final adopted version has made it difficult to implement. However, all entity and cantonal legislation has been harmonized with the state-level Framework law.

Bosnia and Herzegovina is already participating or preparing to participate in the EU education programme s and networks that are open to 'third countries'. The country signed a memorandum of understanding (June 2014) for partial participation in the Erasmus + Programme and thus became the 38th country to join the EQF advisory group; opening up the way to reference the qualifications framework in Bosnia and Herzegovina to the European Qualifications Framework for Lifelong Learning and providing an impetus to intensify implementation.

Main policy objectives

The qualifications framework should be a tool to bring more clarity to what qualifications in Bosnia and Herzegovina mean, and aims to clarify how these qualifications are related and linked. It will be an instrument to promote the reform and modernization of qualifications and quality assurance at all levels of education, and to improve links between education and employment.

It is intended to improve mobility, transparency, progression and quality assurance. The framework plays an important role in overcoming the fragmentation within Bosnia and Herzegovina and supporting integration with the European Union and the neighbouring countries.

The framework should also promote progression into higher education. A substantial number of citizens of Bosnia and Herzegovina work abroad and the framework should support their mobility. For that purpose, the framework will be closely aligned with the European Qualifications Framework. This is also the tool for linking the framework with the NQFs in neighbouring countries, with which there is still considerable mobility and cooperation.

The qualifications framework is not just a technical tool, but should be linked with the reform and development of the education and training systems in Bosnia and Herzegovina. That is why it has been integrated into different strategic documents of the Council of Ministers, such as: the strategy for vocational education and training in Bosnia and Herzegovina for the period 2007–2013; the strategic directions for the development of education in Bosnia and Herzegovina with its implementation plan for 2008–2015; and the Strategic Adult Education Development Platform in the Context of Lifelong Learning for the Period 2014–2020'.

Stakeholder involvement

Following several drafts prepared with local representatives in the framework of the VET Reform III project, funded by the EU, a proposal for a Baseline Qualifications Framework in Bosnia and Herzegovina was developed by a working group of representatives from all ministries of education in Bosnia and Herzegovina under the coordination of the Ministry of Civil Affairs in 2010. The document conceptualizes the background, purpose and concepts of a Baseline Qualifications Framework, including the proposed levels of qualifications. The Council of Ministers adopted the Baseline Qualifications Framework on Thursday 24 March 2011.

This act by the Council of Ministers now has the force of law. The idea of a Baseline Qualifications Framework is to establish a clear basis from which to continue further practical work, and to develop qualifications that are more relevant for different purposes and different groups of learners. It provides a skeleton for building more integrated qualifications systems. Through different EU-funded projects, beginning with the VET IV project, which is supported by the European Union and developments in the country, this framework can now be given a practical meaning for a growing group of beneficiaries among individuals, employers and training providers in Bosnia and Herzegovina.

In accordance with the Baseline Qualifications Framework, an inter-sectoral committee was established in 2013, which developed a work plan for the implementation of the qualifications framework, including appropriate methods and tools. The inter-sectoral committee had 19 members representing all the different public organizations and social partners, and was coordinated by the Ministry of Civil Affairs. Decisions on the implementation are made by unanimous vote. The inter-sectoral committee was supported by the EU VET IV project, and EU projects on adult learning and higher education, and the ETF, and has been using the achievements of current VET and HE initiatives. The action plan for the development and implementation of the qualifications framework in Bosnia and Herzegovina for the period 2014–2020 has not been formally approved at the time of writing, due to the absence of a new Council of Ministers. However, issues around the implementation structures have been discussed and further developed in agreement with the comments of stakeholders.

The implementation of the qualifications framework in Bosnia and Herzegovina will be supported by another inter-sectoral committee at expert level, while a council will be established to oversee policy direction and decisions. In line with the institutional set-up in the country, the education authorities throughout the country will continue to play a decisive role.

Social partners have no real institutional involvement but there is an intention to work more systematically with representatives from economic sectors. This builds on the work started with EU projects, such as the VET IV project, and supported by APOSO, the Agency for Pre-primary, Primary and Secondary Education, which develops occupational standards, bringing the VET offer closer to the labour market.

With the support of the EU and the Council of Europe, a good-practice guide has been produced for curriculum development in HE, which has been tested for a number of profiles and could be used much more widely. The rectors' conference could play a more important intermediate role in promoting cooperation between universities. Together with the universities and the nine pedagogical institutes in the country, the existing agencies for pre-primary, primary and secondary education and for HE are expected to play an important technical role in the implementation of the qualifications framework. In order to ensure trust in the framework it is important to find commonly shared principles and coherent procedures and processes for the development of relevant qualifications and the awarding processes.

Within the framework of the EU-funded project for the development of a qualifications framework for primary and secondary education in Bosnia and Herzegovina education authorities throughout the countries have begun to be assisted to further develop standards of pupils' and students' achievements for primary and secondary education and documents for the implementation of the external 'Matura' at the end of general secondary education.

The ETF is supporting the development of a compendium of good practice throughout the country and is trying to mobilize stakeholders to come forward with innovations at local, entity or state level that can be useful for the implementation of the Qualifications Framework for Lifelong Learning in Bosnia and Herzegovina.

Level descriptors and learning outcomes

The framework has eight levels, which have been developed with reference to the EQF levels, and based on learning outcomes. No sub-levels have been included, but the framework is a meta-framework for Bosnia and Herzegovina

and does not therefore not exclude the eventual use of sub-levels (both Montenegro and Croatia have sub-levels in their respective NQFs, for example). Learning outcomes have been introduced in new VET curricula since the late 1990s, as well as in higher education, but we cannot yet speak of a system-wide and system-deep use of learning outcomes.

The Council of Europe (CoE) has also made progress in cooperating with a number of universities in developing subject area descriptors for a growing number of priority subjects, which set a clear frame for university degrees. The ongoing joint EU/CoE project is developing and interlinking higher education qualifications with occupations in five subject fields: economics, ICT, engineering, agriculture and teacher education, and for a variety of professions. The project has been developing standards for selected qualifications and for corresponding occupations, facilitating a more transparent and cohesive approach for HE qualifications and curricula in the country, based on learning outcomes.

The EU VET IV project developed vocational qualifications on the basis of occupational standards which were a new development for VET in Bosnia and Herzegovina, in spite of more than ten years of VET curriculum reform. The VET department from the Agency for Pre-primary, Primary and Secondary Education (APOSO) has shown a good understanding of the opportunities that these occupational standards offer in terms of more relevant qualifications and curricula. Following the development of agriculture and food processing occupational standards in the EU VET IV project, six additional occupational families were addressed in 2014 by stakeholders from the country. For the each occupational family (addressing two occupations within each family), a working group was established consisting of representatives from companies in the relevant area/sector, secondary school teachers and/or representatives from ministries and pedagogical institutes, chambers of commerce and APOSO.

Validation of non-formal learning and links to the NQF

There is a keen interest among stakeholders in Bosnia and Herzegovina in developing post-secondary vocational education, which will be subject to discussion in the inter-sectoral committee. Given the number of adults who have been displaced and the current numbers of migrant workers from Bosnia and Herzegovina, recognition and validation of non-formal and informal learning is also seen as an important opportunity of the new framework, but due to the lack of standards this has not yet been developed. With support of GIZ (the German technical assistance agency). validation of non-formal and informal learning in a number of different cities was tested using a 'passport of competences'. The passport of competences is designed to support employability of adults by identifying informally acquired competencies. Appropriate skills for job-seekers can often be as important in professional life as formal education. However, such skills often go unrecognized. The "Competence Passport" provides an instrument for systematically identifying and presenting a person's competencies.

Referencing to regional frameworks

The higher education framework has been developed with the Council of Europe and was introduced by law in 2007. Two state agencies were established: the Agency for the Development of Higher Education and Quality Assurance in Bosnia and Herzegovina and the Centre for Information of Qualifications in Higher Education of Bosnia and Herzegovina. They are both operational and part of the institutional set up in accordance with the Bologna Process and European Higher Education Area, Lisbon Recognition Convention and the European Standards and Guidelines. The Republika Srpska has established its own accreditation agency that works within the guidelines of the state agency. The Council of Europe and the EU have worked closely together to support the development of relevant programmes and descriptors based on learning outcomes and have supported the quality assurance of higher education and the preparation for self-certification, but so far self-certification has not been completed and the development of programmes based on learning outcomes is only advancing gradually. With Bosnia and Herzegovina joining the EQF process, it is expected that self-certification to the qualifications framework for the European Higher Education Area and referencing to the EQF will go hand in hand.

The Baseline Qualifications Framework has been influenced by the EQF both in format and in process. The institutional set-up in Bosnia and Herzegovina arguably resembles the European situation with limited responsibilities at the central level. The framework itself has been considered more like a meta-framework for country-wide developments, which is able to incorporate quality-assured qualifications from different entities, rather than a tightly regulated centralized instrument. The absence of the sub-levels which can be found in neighbouring countries reflects its

current 'open design'. It is through the action plan that the framework of qualifications is gradually being populated and implemented, creating a community of practice within the country. That Bosnia and Herzegovina has now joined the EQF advisory group and the fact that Slovenia, Croatia and Montenegro have already referenced their frameworks, is a strong stimulus for the implementation of the qualifications framework in Bosnia and Herzegovina, but referencing is not foreseen in the action plan before 2018.

Important lessons and future plans

The Baseline Qualifications Framework is seen as an important development to support integration with the European Union and to support more relevant qualifications for citizens. The main focus in 2014 is starting the development and implementation of new qualifications and curricula that correspond to the requirements of the qualifications framework in Bosnia and Herzegovina. Formal implementation can only start after approval of the action plan by the Council of Ministers. A new inter-sectoral committee needs to be established as well as the Council. With support of the EU funded projects for higher education, general education and for lifelong learning, and building on experiences in the country, technical work is expected to advance. The participation in the EQF advisory group is creating a new dimension for development.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

BOTSWANA

Introduction

An impact study conducted in 2006 by Cardno Agrisystems concluded that Botswana's education system lacked credibility due to the absence of clear learning pathways and recommended the establishment of a national qualifications framework to address this problem (Tau and Modesto, 2009). Following this recommendation, since 2007 Botswana's Ministry of Education and Skills Development has been working towards the establishment of the Botswana National Credit and Qualifications Framework (BNCQF), assisted since 2010 by a Europe Aid project.

The BNCQF will merge the two already existing partial frameworks: the Botswana National Vocational Qualifications Framework (BNVQF) and the Botswana Technical Education Programme (BTEP). Established in 2004, the BNVQF covers vocational education and training (VET) and has no links to general or higher education (Tao and Modesto, 2009). The BTEP, by contrast, is a college-based qualifications framework which facilitates partnerships between higher education institutions and leading employers in order to provide learners with the entrepreneurial skills that industry and commerce demand (OECD, 2008).

The Republic of Botswana has been one of the fastest growing economies in Africa over the last three decades, emerging in 2012 as an upper middle income country with a per capita GDP of US$16,800 (CIA World Factbook, 2013). However, employment growth has been unable to match economic growth. This is largely because Botswana depends solely on diamonds as a commodity and has so far been unable to diversify its economy (Siphambe, 2007). Although Botswana's territory is vast, covering 582,000 square kilometres, its population remains sparse at 2.031 million (World Bank, 2011). Adult literacy (age 15 and over) stands at 84.5 per cent and youth literacy (ages 15–24) at 95.3 per cent. The primary school completion rate is 92 per cent.

Main policy objectives

The BNCQF's overall aims are twofold: to reform Botswana's education system and to improve communications between stakeholders. As a tool for educational reform the BNCQF aims to:

- bring all national qualifications together under a single internationally recognized classification system, covering the general, TVET and tertiary education sectors;
- provide qualifications that are quality-assured, nationally and internationally comparable, and portable;
- improve the transparency of qualifications so that they convey clearer information about learner competences and knowledge;
- rectify the current mismatch between qualifications and the labour market by making qualifications programmes more responsive to labour-market dynamics;
- align Botswana's education and training system to the global market, making Botswana's qualifications more internationally competitive;
- facilitate learner mobility and progression, both within and outside Botswana with the help of mechanisms for the recognition of prior learning (RPL) and for credit accumulation and transfer;
- establish a qualifications register to keep track of accredited qualifications, programmes, courses, training providers and awarding bodies;
- ensure the accessibility of qualifications to learners, members of government, employers, education providers and members of the public;
- establish an overarching independent regulatory body responsible for policy-setting and implementation of the new system.

As a communications tool, the BNCQF aims to ensure that all stakeholders involved:

- receive and disseminate clear and accurate information concerning the knowledge, skills, responsibilities and degree of independence of

holders of a particular qualification;

- understand and use the terms mentioned in the qualifications framework in the same way;
- understand the roles they are expected to play in the development of qualifications;
- understand the relationship between formal, informal and non-formal learning;
- appreciate the systemic change in Botswanan education and training which will be brought about through the shift in focus towards learning outcomes (Modungwa and Molwane, 2011).

Stakeholder involvement

Botswana's National Human Resource Development Strategy (NHRDS) called for the establishment of an independent statutory body to develop and implement the BNCQF. This body is the Botswana Qualifications Authority (BQA). The BQA is responsible for setting up a national regulatory system for education and skills development. It performs the core functions of: (i) registration and accreditation; (ii) quality assurance; and (iii) advising the Minister of Education and Skills Development on all policy matters relating to the BNCQF. Most importantly, the BQA is responsible for bringing together the different strands of the currently fragmented education and training system.

Level descriptors and learning outcomes

The BNCQF has ten levels. It is outcomes-based and credit-based, and incorporates unit standards for TVET, title definitions and level descriptors.

Table 9 Botswana: Sample structure of the BNCQF

	Education and training sub-systems			
LEVEL	**GENERAL EDUCATION**	**TECHNICAL & VOCATIONAL**	**TERTIARY EDUCATION**	**LEVEL**
10			Ph.D., Ed.D,	10
9			Master's	9
8			Bachelor's degree with honours Postgraduate diploma	8
7			Bachelors Degree E.g. BA, BSc, B.Ed	7
6		Diploma, e.g. BTEP	Diploma, e.g. DSE	6
5		Certificate, e.g. ENVQF 3 BTEP Advanced Certificate		5
4	BGSE	BNVQF 2 Trade Test B		4
3		BNVQF 1, Tade Test C DTCP Foundation		3
2	Junior Certificate ABEP 4			2
1	PSLE, ABEP 3 OSEC			1

Source: Modungwa and Molwane, 2011.

The ten levels are differentiated by the complexity of learning required. Each level descriptor explains what the holder of a qualification at that level is expected to know and be able to do. The three sub-frameworks are linked in order to ensure coherence between higher education and TVET, and to promote the perception that these sectors are equal in value (Modungwa and Molwane, 2011).

Recognition and validation of non-formal and informal learning and links to the NQF

Creating links between academic and vocational qualifications is an important function of the BNCQF. Three nationally valid systems help to fulfil this function: the quality-assurance system, the system of credits upon which qualifications will be based, and the proposed common system for RPL and recognition of current competences (RCC). The BNCQF is helping to implement the RPL and RCC system, which is intended to assess and recognize learners with informal and indigenous skills (Modungwa and Molwane, 2011).

Training institutions have already started to design new curricula based on learning outcomes (Modungwa and Molwane, 2011), and a number of new programmes have been launched targeting specific groups of learners. The Adult Basic Education Programme (ABEP) is an important bridging programme within the BNCQF (Department of Non-Formal Education, Curriculum Blueprint Draft 2007) which combines core skills training with work experience. Already in 2007 it prepared adults for entry to levels 1 and 2 of the BNCQF. Similarly, the Structured Work-Based Learning (SWBL) programmes created in the context of the BTEP are aligned to a suite of college-based Technical Education Qualifications developed between 1997 and 2007 by the Department of Vocational Education and Training (DVET) Botswana, with the aim of making training more consistent with employers' demand for skills.

The Centre for Continuing Education at the University of Botswana has also designed and implemented non-credit programmes covering a variety of areas which aim to open access to those without formal education, thus promoting BNCQF-aligned mobility between conventional and less conventional courses.

Referencing to regional frameworks

The ten-level, outcomes-based and credit-based design of the BNCQF has been deliberately adopted in order to align it with the regional framework of the Southern African Development Community (SADC).

Important lessons and future plans

The BQA has already had some successes, notably:

- developing a vision statement and branding device;
- embedding the BNCQF within the existing Human Resource Development Council and strategy;
- revising and re-designing the qualifications framework, turning it into an integrated and comprehensive framework;
- developing a legal framework for the BQA and BNCQF;
- developing a draft communication strategy;
- conducting a study on credit systems and policies;
- developing BNCQF policy;
- benchmarking with other countries in the SADC region.

The next steps to be taken are:

- establishing a monitoring and evaluation unit;
- developing a formal methodology to measure the impact of the qualifications framework on the education and training system;
- developing a marketing and communications strategy to help stakeholders, learners and the general public understand the changes to the learning system brought about by the introduction of the BNQCF (covering pedagogy, programme design and delivery);
- developing a consistent and sustained programme of information sharing between government and stakeholders.

However, significant challenges remain. These include a dearth of local expertise, inflexible financial resources, insufficient time, poor understanding of the goals of the BNCQF by stakeholders, and insufficient buy-in (Ministry of Finance and Development Planning, 2010). The government foresees overcoming these challenges by improving communications between stakeholders, and aligning the BNCQF with the interests and needs of different sectors and stakeholders.

References

Botswana Training Authority (BOTA). Webpage of the Botswana Training Authority. http://www.bota.org.bw/html/aboutBNVQ.shtml?page=2

Cardno Agrisystems. 2006. *A Study to Establish the National Qualifications Framework,* Final Report, Support to the Education and Training Sector, Government of Botswana, Gaborone, Botswana

Central Intelligence Agency. 2013. *The World Factbook.*

Department of Non-formal Education (DNFE). 2007. Draft Policy for Adult Basic Education Programme. Gaborone, Ministry of Education.

Hughes-d'Aeth, A. 2004. *Feasibility Study for the Effective Provision and Expansion of Technical and Vocational Education and Training in Botswana*, Gaborone, Botswana.

Ministry of Education. 2007. *Botswana Technical Education Programme Qualifications Blueprint.* Gaborone, Ministry of Education, Version 7, April 2008.

Ministry of Finance and Development Planning. 2010. *National Credit & Qualifications Framework Synopsis.* Gaborone, Ministry of Finance and Development Planning.

Modungwa, A and Molwane, A.B. 2011. *National Qualifications Framework: the Botswana context.* (International NQF Symposium September 9, 2011, Johannesburg, South Africa). Gaborone, Botswana Qualifications Authority.

OECD. 2008. *African Economic Outlook.* Paris, OECD/AFDB http://www.oecd.org/dev/europemiddleeastandafrica/40573959.pdf

Siphambe, H.K./ILO. 2007. *Growth and Employment Dynamics in Botswana: A Case Study of Policy Coherence.* (Working Paper number 82. Policy Integration and Statistics Department). Geneva, International Labour Organization.

Tau, D. and Modesto, S/ILO. 2009. *Qualifications Frameworks: Implementation and Impact. Background case study on Botswana.* (Skills and Employability Department). Geneva, International Labour Organization.

UNESCO. 2011, *National Monitoring Report: Botswana.* (Compiled through the SADC/UNESCO Assessment and review of Technical and Vocational Education and Training [TVET] in the SADC Region and development of a regional strategy for the revitalisation of TVET). Maria Overeem, National Consultant, UNESCO.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

BULGARIA

Introduction

The Bulgarian National Qualifications Framework for Lifelong Learning (BQF) was adopted by the Council of Ministers' Decision No 96 of 2 February 2012. It was referenced to the European Qualifications Framework (EQF) and self-certified against the qualifications framework of the European Higher Education Area (QF-EHEA) in mid-2013. According to the programme for European development of Bulgaria (2009–13),[11] the Bulgarian government sees the BQF as a precondition for implementing the EQF and an important national priority. A broad range of stakeholders have been involved in developing the BQF, which started in 2007 with drafting the framework for higher education.

The BQF is a single, comprehensive, eight-level framework with an additional preparatory Level 0. The framework includes qualifications from all levels and subsystems of formal education and training, including pre-primary education (in Bulgaria, two years of pre-school education before first grade is mandatory). Hence the BQF encompasses pre-primary, primary and secondary general education, vocational education and training (VET) and higher education.

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

Main policy objectives

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

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

Apart from offering transparency, the NQF is seen as an important tool supporting national reforms and needs, for example, setting up a system for validating non-formal learning, improving education quality, modernizing curricula and strengthening provider accountability. The BQF aims to play an important role in supporting lifelong learning and in promoting participation of adults in learning in Bulgaria.

Stakeholder involvement

The Ministry of Education and Science coordinated and led drafting of the BQF and is now coordinating its implementation. National coordination point (NCP) responsibilities lie with the International and European Cooperation Directorate in this ministry.

Between 2008 and 2011, a working group developed proposals for level descriptors for VET and general education. Higher education levels had already been developed in 2007 by another working group. Both processes served as an important base for further developments.

In January 2011, a more coherent approach was requested and a new task force was set up, responsible for drafting a comprehensive framework with a coherent set of levels and level descriptors. This task force included all national stakeholders, including the social partners. A broad

11 Government programme for the European development of Bulgaria (2009–13). http://www.mlsp.government.bg/bg/03.11.2009FINAL-ednostranen%20pechat1.pdf [accessed 5.3.2014].

national consultation process was carried out in 2011. Finding agreement on the level descriptors for higher education was particularly challenging. The result, based on closer comparison of the learning outcomes, merged four sub-levels of the master programme into one generic level.

Framework implementation

The qualifications framework is firmly based on national legislation and was adopted by the Council of Ministers (Decision No 96). It is not operational yet. The referencing report was adopted by the Minister for Education and Science in March 2014, paving the way towards implementation, but actual implementation has been delayed. The BQF, as proposed for referencing, is a classification framework. Its future reforming role to support development and revision of qualifications and quality-assurance arrangements is acknowledged. BQF will be embedded in wider educational reforms; legislative changes will be introduced to strengthen implementation of the BQF; curricula and provision will be modernised. On completion of the referencing process, all new qualification certificates, diplomas and Europass documents will be referenced to the relevant BQF level, linked to the corresponding EQF level. At present, this is foreseen for the 2015/16 school year, accompanied by the necessary legislative changes.

Beyond this, information on actual implementation is sparse. One explicit aim of the BQF is to support lifelong learning. Currently, the BQF comprises all educational stages and all levels of education (from pre-school to doctoral level). It can be regarded as a comprehensive framework. However, it is restricted to qualifications from formal education and training; levels 6 to 8 are limited to qualifications awarded by higher education institutions. The question arises of how open or closed the framework will be in the future; what actual role will it play in supporting lifelong learning, access, progression and participation (especially of adults)? Will it be open to qualifications acquired outside the formal education system in the course of lifelong learning? Will it become a tool for recognition of lifelong learning achievements?

The Ministry of Education and Science is the main national competent authority for BQF implementation. According to the Council of Ministers' Decision No 96, dated 2 February 2012, on adoption of the BQF, the Minister for Education and Science is responsible for maintenance and updating of the NQF of the Republic of Bulgaria, in line with the EQF for lifelong learning. The International and European Cooperation Directorate in the Ministry of Education and Science is the NCP. A qualification register has yet to be developed. However, registers for school education, VET and higher education diplomas are in place.

Level descriptors and learning outcomes

The BQF comprises eight levels and an additional preparatory level (NQF Level 0, covering pre-school education). Level descriptors take into account EQF and QF-EHEA descriptors.

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

The expected learning outcomes at the qualification levels reflect both the legal acts governing different sub-systems of education and training and state education requirements of the contents and expected learning outcomes in the national education system (general and VET) and in higher education.

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

Validation of non-formal and informal learning and links to the NQF[12]

One aim of the BQF is to support validation of prior learning, including non-formal and informal learning (Bulgarian Ministry of Education, Youth and Science, 2013). Bulgaria does not have an

12 This section draws mainly on input from European Commission et al., 2014.

overall national strategy or policy on validation of non-formal learning. Only in the VET sector are opportunities for validation and recognition of non-formal and informal learning regulated, by the amended VET Act (July 2014). Procedures were developed through a project, 'System for validation of non-formal acquired knowledge, skills and competences', implemented by the Ministry of Education and Science in cooperation with the National Agency for Vocational Education and Training, and other relevant ministries and social partners.[13] The project, which ran during 2013/14, developed a general procedure for validation, as well as a manual for vocational gymnasiums (on how to implement the validation procedure with all necessary templates and documents). In addition, the project has trained more than 1,000 consultants on validation procedures. The manual will be tested in more than 200 vocational gymnasiums.

Some aspects of validation (such as awarding credit units and access to higher education) are covered by the Higher Education Act, although validation practices are not broadly used (ibid.). Adoption of the BQF, which presents detailed descriptions of learning outcomes in line with state regulations requirements (SER), will promote possibilities to implement validation of non-formal and informal learning. In VET, where validation is currently possible, SER are the standards used, while in higher education, institutions are autonomous and have their own standards for validation and recognition. These should be in line with the SER on acquisition of higher education at bachelor, master and professional bachelor degree levels, and with ordinance on the SER of university education acquired in foreign higher education institutions, and of periods of studies completed at such establishments.

Referencing to regional frameworks

The Ministry of Education and Science is the main national competent authority for BQF development and implementation. The national coordinating point (NCP) is the International and European Cooperation Directorate at the ministry.

Bulgaria delivered a joint referencing report in early 2013, referencing the BQF to the EQF and the QF-EHEA.

13 Partners include the Ministry of Education, Youth and Science, Ministry of Labour and Social Policies, Ministry of Justice, Public Employment Agency, Bulgarian Industrial Association, Bulgarian Chamber of Commerce and Industry, the Confederation of Labour Podkrepa (see European Commission et al., 2014).

Table 10 Level correspondence between the BQF and the EQF

BQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1
Level 0	

Source: Bulgarian Ministry of Education, Youth and Science, 2013.

The BQF includes a Level 0, which is a preparatory level of pre-school education before first grade. It has no corresponding level in the EQF, but is included in the BQF to encompass the entire education system.

VET can start quite early (at 13) and is spread over four levels in the BQF (levels 2 to 5), starting with the 'first level' of a vocational qualification placed at Level 2, along with the basic education certificate. Levels 3 and 4 comprise lower and upper secondary stages and include the 'second and third level' of a vocational qualification, along with general education. Level 5 comprises VET only; the 'fourth level' of a vocational qualification is placed here. This is the most advanced (post-secondary) vocational qualification.

Important lessons and future plans

The NQF aims to increase transparency in education and training and aid knowledge and skills transfer and, so, improve labour force mobility. Level descriptors defined in terms of learning outcomes aim to provide a reference point and common language for diverse qualifications from different education sub-systems. By referring to educational levels and state educational requirements, the BQF has been given a strong input orientation. It is expected, however, that level descriptors based on learning outcomes will play a very important role in supporting dialogue, and that

discussion among stakeholders will strengthen the learning-outcomes dimension in qualifications design.

The framework can play an important role, but only if it is part of wider strategic policy resulting in necessary reforms and institutional regulations. The forthcoming law on pre-school and school education, the Higher Education Act and amendments to the VET Act will feed into these developments. The law on pre-school and school education will introduce a new structure to secondary school education, and the BQF will be adjusted accordingly.

Although it is an explicit aim of BQF work to strengthen orientation towards a lifelong learning approach, it remains a challenge that lifelong learning aspects are underfocused. There is little information so far on flexibility of the system and the conditions and role of the framework for promoting lifelong learning and supporting access, progression and participation of adults.

Future plans include necessary legislative changes, modernization of curricula in schools and higher education and promotional activities.

Main sources of information

[URLs accessed 23.7.2014]

The Bulgarian referencing report to the EQF [unpublished].
The International and European Cooperation Directorate in the Ministry of Education, Youth and Science is designated as the EQF NCP: http://www.mon.bg
It plays an organizational, coordination and supportive role in the referencing process.

List of abbreviations

BQF	Bulgarian Qualifications Framework
EQF	European Qualifications Framework
NQF	national qualifications framework
QF-EHEA	qualifications framework – European Higher Education Area
NCP	national coordination point
SER	state regulations requirements
VET	vocational education and training

References

[URLs accessed 23.7.2014]

Bulgarian, Ministry of Education, Youth and Science. 2013. *Referencing the NQF of the Republic of Bulgaria to the EQF and to the qualifications framework for the European Higher Education Area* [unpublished].

European Commission. 2012. Regional strategies of learning validation and education. Project ReSoLVE (manual available in Bulgarian). http://bit.ly/1hayrAk

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014.* Country report: Bulgaria. https://cumulus.cedefop.europa.eu/files/vetelib/2014/87050_BG.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

CAMBODIA

Introduction

The Cambodian Qualifications Framework (CQF) was established in December 2010 by a committee of ministers following the sixth meeting of the National Training Board (NTB). It was submitted to the seventh NTB meeting in 2011, and was approved at the eighth in February 2012. The CQF is currently awaiting the preparation of supporting documents and guidelines for its implementation. It will then require approval by the Council of Ministers to outline its functions before implementation can take place (Royal Government of Cambodia, 2012).

Cambodia has a population of 14,138,000 with a GDP per capita of $2,400 and a real GDP growth rate of 6.5 per cent in 2012. In 2007, 31 per cent of the population was below the poverty line and the unemployment rate was 3.5 per cent. The informal sector accounts for 80 per cent of GDP and 90 per cent of employment. In 2009, 2.1 per cent of GDP expenditure was on education, and the 2008 census indicated an adult literacy rate of 77.6 per cent.

Cambodia is aspiring to become an upper middle income country by 2030 (MoEYS, 2013). In line with the integration of Association of Southeast Asian Nations (ASEAN) member states, which encourages and promotes opportunities for collaboration between institutions in different countries, it is investing in building a competitive human capital and skills development roadmap in order to meet this goal. High-quality educational programmes and internationally acceptable certification are a prerequisite for ASEAN integration. The Cambodian Government envisages a thoroughgoing reform of the entire education sector in order to provide Cambodia's citizens with quality primary, secondary, vocational and tertiary education that responds to the needs both of young people and of the labour market, and that takes into account recent social and demographic changes.

The Education Strategic Plan (ESP) 2014–2018 (MoEYS, 2013) consolidates the progress made during the ESP 2009–2013 (MoEYS, 2010) in addressing issues of access, quality and institutional capacity building. It focuses on improving the quality of educational provision in the secondary, VET and higher education sectors, ensuring in particular that VET provision delivers relevant knowledge and skills. The ESP 2014–2018 also proposes reforms to the national assessment and examination systems.

The ESP addresses non-formal as well as formal education. It sets out a plan to increase the number of students studying in equivalency programmes from 5,000 in 2013 to 7,300 in 2018. Supplementary programmes will ensure the certification of non-formal programmes.

Main policy objectives

The government intends the CQF to:

- allow nationally consistent recognition of learning outcomes;
- deliver high-quality education and training that matches international standards;
- provide mechanisms for credit transfer and for the recognition of prior learning and experience;
- develop flexible pathways to facilitate movement between education and training sectors, as well as between those sectors and the labour market;
- improve access to education and training programmes and to qualifications;
- set out clearly defined avenues for achievement in order to encourage individuals to continue their education;
- provide qualifications that meet the needs of employers as well as learners, thus improving national economic performance;
- facilitate the mobilization of a skilled regional workforce (Kingdom of Cambodia, 2012).

Level descriptors and learning outcomes

The CQF has eight levels, as does the TVET sub-framework. The first four of these levels lead to vocational or technical and vocational certificates

which are equivalent to secondary education. The remaining four levels cover post-secondary education.

The CQF incorporates level descriptors which are based on learning outcomes. The level descriptors cover the following areas:

- knowledge;
- cognitive skills;
- psychomotor skills;
- interpersonal skills and responsibility;
- communication skills;
- information technology skills;
- numeracy skills.

The relationships between the different levels are shown in Table 11.

Stakeholder involvement

The ministry in charge of education and the accreditation of institutions is the Secretariat of the National Supreme Council of Education led by the Prime Minister. The Council is composed of high officials with experience in education, politics, economy, science, technology and culture. Stakeholders' roles and responsibilities are defined through a consultation process. Those consulted include representatives from the Ministry of Labour and other ministries involved with education and training, as well as representatives of employers and employees.

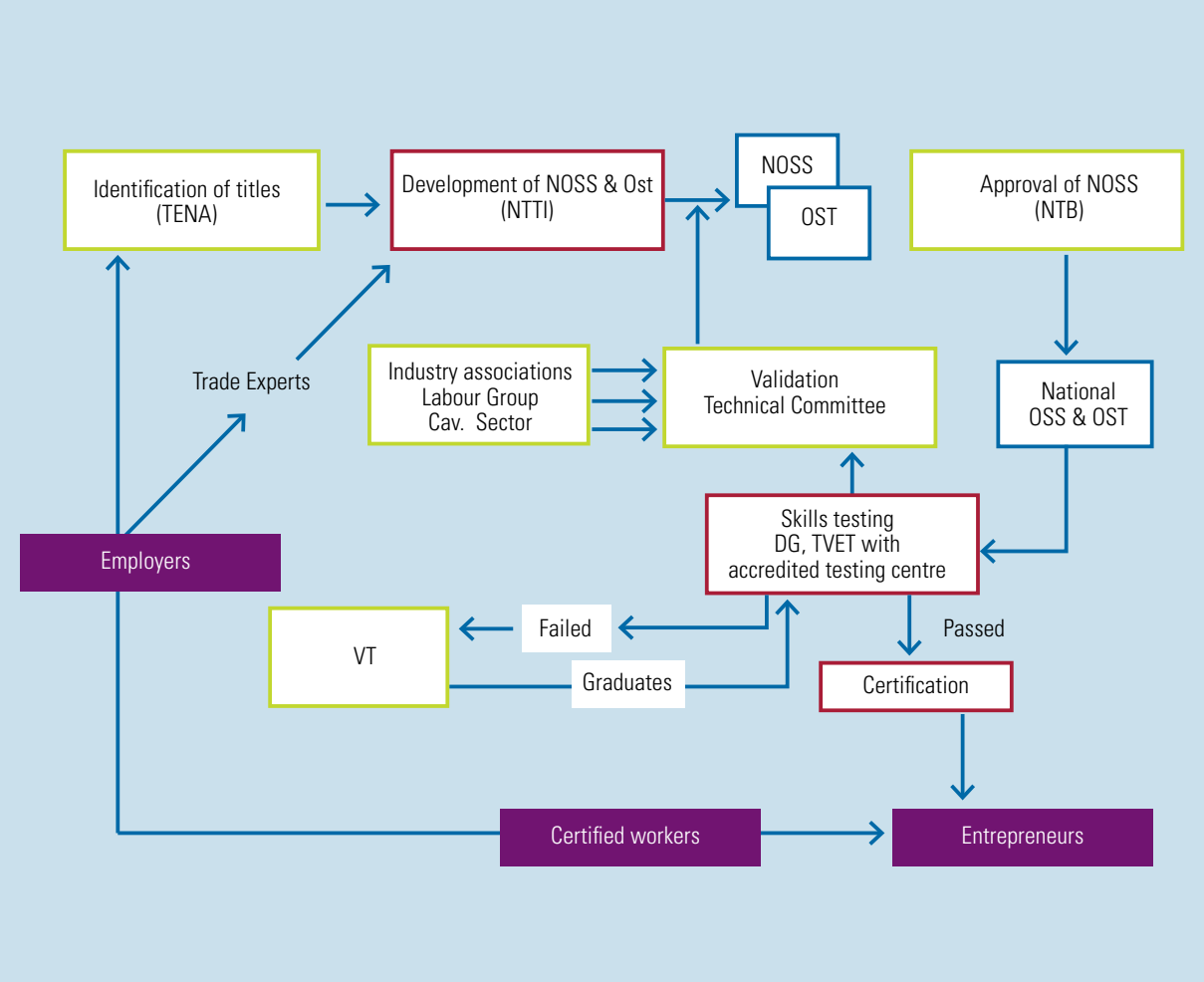
Cambodia has developed a framework of National Occupational Skills Standards (NOSS) and a testing and certification system involving numerous stakeholders and institutions (see Figure 3). As well as utilizing existing institutions such as technical institutes, it has also created a range of new organizations for testing and certification, including Sector Councils, Industry Advisory Groups and Technical Committees for Accreditation and Testing.

Table 11 Cambodia: Higher education and general education in Cambodia

Levels	Technical and vocational education and training	Higher education	General education
8	Doctoral degree	Doctoral degree	
7	Master's degree in technology/business	Master's degree	
6	Bachelor of technology/engineering/business	Bachelor's degree	
5	Higher diploma of technology/business	Associate degree	
4	Technical and Vocational Certificate 3		Upper Secondary Certificate
3	Technical and Vocational Certificate 2		
2	Technical and Vocational Certificate 1		
1	Vocational Certificate		Lower Secondary Certificate

Source: Kingdom of Cambodia, Cambodia Qualifications Framework, 2012.

Figure 3 Cambodia: Framework of NOSS and testing and certification organizations



Source: Directorate General TVET, 2011

Recognition and validation of non-formal and informal learning

The CQF will support inter- and cross-sectoral linkages between the different types and levels of qualifications, allowing individuals to progress in a wide variety of ways and tailor their educational programme to their needs and interests. Mechanisms will be put in place for the recognition of prior learning, whether acquired through formal, non-formal or informal means, and for the accumulation and transfer of credits. In this way, Cambodia aims to remove boundaries between education and training sectors and establish alternative entry and exit pathways that will increase access to higher qualifications (Kingdom of Cambodia, 2012).

For example, skills bridging (SB) programmes are being introduced to allow young people not currently in school to access the two-year diploma programmes in skills development. After completing the SB programme an assessment of performance is made at certificate Level 1 which is equivalent to Grade 9 of general education. The programme also incorporates advice and support on employment possibilities for those seeking to work rather than remain in training after the SB programme.

Equivalency tests that allow re-entry to formal education for non-formal education learners, fall under the authority of MoEYS in line with the policy of the National Supreme Council of Education. Article 26 of the Education Law stipulates that, in line with Cambodia's commitment to ensuring the quality of educational provision, examinations shall be conducted in a fair and impartial manner.

There are also progression possibilities for teachers. The Education Law encourages primary and lower secondary school teachers who have obtained bachelor degrees at any age to take an examination in order to become secondary school teachers. The law also encourages primary school teachers who have not completed secondary school to take an examination in order to obtain a certificate of secondary school equivalency. The law provides teachers with the opportunity to study at bachelor and post-graduate level, with the aim of raising teacher salaries.

Article 22 of the Education Law stipulates that educational institutions must fulfil obligations relating to national education and training standards. Both public and private educational institutions are asked to establish internal assessment procedures and to monitor and assess the quality of their educational provision.

Important lessons and future plans

The government sees the CQF as part of a broader system-wide reform of Cambodian education. This overarching reform, which will be implemented in a focused and time-bound manner, will involve all stakeholders and result in an education system that is more responsive to the needs of individuals and the labour market (UNESCO, 2012).

The government recognizes that not all education and training providers will be able to comply with national standards immediately. Once introduced, the CQF quality-assurance mechanisms will require substantial support from all stakeholders in order to make it easier for providers to comply.

As well as allocating a sufficient budget for the CQF's development and implementation, the government intends to complement it with other policy measures, such as improving the quality and governance of teacher training institutions and involving social partners (employees' and employers' associations) in the development of training institutions. Measures will also be introduced to upgrade provincial training centres and schools so that they meet accreditation requirements (UNESCO, 2012).

Other plans for reform include:

- developing a regulatory framework for TVET;
- promoting equal access to education for disadvantaged groups;
- improving skills and competences;
- developing quality assurance and Accreditation;
- creating jobs in rural areas; and
- increasing agricultural and industrial productivity.

References

Central Intelligence Agency. 2013. *The World Factbook.* Washington DC, CIA.

International Labour Organization (ILO). 2006. *Decent Work for Women and Men in the Informal Economy: Profile and Good Practices in Cambodia.* (ILO Sub-regional Office for East Asia in cooperation with Economic Institute of Cambodia and United Nations Development Fund for Women, Cambodia). Phnom Penh, ILO.

Kingdom of Cambodia. Directorate General TVET (Tep Oeun). 2011. *Current Status and Future TVET Policy Direction.* Phnom Penh, DG of Technical and Vocational Education and Training (TVET).

Kingdom of Cambodia. Ministry of Education, and Youth and Sport (MoEYS). 2010. *Education Strategic Plan 2009-2013*. Phnom Penh, MoEYS.

Kingdom of Cambodia, Ministry of Education, and Youth and Sport (MoEYS). 2013. *Education Strategic Plan 2014-2018.* (Draft 31 May 2013). Phnom Penh, MoEYS.

Kingdom of Cambodia. Ministry of Labour and Vocational Training. 2012. *Strengthening Technical and Vocational Education and Training: 1st Quarterly 2012 Progress Report.* Phnom Penh, Ministry of Labour and Vocational Training.

Kingdom of Cambodia. 2012. *Cambodia Qualifications Framework*, Phnom Penh.

Kingdom of Cambodia. 2013. *Qualifications Framework; Update on Development and Next Steps.* Phnom Penh, Royal Government of Cambodia.

Kingdom of Cambodia. Ministry of Education, Youth and Sports Planning Department. 2013. *Education Statistics and Indicators 2012/2013.* Supported by UNICEF/Sida. 25 June 2013.

Kingdom of Cambodia, Ministry of Education, Youth and Sports. Planning Department. (n.d). Policy on Human Resource in Education Sector. Phnom Penh, MoEYS.

Kingdom of Cambodia. Ministry of Labour and Vocational Training. 2012. *Piloting the Post Harvest Technology and Skills Bridging Program for Rural Poor. First Quarter Progress report (JFPR 9133 CAM).* Phnom Penh, Ministry of Labour and Vocational Training.

UNESCO. 2012, *Policy review of Cambodia's TVET system*. Paris, UNESCO.

World Bank. 2013. *Cambodia.* http://data.worldbank.org/country/cambodia

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

CROATIA

Introduction

The Croatian Qualifications Framework (CROQF) Act (2013) established the CROQF based on learning outcomes.[14] It is a single, comprehensive eight-level framework, which incorporates credit systems. It includes qualifications from all levels and sub-systems of formal education and training (general education, vocational education and training [VET] and higher education). It will also be the basis for validating non-formal and informal learning.

The framework has entered an early operational stage. Implementing structures have been set up and responsibilities among stakeholders agreed. The CROQF Act foresees development of two by-laws. The ordinance on the CROQF register has recently been adopted.[15] The ordinance on the validation of non-formal and informal learning is in preparation.

Main policy objectives

Apart from offering transparency, CROQF is seen as an important tool for reforming national education and training. It builds on the reforms under way since 2005, such as developing new educational standards and national curricula for general education, as well as introducing the State matura. In 2006, as part of this process, a total of thirteen sector councils were established. These councils were entrusted with defining the necessary vocational qualifications, analyzing existing and necessary competences within sectors and sub-sectors, and developing contents for parts of the vocational qualification standard, providing the basis for new VET curricula. The ordinance on the CROQF register envisages expansion to twenty-five sector councils, considering different sub-systems of education and training (general, vocational and higher education).

Besides helping link to the European Qualifications Framework (EQF) (and to the qualifications framework in the European Higher Education Area [QF-EHEA]), thus allowing for international comparability of Croatian qualifications, the framework is seen as reflecting national needs and priorities and as an instrument for developing new education and training solutions, specific to the Croatian context, to:

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

Specific CROQF aims include setting up a system for validating and recognizing non-formal and informal learning, and creating a well-founded quality-assurance system (Croatian Ministry of Science, Education and Sports, 2013).

Stakeholder involvement

Although the idea had been considered earlier, development of CROQF officially commenced in 2006, when the Ministry of Science, Education and Sports formed the first committee for the purpose. The national committee for development of the CROQF was set up in 2007, aiming to ensure close cooperation and coordination between public authorities, employers, learning providers and other social partners. This committee was chaired by the Deputy Prime Minister and comprised 27 members representing different ministries, social partners, schools, universities and agencies. In 2010, it was succeeded by a 25-member high-level committee, the national committee for implementation of the CROQF. With adoption of the CROQF Act, stakeholders' involvement in CROQF implementation was institutionalised (see framework implementation).

14 The English version is available at http://bit.ly/1KLcSkL [accessed 23.7.2014].

15 See 'Ordinance on the register of CROQF' (Pravilnik o Registru Hrvatskog kvalifikacijskog okvira). http://bit.ly/1iLj6aA [accessed 23.7.2014].

Framework implementation

The CROQF Act (2013) set up the institutional and legislative framework for CROQF implementation and defined involvement, roles and responsibilities of key bodies and stakeholders. Setting up an appropriate institutional structure for decision-making and implementation was challenging. According to the CROQF Act, the national council for development of human potential, the national coordination group and sectoral councils take on particular responsibilities for putting the framework in place. The national council comprises 24 representatives of national ministries, regional structures, social partners and national agencies involved in development and award of qualifications in different sub-systems of education and training. This body oversees policies in education, training, employment and human resource development, and monitors and evaluates CROQF's impact. The national council was appointed by the Croatian Parliament on 6 June 2014. On a more technical level, the Ministry of Education (also EQF national coordination point [NCP]) coordinates implementation – in close cooperation with the ministries of Labour and Regional Development. Their main tasks include: adopting guidelines for developing qualification standards, setting up a national register, quality-assurance and validation procedures, preparing an ordinance on validation of non-formal learning and referencing the CROQF to the EQF. With adoption of the ordinance on the CROQF register (May, 2014),[16] CROQF entered an early operational stage. The ordinance stipulates content and management of the CROQF register, procedures for requests, validations and entries into the CROQF register, sectors' and new sectoral councils' designations, criteria for selection of new sectoral councils' members (sectoral councils have increased from thirteen to twenty-five to cover all sub-systems), and their operational activities as well as the internal and external quality-assurance system.

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

The main challenge in implementation consists of securing quality-assurance procedures and principles – as the system should improve and consider all existing procedures in different educational sectors. Other challenges are linked to timely establishment of the new sectoral councils by end of 2015 and capacity-building of their members as well as administrative capacities of ministries and agencies responsible for their coordination and administration.

The draft ordinance on recognition and validation of non-formal and informal learning is under development (see validation of non-formal and informal learning).

Level descriptors and learning outcomes

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

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

CROQF introduces two classes of qualifications: full and partial. For example, a qualification with a minimum of 180 ECVET and/or HROO points[17] (from which a minimum of 120 ECVET and/or HROO points are acquired at the fourth reference level or higher) is referenced to level 4.1. For a qualification at level 4.2, a minimum of 240 ECVET and/or HROO points are required (a minimum of 150 ECVET and/or HROO points at the fourth reference level or higher).

CROQF plays a central role in developing and implementing the learning-outcomes approach in all sub-systems of education and training, building on the reforms so far. It will be further operationalized by the strategy for education, science and technology – currently under development – aiming at establishing conditions for high-quality education and training.

The VET reform agenda includes a move towards an outcomes-based approach in standards and curricula. Pilot occupational standards and outcomes-based curricula are being developed.

16 See 'Ordinance on the register of CROQF' (Pravilnik o Registru Hrvatskog kvalifikacijskog okvira). http://bit.ly/1iLj6aA [accessed 23.7.2014].

17 Croatian credit system for general education.

A new approach to evaluating school output introduces a system of common final exams (state *matura*) for grammar schools and other four-year secondary schools in Croatian language, mathematics, the first foreign language and the mother tongue for ethnic-minority pupils.

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

Validation of non-formal and informal learning and links to the NQF[18]

One explicit aim of CROQF is to set up a system for validating non-formal and informal learning (Article 3 of the CROQF Act). Article 15 establishes creation of an ordinance on recognition and validation that will specify the procedure in detail and establish a closer link to CROQF. This is currently being developed for consultation with the wider public. Further, a new draft of the strategy for education, science and technology recognizes validation as an essential part of adult and higher education. Another important precondition for validation is setting up qualification standards, currently under development.

In practice, validation of learning outcomes acquired outside formal education and training is still rare. No access to formal qualifications can be granted without formal learning. Validation arrangements are in place for adult education and crafts. For instance, a master craftsperson qualification validates and recognises non-formally acquired knowledge and competences.

Referencing to regional frameworks

Croatia referenced its national qualifications levels to the EQF and self-certified to QF-EHEA in March 2012, preparing one comprehensive report. According to the CROQF Act and the ordinance on the CROQF register, indication of NQF/EQF levels on certificates/diplomas/Europass documents will start in line with the respective qualification standard included in the CROQF register.

Table 12 Level correspondence between CROQF and the EQF

CROQF	EQF
Level 8.1	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4.1	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Croatian Ministry of Science, Education and Sports, 2013.

Important lessons and future plans

Relatively rapid development of CROQF illustrates the importance of stimulating active and broad participation throughout the entire process. If complemented by targeted support for, and training of, stakeholders, this can support genuine partnerships. Progressive, step-by-step development is emphasized. It has, so far, been a very inclusive process with more than 200 meetings, workshops and conferences and consultations with different groups of stakeholders, including more than 10,000 individuals. However, it is still not easy to evaluate ownership of the NQF among different stakeholders – it will be more visible once the register is fully operational. Until now, levels of ownership have been highest among ministries involved in preparation of the ordinance on the CROQF register, but it is gradually being accepted by others through events and projects. A positive effect can be seen in the financial opportunities provided under pre-accession assistance, such as the project, 'Further development of CROQF, where universities have proven to be very active and have started developing qualifications standards and occupational standards in line with new developments in CROQF implementation.

18 This section draws mainly on input from European Commission et al., 2014.

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

Main sources of information

[URLs accessed 23.7.2014]

The EQF NCP for Croatia is the section for development of higher education at the Ministry of Science, Education and Sports.
A CROQF website has been established: http://www.kvalifikacije.hr/hko-hr

List of abbreviations

CROQF	Croatian Qualifications Framework
EQF	European Qualifications Framework
HROO	Croatian credit system for general education
NCP	national coordination point
NQF	national qualifications framework
QF-EHEA	qualifications framework in the European Higher Education Area
SER	state regulations requirements
VET	vocational education and training

References

[URLs accessed 23.7.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014. Country report: Croatia.* https://cumulus.cedefop.europa.eu/files/vetelib/2014/87060_HR.pdf

Croatian Ministry of Science, Education and Sports. 2013. The Croatian Qualifications Framework Act. Zagreb: Ministry of Science, Education and Sports. http://www.kvalifikacije.hr/fgs.axd?id=257

Vlada Republike Hrvatske [Croatian Ministry of Science, Education and Sports]. 2009. Hrvatski kvalifikacijski okvir: Uvod u kvalifikacije [CROQF: introduction to qualifications]. http://personal.unizd.hr/~mdzela/hko/HKO_Prirucnik.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

CYPRUS

Introduction

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

A decision to create an NQF was taken by the Council of Ministers in 2008 (Decision No 67 445); a national committee for 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. First referencing report was presented to the EQF advisory group in June 2014.

Main policy objectives

The NQF's main role is to classify qualifications according to predefined levels of learning outcomes. The reform potential (Cypriot Ministry of Education and Culture, 2013) of the NQF is being acknowledged by linking it to wider reforms and procedures for quality assurance, assessment and award of qualifications.

More specific objectives and targets are to:

- support recognition and validation of qualifications;
- enable progression and mobility;
- promote lifelong learning through better understanding of learning opportunities, improved access to education and training, creation of incentives for participation, improved credit transfer possibilities between qualifications and recognition of prior learning;
- improve transparency, quality and relevance of qualifications;
- strengthen links with the labour market.

Analysis of the existing national qualification system (ibid., p. 63) emphasizes that the NQF can contribute to these objectives if it is seen as one of several elements in a wider strategy. Only then will it be possible to initiate the necessary reforms and institutional regulations on quality assurance, assessment and award of qualifications. This strategy, however, must protect quality and credibility of the system. This means making sure that all qualifications are a result of a formal assessment and validation procedure, safeguarding that an individual has achieved the necessary/required learning outcomes.

The objective is to develop and implement an inclusive framework, open to qualifications awarded outside formal education. This will primarily be achieved by including the vocational qualifications system – established by the HRDA – in the framework. These qualifications refer to occupational standards and certify learning outcomes acquired at work. This is important to increase adult participation in lifelong learning (LLL) (currently at 7.4 per cent) which remains below the EU average of 9.0 per cent in 2012 (European Commission, 2013). This is clearly linked to an aim of the NQF to promote lifelong learning and give a second chance to all Cypriots for educational advancement and job progression through LLL.

Inclusion of the vocational qualifications system in the NQF will bring comparability and better correlation of various qualifications, acquired in formal or non-formal learning, which will result in upgrading of knowledge, skills and competences throughout lifelong learning. One important policy objective is also to reinforce vocational education and training (VET) at secondary, post-secondary and tertiary levels. The first level of the new apprenticeship system, started in October 2012, addresses youngsters who dropped out.

Stakeholder involvement

The general directorate for VET at the Ministry of Education and Culture initiated and is coordinating NQF developments.

The national committee for development and establishment of NQF consists of the permanent secretary at the Ministry of Education and Culture (president of the committee), permanent secretary of the Ministry of Labour and Social Insurance, and the director general of the Human Resources Development Authority, or their representatives. Higher education representatives are involved but they maintain a degree of autonomy.

The Ministry of Education is the competent authority and designated EQF NCP, operational since 2012. It comprises representatives from all departments of the Ministry of Education and Culture, Ministry of Labour and Social Insurance and the Human Resource Development Authority.

Framework implementation

The framework is not yet operational. The Cyprus NQF will be established at the Ministry of Education and Culture as an in-service department and will be implemented gradually. Stakeholders responsible for accreditation of qualifications will continue to work according to the existing legislative framework. However, new legislation on operation of the NQF, to clarify cooperation among different stakeholders, is thought necessary. A decision of the council of ministers is planned; at a later stage if necessary, a legislative framework may be introduced (Cypriot Ministry of Education and Culture, 2013). A new permanent body – council of the NQF of Cyprus – including all relevant stakeholders, is planned. Its main tasks will be of an advisory nature and focus on:

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

Level descriptors and learning outcomes

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

VET qualifications, developed under HRDA responsibility, are aligned from Level 3 to Level 7 of the NQF.

The existing national qualifications system is mainly based on input such as quality of teachers and length of education and training programmes. However, an intention to strengthen the learning-outcomes approach is clear, with different interpretation across levels and sectors. Emphasis is increasingly being put on learning outcomes and the need to revise curricula, learning programmes and assessment methodologies towards learning outcomes. Several reforms are under way, exemplified by upgrading curricula for pre-primary and upper-secondary education, upgrading VET through introduction of post-secondary institutes for VET (technological lyceums) (launched in September 2012) and introduction of new modern apprenticeships. Strong emphasis is given to upgrading teachers' competences and establishing and monitoring quality-of-learning outcomes. Experience gained in developing competence-based vocational qualifications will feed into NQF implementation. These are based on occupational standards and make it possible to award a qualification to a candidate irrespective of how and where they acquired the necessary knowledge, skills and competences.

In formal education, learning outcomes are mainly expressed as part of a subject and stage-based general education. In the curriculum, learning outcomes are described as the knowledge, skills and attitudes, and awareness learners are expected to achieve at the end of each stage. There are level descriptors indicating the standards a learner should have achieved when certificates at different education levels are awarded. Development of a single unified curriculum from pre-primary to primary and lower-secondary education based on learning outcomes is an important achievement.

Validation of non-formal and informal learning and links to the NQF[19]

There is no comprehensive national strategy or policy in Cyprus for validation of non-formal and informal learning. In 2013, the board of ministers established an inter-departmental committee to develop a comprehensive action plan for validation of non-formal and informal learning by 2018, following a Council recommendation. The committee is coordinated by the Ministry of Education and Culture and includes representatives from the Ministry of Labour and Social Security, the general directorate for European programmes, coordination and development (formerly, the planning bureau), the Human Resources and Development Agency (HRDA) and the Foundation for the Management of European Lifelong Learning Programmes. In addition, commissioners of volunteering and non-governmental organizations sit on the committee. The committee may expand to include others, according to future needs.

The committee considers work already done by the HRDA. HRDA has developed a system of vocational qualifications where validation of non-formal and informal learning to award full or partial qualifications is possible. These specific VET qualifications are usually granted by labour-market institutions or employment services and have been in place since 2005. The validation process includes: identification, examination of the applicant's competences and knowledge (assessment), and certification. The committee should expand and make existing validation arrangements more comprehensive, including the general and adult education sector as well as non-formal learning that takes place in the volunteering and youth sector.

The standards used in the vocational qualifications system refer to occupational standards; they are different from those in apprenticeship or school-based VET qualifications. These qualifications are not recognized in formal education. However, in the NQF development context, ways of connecting the two VET systems is being discussed. In higher education, the autonomous nature of institutions, allows for recognition of credits from prior learning. In addition, the Cyprus Council for Recognition of Higher Education Qualifications can recognize credits that come from work experience as part of an individual's qualification. Individuals can also get information and communications technology certificates after successfully passing examinations, regardless of how and when the knowledge was developed.

19 This section draws mainly on input from European Commission et al, 2014.

Referencing to regional frameworks

Referencing national qualifications to the EQF is the Ministry of Education and Culture's responsibility, where the national contact point has also been established. It is work in progress. The draft referencing report was presented in June 2014.

Table 13 Level correspondence between the Cyprus Qualifications Framework (CQF) and the EQF

CFC	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Cypriot Ministry of Education and Culture, 2013.

Important lessons and future plans

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

Early stages of NQF implementation will adopt a flexible bottom-up approach, based on key principles to be applied across sub-systems, but also accepting differences and different approaches and practices in different education and training sub-systems, if necessary.

Focus is on qualitative upgrading of the system to become flexible and adaptable, ensuring unity, continuity and consistency between all levels and

services, linking the education system, especially at tertiary level, with productivity and improvement of material infrastructure for provision (Cypriot Ministry of Education and Culture, 2013).

Main sources of information

[URLs accessed 14.7.2014]

National contact point established at the Ministry of Education and Culture: http://www.moec.gov.cy

List of abbreviations

CQF	Cyprus Qualifications Framework
EQF	European Qualifications Framework
HRDA	Human Resources and Development Agency
NQF	national qualifications framework
SVQ	system of vocational qualifications
VET	vocational education and training

References

[URLs accessed 24.7.2014]

Cypriot Ministry of Education and Culture. 2013. Referencing of the Cyprus Qualifications Framework to the European Qualifications Framework for Lifelong Learning [unpublished].

European Commission. 2013. *Education and training monitor 2013.* Cyprus. http://ec.europa.eu/education/tools/et-monitor_en.htm

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014. Country report: Cyprus.* https://cumulus.cedefop.europa.eu/files/vetelib/2014/87082_CY.pdf

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

CZECH REPUBLIC

Introduction

The Czech Republic has yet to decide whether to develop a comprehensive national qualifications framework (NQF). However, partial/sectoral frameworks for vocational qualifications and for higher education qualifications have been developed, the former already operational. The proposed descriptors for primary and secondary education may also be seen as pointing in this direction; the question now being discussed is whether an overarching framework can help to coordinate and bridge these separate developments. The latest preliminary surveys among various stakeholders are supportive of developing a comprehensive NQF as a tool for communication, common cooperation and improving quality of education and training in general. Promotion and development of a comprehensive NQF is in line and being coordinated with development of the emerging national education 'Strategy 2020'. An expert group has drafted a proposal of descriptors for a comprehensive NQF. Analysis of collected opinions on NQF development, including a strengths, weaknesses, opportunities and threats (SWOT) analysis,[20] was finalized and disseminated among stakeholders and experts.

Work on the framework for vocational qualifications started in 2005, based on the Act on the Verification and Recognition of Further Education Results (2006),[21] which is also the legal framework for recognition and validation of non-formal and informal learning. Both processes are closely related. The framework for vocational qualifications is the backbone of the publicly accessible national register of vocational qualifications (NSK).

A framework for tertiary qualifications was designed under the Q-RAM project initiated in 2009 and is now being partially implemented.

20 For more information see Czech National Institute of Education (Národní ústav pro vzdělávání), 2013.

21 Act No 179 of 30 March 2006 on verification and recognition of further education results and on amendments of some other acts http://www.msmt.cz/areas-of-work/act-no-179-of-30-march-2006 [accessed 9.9.2014].

Main policy objectives

Interlinked development of a framework and a register for vocational qualifications is a cornerstone of the national strategy for lifelong learning (Czech Ministry of Education, Youth and Sports, 2007). Aiming at improving access to lifelong learning and creating a more permeable education and training system, this strategy's main elements, reflecting identified and agreed needs,[22] are:

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

Another important issue is to open up different pathways to qualifications and to increase flexibility in the qualifications system. Comprehensive vocational qualifications in the register for vocational qualifications are broadly comparable and compatible with qualifications acquired in initial VET, opening up both ways of acquiring qualifications (formal and non-formal learning). Also, one can acquire vocational (formerly called partial) qualifications listed in the register and build a comprehensive qualification step by step. At national vocational qualifications (NVQ) framework/ European Qualifications Framework (EQF) Level 3, exams can be taken for all vocational qualifications

22 Important progress was achieved in lifelong participation in recent years (from 6.8 per cent in 2009 to 10.8 per cent in 2012); now above the EU average (9.0 per cent) (European Commission, 2013, p. 33).

of a given comprehensive qualification, but to achieve a comprehensive vocational qualification, attain a level of education and receive the apprenticeship certificate, it is necessary to pass the final exam. This makes final comprehensive exams a bridge between formal education and the NVQ system. Focus is more on vocational (formerly called partial) qualifications, because these aid employment and can address relatively quickly shortages of certain qualifications in the labour market.

Developments in VET and higher education – to some extent pursued through projects – have not been coordinated or connected. This leaves several questions and challenges for development of shared concepts and design of a structure which could provide the basis for a future comprehensive NQF. This challenge is accentuated because the idea of a comprehensive framework is not yet well understood by the broader public. Nevertheless, it is slowly gaining ground among decision-makers, experts and other stakeholders.

Stakeholder involvement

The Act on the Verification and Recognition of Further Education Results, which came into force in 2007, sets out the basic responsibilities, powers and rights of all stakeholders in developing and awarding NVQs. The Czech Ministry of Education, Youth and Sports (MEYS) coordinates activities of central administrative authorities (ministries) and approves, modifies and issues a list of vocational and complete vocational qualifications. It supports the National Qualifications Council's activities. This, in turn – including all stakeholders – acts as an advisory body to the MEYS on qualifications. Sector councils are in charge of developing qualification and assessment standards of the NSK up to Level 7; most qualifications are, however, placed at levels 2 to 5. At higher levels they define only specialized supplementary qualifications, not those awarded by higher education institutions (bachelor, master's and Ph.D. degrees) (European Commission et al., forthcoming). Opening up higher levels (up to Level 7) for qualifications awarded outside higher education institutions is seen as an important means of supporting lifelong learning.

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

Framework implementation

The Czech Republic does not have a comprehensive NQF in place. There are two sectoral frameworks for VET and higher education. The eight-level framework for vocational qualifications – based on the NSK is fully operational. It constitutes a qualification and assessment standard. The framework is populated mostly with vocational qualifications on levels 2, 3 and 4. A small number of vocational qualifications on levels 5, 6 and 7 have been published as well. Numbers of people who undertook validation of non-formal and informal learning have increased significantly since 2010. As of June 2014, there were a total of 99,202 assessments carried out in the period from 2010 to 2014.[23]

The qualification framework for higher education, in line with the Bologna framework, was designed and developed in the Q-RAM project (2009–12), providing general descriptors for three categories of learning outcomes for all higher education programmes, and specific descriptors for thirty-nine areas of education. The Q-Ram framework covers EQF levels 5 to 8, where Level 5 is foreseen to be assigned to short-cycle programmes once this category has been introduced to the Czech system during ongoing higher education reform. Currently, a concept of short cycle is not present. In 2012, the qualification framework went through pilot implementation at 12 universities and four tertiary VET institutions (VOŠ), having directly involved sixty-nine study programmes and almost 1,000 teaching staff members and higher education institution managers. Although there has not been any significant progress in implementation since 2012, further activities are foreseen for 2014 and beyond after new legislation on higher education is passed.

Primary, lower- and upper-secondary general education and VET are defined at national level through framework educational programmes. They were referenced to levels 1, 2, 3 and 4 of the EQF based on classification of educational qualification types (KKOV) and nationally approved curricula.

Level descriptors and learning outcomes

The framework and register for vocational qualifications consists of eight levels. Level descriptors reflect complexity of work activities.[24]

23 Ibid.

24 In the proposal on qualifications levels in the national qualification system, adopted by the Ministry of Education, Youth and Sport in 2010, 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 would be referenced to EQF levels by comparison of learning outcomes in national curricula and the EQF.

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

A set of level descriptors for primary and secondary education (EQF levels 1 to 4) was also drafted in 2012, based on core curricula. In this proposal, descriptors are grouped into three categories: knowledge, specific study and work skills, and transferable skills.

In 2013, a group of experts from the worlds of education and work drafted a proposal for national comprehensive descriptors. They reflect and respect both the EQF descriptors and national sectoral descriptors developed so far. Discussion on need, scope and goals of the comprehensive qualifications framework between all education sectors continues.[25] Potential strengths, opportunities, weaknesses and threats, which arose from previous surveys, are being discussed and shared among experts.

The learning-outcomes approach is widely used in the Czech education system, although applied and interpreted slightly differently across education levels and sub-systems. Core curricula for primary and secondary education emphasize key competences and their practical use. Expected learning outcomes are defined in terms of activities, tasks students should be able to perform. The Education Act, which came into force in 2005, regulates curriculum reform at primary and secondary levels, emphasizing learning outcomes and strengthening social partner influence in VET. Key competences (such as information and communications technology skills, learning to learn, problem-solving) have become very important. Modularization of courses was introduced to improve transferability between various pathways in initial and continuous education, but it has not yet been implemented in most schools. A competence-based and learning outcomes-oriented approach is shared by VET and higher education and has broad political support. This is documented and confirmed by curriculum reform of vocational education (including relevant methodologies) and by the Act on the Verification and Recognition of Results of Further Education.

Initial VET (IVET) core curricula are increasingly being aligned with competences defined in the NSK. Most standards for Level 4 and higher, however, are still being drafted (National Institute of Technical and Vocational Education, 2011). In the project Q-RAM (on development of a qualifications framework for higher education), the learning-outcomes approach has been crucial in developing generic descriptors and subject-specific benchmarks and will be further promoted in specific study programmes. A pilot study within this project tested subject-specific benchmarks in 2011.

Validation of non-formal and informal learning and links to the NQF[26]

The Czech Republic does not have an overall national strategy on validation of non-formal and informal learning nor an overarching NQF. Validation and recognition procedures are in place for vocational qualifications included in the NSK. The register is legally grounded in the Act on the Verification and Recognition of Further Education Results (2006) and addresses further learning results with adults as a main target group. The Act was amended in 2012. The minimum age limit (18 years) to take part in the competence assessment leading to vocational qualification was removed.

Validation and recognition procedures are carried out according to the qualifications and assessment standards included in NSK. Each qualification standard – based on occupational standards – is defined in terms of competences. Based on a validation and recognition procedure, one can acquire a vocational qualification listed in the register and build step-by-step a comprehensive qualification (broadly comparable with an IVET qualification). For instance, at NVQF/EQF Level 3, exams can be taken for all vocational qualifications of a given comprehensive qualification, but to achieve a comprehensive vocational qualification, attain a level of education and receive the apprenticeship certificate, it is necessary to pass a final exam. This makes final exams a bridge between the two systems, formal education and NVQ.

Education and training providers in general education, vocational and higher education can decide to shorten a learner's pathway in line with legal provisions. This is normally at the school principal's discretion. There is no methodological framework for how this should be done and there is no record of how much it is used.

25 The Czech Republic has referenced its formal initial qualifications to the EQF based on the KKOV and nationally-approved curricula.

26 This section draws mainly on input from European Commission et al, 2014.

In terms of access to formal education programmes, one needs to have a formal qualification. For instance, to access higher education, students have to have achieved an upper-secondary leaving certificate (*maturita*). However, higher education institutions can (but do not have to) select applicants based on their own entrance exams or results from national comparative exams.

Referencing to regional frameworks

The Czech Republic referenced its formal qualifications to EQF levels in December 2011. In the absence of a comprehensive NQF, formal initial qualifications were referenced based on the KKOV and nationally approved curricula. From qualifications awarded in continuing education only those included in the NSK were referenced to the EQF. Higher education qualifications are linked to the EQF, but not yet self-certified against the QF-EHEA.

Important lessons and future plans

An important topic of discussion is further development towards a more comprehensive overarching NQF with a coherent set of level descriptors, which will bring together sub-frameworks for vocational qualifications, higher education and lower - and upper - secondary education. Explicit levels will make links to the EQF levels more transparent. Discussions and experts' work have started, but no decisions have yet been taken. Discussions on the purpose and potential advantages of the NQF continue.

Main sources of information

[URLs accessed 9.9.2014]

The National Institute for Education is the EQF NCP, which manages the operational agenda and creates proposals of the NCP for referencing qualification levels to the EQF: http://www.nuov.cz
A register of all approved qualification and assessment standards is available at: http://www.narodni-kvalifikace.cz/

List of abbreviations

EHEA	European Higher Education Area
EQF	European Qualifications Framework
IVET	initial vocational education and training
KKOV	classification of educational qualification types
NCP	national coordination point
NSK	national register of vocational qualifications
NQF	national qualifications framework
NVQ	national vocational qualifications
SWOT	strengths, weaknesses, opportunities and threats
VET	vocational education and training

References

[URLs accessed 9.9.2014]

Czech Ministry of Education, Youth and Sports. 2007. *The strategy of lifelong learning in the Czech Republic.* http://www.msmt.cz/uploads/Zalezitosti_EU/strategie_2007_EN_web_jednostrany.pdf

Czech National Institute of Education [Národní ústav pro vzdělávání]. 2013. *Východiska a výsledky dotazníku o potřebnosti Národního rámce kvalifikací ČR: Pracovní a informační text* [Background and results of a questionnaire on the desirability of the NQF CR: working and informational text]. http://www.nuv.cz/uploads/EQF/NRK_vysledky_setreni_2012_cerven_2013.pdf

European Commission. 2013. *Education and training monitor.* Country report on Czech Republic, p. 2. http://ec.europa.eu/education/library/publications/monitor13_en.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014. Country report: Czech Republic.* https://cumulus.cedefop.europa.eu/files/vetelib/2014/87052_CZ.pdf

National Institute of Technical and Vocational Education. 2011. *National referencing report of the Czech Republic.* http://bit.ly/1j2dh9s

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

DENMARK

Introduction

Denmark has developed a comprehensive national qualifications framework (NQF) covering all types and levels of qualification awarded and quality-assured by public authorities. Work on the framework started in 2006 and builds directly on the qualification framework for higher education established in 2006/07. Implementation of the eight-level framework has been a gradual process, starting in June 2009 when the proposal for the framework was adopted by the Minister for Education, the Minister for Science, Technology and Innovation, the Minister for Culture and the Minister for Economic and Business Affairs. The NQF was referenced to the European Qualifications Framework (EQF) in May 2011. The framework has now reached an operational stage and forms an integral part of the Danish education and training landscape. An evaluation of the NQF was finalized in October 2013; overall providing positive feedback on the results achieved so far. Work is now underway, between the ministries of education, science and employment, to decide on how to develop the framework further. Denmark has already started to indicate NQF and EQF levels in qualifications documents, the first examples of which were awarded early 2013.

Main policy objectives

The Danish NQF (DK NQF) provides a comprehensive, systematic overview of public qualifications[27] that can be acquired within the Danish system.

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

The DK NQF draws a clear distinction between levels 1 to 5 and levels 6 to 8. The latter are identical with the level descriptors in the Danish Qualifications Framework for higher education at bachelor, master's and doctoral levels and contain explicit references to research-related outcomes. The difference is illustrated by use of two different principles for referring qualifications to the framework. A qualification at levels 1 to 5 is referred according to a 'best-fit' principle where the final decision is based on an overall judgement of the knowledge, skills and competences of a particular qualification (type). A principle of 'full fit' is used for levels 6 to 8, as is the case for the Danish Qualifications Framework for higher education, implying that qualifications at this level have to be fully accredited[28] as meeting the legal requirements set by national authorities and according to the qualifications framework for higher education for qualifications at these levels.

This distinction implies that all qualifications at levels 6 to 8 need to be defined and accredited according to the qualifications framework for higher education. For the moment, there are no publicly recognized qualifications in the Danish education system at levels 6 to 8 that are not included in the Higher Education Area (qualifications framework for higher education), and several non-university qualifications have been, or are expected to be, accredited as bachelor's and master's (for example, related to arts, the armed services and police) and thus included in the qualifications framework for higher education.

The NQF adopted in 2009 is considered to be a first step in a long-term development process. The first stage of development was concluded by publishing the 2013 evaluation report. Results of this report are now being studied and will result in a set of priorities for the next few years. In the same way as in the Netherlands and Sweden, opening up towards private and non-formal qualifications is being considered. A mapping

27 The Danish Evaluation Institute specifies this as '…all qualifications that have been awarded pursuant to an Act or executive order and that have been quality assured by a public authority in the Danish education system' (Danish Evaluation Institute, 2011, pp. 13–14).

28 The accreditation process in Danish higher education, and how this links to the learning outcomes principle, is well documented in the 2013 report (Hansen et al., 2013).

exercise was carried out in 2013 showing that a high number of certificates and qualifications operate outside and in parallel to the existing NQF.

Stakeholder involvement

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

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

It is interesting to note that follow-up to the 2013 evaluation is being carried out in cooperation between three ministries: education, science and employment.

Framework implementation

The NQF is now visible to the general public through two websites, both having reached an advanced level of development and implementation. The DK NQF provides information for an international target group, presenting the NQF and the qualifications covered by this. The 'education guide' [*UddannelsesGuiden*][29] addresses a national target group and provides comprehensive information on qualifications, programmes, access, etc. This website also provides comprehensive information on the NQF and qualifications levels and explains clearly the concept of levels based on learning outcomes and how these can be used by learners. The fact that NQF and EQF levels are now gradually being added to qualifications and certificates themselves is also of critical importance for increasing NQF visibility to citizens.

Evaluation of the DK NQF was carried out in 2013 to assess speed and quality of the formal implementation process, check how the framework is judged by potential users and provide a basis for future improvements. The evaluation report shows most stakeholders involved with the NQF[30] are positive towards the role it now plays. A total of 78 per cent of respondents 'know well' the principles underpinning the framework and 64 per cent are positive about the initiative. Just over a quarter (27 per cent) are neutral as regards the role played by the framework. It should be noted that the general public was not targeted by the evaluation, only representatives of stakeholders directly or indirectly associated with design and implementation of the framework.

Level descriptors and learning outcomes

The eight-level structure adopted for the DK NQF is defined by knowledge (*Viden*), skills (*Færdigheder*) and competences[31] (*Kompetenser*). Danish level descriptors have been based on several different sources, including existing descriptions of learning outcomes in curricula and programmes, EQF descriptors and Bologna descriptors. They have been designed to be relevant to different types of qualification, theoretically as well as practically oriented. Knowledge descriptors emphasise the following:

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

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

29 See https://www.ug.dk/ [accessed 22.10.2014].

30 A total of 848 persons were contacted; 425 persons (51 per cent) responded.

31 Note that the DK NQF, in contrast to the EQF, uses the plural 'competences'.

- Type of skill involved: practical, cognitive, creative or communicative;
- Complexity of problem-solving, problem-solving these skills can be applied to and complexity of the task;
- Communication, communication required, 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, type of work/study context in which the knowledge and skills are brought into play, and degree of unpredictability and changeability in these contexts;
- Cooperation and responsibility, ability to take responsibility for one's own work and work of others and complexity of cooperative situations in which one engages;
- Learning, ability to take responsibility for one's own learning and that of others.

Table 14 Level descriptors in the DK NQF for lifelong learning

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

Source: Danish Evaluation Institute, 2011.

These descriptors are used to address both (full) and supplementary qualifications. The role of supplementary qualifications is particularly important for adult education and for continuing vocational education and training (VET). A supplementary qualification can be a supplement (addition) to a qualification, a part (module) or an independent entity not related to any other qualification.

The learning outcomes approach is widely accepted in all segments of education and training and is increasingly being used to define and describe curricula and programmes. VET has a strong tradition of defining qualifications in terms of competence, but higher education and different parts of general education are also making progress. It is clear, however, that it is necessary to deepen understanding of the learning-outcomes approach at all levels, for example by developing guidelines.

Validation of non-formal and informal learning and links to the NQF[32]

Validation in Denmark is well established and regulated by legislation covering upper general education, VET, adult education and higher education. Implementation is highly decentralized, and while legislation provides a framework to assure quality in validation, the actual process can only be carried out by education providers. They are responsible for guidance and for validation within their educational and training programmes. Also, the responsibility for quality assurance and evaluation lies with educational institutions. Other bodies can be involved at an early phase, providing information, guidance and support.

A 2010 action plan outlined a range of initiatives across adult learning areas, aiming to: identify the players in guidance and counselling; explore possible broader approaches to validation in adult learning, including vocational and employment angles; strengthen information to support broader implementation; and develop a code of conduct as a measure to ensure quality. A renewed legislative framework for VET, including further promotion and development of validation especially targeted at adults, has been prepared by the government, as part of the 2013 plan for growth and employment in Denmark.[33] The foreseen implementation phase for this reform is 2014–15.

The DK NQF, adopted in 2009 and referenced in 2011, includes all types and levels of qualifications awarded by public authorities. Almost all qualifications described in the NQF are accessible or can be acquired based on validation. Arrangements for validation cover all education sectors and establish links between them. However, links between validation in the public sector and the private and third sectors are weak or missing. The most comprehensive measures are found in VET and adult learning, while higher education does not use validation to the same extent. Validation can be used to award full or partial qualifications, grant exemptions from modules or parts of courses, grant access to higher education programmes or other formal education (mostly adult learning programmes), and tailor training specifications for individual training pathways towards a full qualification.

32 This section draws mainly on input from European Commission *et al.* 2014.

33 See http://bit.ly/1VrIOgP [accessed 16.10.2014].

As a second stage of development/implementation of the NQF, it has been considered whether the framework may be opened up to qualifications and certificates from the private and non-formal sectors. Private-sector organizations and the social partners are important stakeholders in development of validation programmes and contribute significantly. There is a tradition of collaboration between enterprises and formal education providers on competence development for workers, supported by the social partners. Third-sector/non-formal education stakeholders play an important part in providing information and guidance on validation possibilities and in supporting learners in identifying and documenting their prior learning.

Table 15 Level correspondence between the DK NQF and the EQF

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

Source: Danish Evaluation Institute, 2011.

Referencing to regional frameworks

Referencing to the EQF is treated as an integral part of overall implementation of the NQF and was completed in May 2011 (Danish Evaluation Institute, 2011). The result shows a strong convergence between the Danish framework and the EQF, but a linking of Danish Level 1 to EQF Level 2.

Important lessons and future plans

The DK NQF can now be considered fully operational.

Potential inclusion of certificates and diplomas awarded outside the public domain is currently being addressed. Accomplishment of this will further strengthen relevance of the framework for the labour market and the social partners.

Main sources of information

[URLs accessed 22.10.2014]

A website for the DK NQF is available on: http://ufm.dk/en/education-and-institutions/recognition-and-transparency/transparency-tools/qualifications-frameworks
The Danish Agency for Higher Education acts as NCP: http://ufm.dk/en/the-minister-and-the-ministry/organisation/danish-agency-for-higher-education/about-the-agency

List of abbreviations

DK NQF	Danish National Qualifications Framework
EQF	European Qualifications Framework
NCP	national coordination point
NQF	national qualifications framework
VET	vocational education and training

References

[URLs accessed 7.10.2014]

Danish Evaluation Institute. 2011. *Referencing the Danish qualifications framework for lifelong learning to the European qualifications framework.* http://english.eva.dk/publications/referencing-the-danish-qualifications-framework-for-lifelong-learning-to-the-european-qualifications-framework/download

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Denmark.* http://libserver.cedefop.europa.eu/vetelib/2014/87054_DK.pdf

Hansen, J.B. *et al.* 2013. *Learning outcomes in external quality assurance approaches: investigating and discussing Nordic practices and developments.* http://bit.ly/1FJUf1t

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

EGYPT

Introduction

Egypt has the largest population of the Arab countries, with 86 million inhabitants. The population growth rate has been declining in recent years and the country is in the middle of a demographic transition. However, 32% of the population is under 15, so there is still huge pressure on education, health, infrastructure and other services, as well as in the labour market. The labour force has been growing at 1.9% a year since 2000 and stood at 26.1 million in 2010. Some 800,000 jobs need to be created on a yearly basis to allow newcomers to enter the labour market. This is reflected also in the high rate of migration (around 4.4% of the population works abroad) and this trend is increasing, not only in the direction of the Arab states, but also towards Europe.

According to Egyptian Labour Market Panel Survey (ELMPS) data, in 2012 the total activity rate for the15–64 age group was 51.1 per cent, with a male activity rate of 80.2 per cent and a female activity rate of 23.1 per cent. There has been slight increase in the activity rates for males, but reduced rates for females, as opportunities in the labour market contract. The decreasing activity rate of females has been a consistent trend since 2006.

The overall employment rate is also low at 47 per cent. Since the January 2011 revolution, the unemployment rate has been constantly growing: from 9 per cent in 2010 to 12 per cent in 2011, rising again to 12.7 per cent in 2012 and reaching in 2013 13.2 per cent (3.6 million jobless Egyptians). Unemployment is a particular problem for women, as the female unemployment rate is more than double the male rate (25 per cent as against 10 per cent in 2012).

It is worth noting the paradox that there are very low unemployment levels among less well-educated workers, or those without any formal schooling and that, overall, unemployment increases the higher the level of education an applicant has.

However, this applies mainly to women. Unemployment levels for females with general high school education is 30 per cent (6 per cent for males), 37 per cent for VET high school graduates (5 per cent for males), 29 per cent for post-secondary (6 per cent for males) and 25 per cent for university (7 per cent for males). Education encourages females to plan to enter the labour market, but as employment prospects are poor, women are often unemployed. Moreover, the relationship between VET and employment prospects is polarized between men and women. VET supports the reduction of male unemployment – 5 per cent of male VET high school graduates are unemployed; by contrast, 37 per cent of women VET graduates are out of work.

Main policy objectives

In the last four years, a number of priorities for overcoming the challenges facing the Egyptian education and training systems have been identified by a range of sources. The national competitiveness reports, the TVET strategy developed by the TVET Reform Programme, the OECD country review for higher education, the workforce development report of the World Bank and the ETF Torino Process report all confirm priorities for a unified vision of VET, a less fragmented VET landscape, including more efficient governance, a more demand-oriented VET offer, the need for more and a better skilled workforce, and shadowing the Bologna Process in higher education.

Prior to the Egyptian revolution in January 2011, there was a consensus among various stakeholders from the education and training systems that a national qualifications framework (NQF) was crucial in overcoming the challenges facing education and training. There is clearly a need to develop and implement a clear framework for qualifications in Egypt based on modern, quality criteria. This policy action is supported by statements of the minister of education to upgrade TVET and make it more relevant to labour market demands. A deputy minister of TVET has been appointed with this mission.

From 2005 until 2008, a National Task Force prepared the concept paper for an Egyptian National Qualifications Framework. The National Task Force was chaired by the Minister of Manpower and Migration and included formal representation of the main stakeholders, governmental and non-governmental.

A complete proposal for an NQF consisting of the proposed NQF model, its tools and proposed policies, and implementation action plans was prepared by NAQAAE (the National Authority for Quality Assurance and Accreditation of Education), which is in overall charge of the NQF. The proposal was presented to the inter-ministerial Supreme Council for Human Resources Development in 2010. However, the whole project was suspended because of political instability in Egypt.

In 2010, the Egyptian Prime Minister endorsed the concept paper and gave the mandate to NAQAAE to commence with development of an NQF. It should be noted that no legislative mandate was issued, and no earmarked budgets were allocated. The objectives to be achieved by the NQF, as identified in the proposal presented by NAQAAE, are:

- Providing reference standards for qualification levels based on learning outcomes;
- Acting as a reference to build qualification frameworks for different sectors/sub-sectors serving as a comparability tool for recognition of Egyptian qualifications, allowing overseas mobility in education systems and labor markets;
- Linking qualification levels allowing progression from one level to another;
- Linking TVET and the general education systems, promoting level progression (no dead ends) and permitting (with appropriate tools) horizontal mobility between the two systems;
- Guiding QA standards (and ARS) setting both by providers of education and EQA bodies;
- Permitting inter-sectorial mobility (with appropriate tools);
- Providing a benchmark to review and enhance standing Egyptian qualifications, and acting as reference standards when introducing new qualifications;
- Assuring public confidence in the outcomes of the Egyptian qualifications system by meeting societal and employers' expectations for different qualifications levels;
- Fostering lifelong learning and the recognition of prior learning (RPL).

Since these initiatives, no progress has been made in implementing the proposal developed in 2010.

Stakeholder involvement

In mid-2007, a task force comprising representatives of key ministries and stakeholders was established, to work on the exploratory, conceptual and design phase of an Egyptian NQF. The task force comprised eleven members from the Executive Committee of the Supreme Council for Human Resource Development, supported by four external members representing stakeholders. In parallel, NAQAAE was leading an initiative to develop the proposal for an NQF. The proposal was presented to the Supreme Council for Human Resources Development in 2010 and consequently the Prime Minister transferred the mandate for NQF development to NAQAAE, obviating the need for a task force. NAQAAE, taking a sectoral approach, continued working on the project, taking it a further step as it formed sectoral working groups formed of representatives of ministries, agencies, employers and trade unions and started building QFs for twenty-two different sectors.

At policy level, the process of establishing the NQF has been led by the Ministry of Manpower and Migration; from the early stages, the ministry engaged several public bodies (the Prime Minister's Office, other ministries, and the Supreme Council for Human Resources Development) in the process of developing the NQF. The National Authority for Quality Assurance and Accreditation for Education has been nominated as the implementing body for the NQF.

In January 2013, the government approved the establishment of the National TVET Authority, which replaces the Supreme Council for Human Resources Development. The authority was never operational and the new government appointed in 2014 established a new TVET authority under the Prime Minister, with two executive committees, one for technical vocational education and a second committee for vocational training. Twenty-seven regional committees have been established to assure the link with the local needs for VET. The two executive committees are coordinated by the Ministry of Education, which represents the initial VET sector, for TVET, and the Ministry of Manpower, which represents CVET, for training. The regional committees are supervised by the regional governors.

Level descriptors and learning outcomes

As a consequence of the slow progress to date, the NQF model remains the eight-level NQF model presented by NAQAAE. This is in line with Egyptian education, training and labour market

structures. These eight levels are described according to three broad descriptors. These are:

a) Knowledge: described by knowledge extent and depth.
b) Skills: described as cognitive skills (including logical, intuitive and creative thinking) and professional skills (including manual dexterity and the use of methods, materials, tools and instruments).
c) Competencies: described in terms of the extent of responsibility, autonomy and interaction.

The model adopts a matrix-type design for the description of levels together with broadly-defined learning outcomes, similar to that of the European Qualifications Framework.

Prior to the EQF-inspired model developed by NAQAAE, the National Skills Standard Project was implemented and is still used to provide standards in training programmes in tourism, construction and agriculture with the involvement of the sectoral and regional ETPs (Enterprise Training Partnerships). How far these standards have been updated is not clear, nor is it clear if they are used in the TVET sector.

Validation of non-formal learning and links to the NQF

The establishment of progression pathways to avoid dead-ends and educational bottlenecks, and rules to accredit prior learning, are among the key objectives of the Egyptian NQF. Up to now, no detailed implementing rules have been defined. The fragmented VET landscape and the absence of an NQF do not allow horizontal progression pathways and progression between systems.

Referencing to regional frameworks

At regional level, Egypt is participating in a regional project on qualifications (Qualifications for the Mediterranean, Q4M) launched by the European Training Foundation, an EU agency, in 2010. It aims to enhance regional and Euro-Mediterranean partnerships on issues related to qualifications. Seven countries are participating in this project - Egypt, Tunisia, Morocco, Jordan, France, Italy and Spain. The project comprises three main elements:

- Networking and sharing among the countries involved in the project on issues related to NQF design and implementation;
- Increasing regional transparency and mutual understanding of qualifications in two economic sectors (tourism and construction) with the aim of creating conditions for recognition of qualifications across borders;
- Integrating and cross-fertilising the developments in the regional sectoral component with national developments in the setting up and implementation of qualification frameworks.

The project has to date produced common profiles for occupations in the key sectors of construction and tourism. The Q4M project has disseminated learning outcomes approaches to qualifications in the TVET sector. At this stage, the qualifications in the TVET sector are input-based with no relation with occupational standards or requirements of the labour market. It is also important to note that an Arab Qualifications Framework (AQF) is under development. This is a planned regional, or trans-national, ten-level QF, under the auspices of the Arab League. ANQAHE, the Arab Network for Quality Assurance in Higher Education, has published a blueprint. It remains to be seen if the league will accept it as it is or modify it. NAQAAE plans to reference Egypt's NQF to both the AQF and to compare it to the EQF, shadowing the ten criteria used by EU member states.

Important lessons and future plans

There are signs that the NQF may be given new impetus in the next years. In February 2015, at the Prime Minister's instigation, NAQAAE organised a high-level conference, which included the respective ministers of education, manpower and immigration, and the vice-minister of education for TVET; plus senior officials and representatives from the ministries of higher education, industry and commerce, tourism, housing, utilities and urban communities. Additionally, experts and representatives from Al- Azhar University, the Industrial Training Council, the Supreme Council of Universities, and heads of industry Sector Committees participated.

The conference set out a roadmap to develop, ratify and implement the NQF. The next stage is to draft an NQF law.

The NQF is also an integral part of the EU-funded TVET II programme, which began work in 2014.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

ESTONIA

Introduction

Estonia is implementing a comprehensive national qualifications framework (NQF) for lifelong learning, the Estonian Qualifications Framework (EstQF), which includes all State-recognized qualifications.[34] The overarching framework brings together sub-frameworks for higher education qualifications,[35] vocational education and training (VET) qualifications,[36] general education[37] and occupational qualifications,[38] with specific descriptors and underpinning quality-assurance activities.

The sub-framework for higher education, reflecting principles of the European Higher Education Area, was adopted in August 2007 and described by a standard of higher education. General descriptors follow the logic of Dublin descriptors, but are adjusted to national needs.

Level 5 of the EStQF has been subject to intensive discussions since establishment of the framework in 2008 as there were no initial education qualifications at this level. Following intense consultation with all stakeholders, the new VET Act came into force in mid-2013.[39] It substantially transformed the VET system and introduced qualifications at Level 5 (both in initial and continuing VET). It also establishes a new quality-assurance framework for VET and the Estonian VET credit system.

34 According to law, they have to be defined in learning-outcome qualification standards (curriculum or professional standard). Awarding institutions (educational institution, professional associations) have to be accredited by the state.

35 Referred to as standard of higher education.

36 Referred to as vocational education standard.

37 Referred to as national curriculum for basic schools and national curriculum for upper secondary schools.

38 Occupational qualification means a qualification associated with trade, occupation or profession resulting from work-based learning.

39 See https://www.riigiteataja.ee/akt/122122013002 [accessed 22.10.2014].

Main policy objectives

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

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

- improve the link between education/training and the labour market;
- increase educational offer and qualification system consistency;
- provide transparency for employers and individuals;
- increase understanding of Estonian qualifications in the country and abroad;
- introduce common quality-assurance criteria;
- support validation of non-formal and informal learning;
- monitor supply and demand for learning.

It is expected that implementation of an overarching NQF will increase coherence of education and training and help to introduce coherent methods for standard-setting. Another important policy objective is to increase adult participation in lifelong learning from 12 per cent in 2012 to 20 per cent in 2020, set as a national target (European Commission, 2013, p. 3). A particular concern is reducing numbers of low-skilled adults without a vocational or occupational qualification. Early school-leaving and dropouts have decreased in past years to 10.5 per cent in 2012, but are still high in the final years of basic education and highest in the first year of vocational education. Further decreasing early school-leaving (especially among boys) remains an important policy area and an objective for the coming year. A significant reduction in early leaving of males took place, but still remains twice as high as for females. A key priority is to improve quality of education and especially relevance of VET to needs of the labour market.

The labour market in Estonia cannot be considered (highly) regulated by qualifications (only a small part of professions and occupations is regulated) and about one third of the workforce does not

have qualifications. Government sees this as a problem and plans measures to open access to qualifications (Cedefop, 2014).

Stakeholder involvement

The Ministry of Education and Research with the Estonian Qualifications Authority are the main bodies in charge of development and implementation of the EstQF. 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; the Qualifications Authority; the Confederation of Estonian Trade Unions; the Estonian Employers' Confederation and the Estonian Employees' Unions' Confederation).

The Estonian Qualification Authority (Kutsekoda) was established in 2001 to develop a competence-based professional qualifications system, put in place in parallel to the formal education system under the Ministry of Education and Research. Based on the Professions Act in 2001, professional qualifications were referenced to a five-level professional framework where Level 1 was the lowest and Level 5 the highest.

The Qualifications Authority coordinates 16 professional councils and provides technical support to the board); it cooperates with other institutions, such as the National Examination and Qualifications Centre and the Quality Agency for Higher Education.

The Chamber of Commerce and Industry, Estonian Employers' Confederation and Central Federation of Trade Unions participate in professional councils 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 was introduced by the amended Professions Act to improve cross-sectoral cooperation and coherence in the qualification system.

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

Framework implementation

The Estonian NQF has reached an early operational stage, the Ministry of Education and Research and the Estonian Qualifications Authority being the main bodies involved in its implementation. A legal and institutional framework was set up by the amended Professions Act of 2008 and key responsibilities and roles of different stakeholders have been agreed. Quality criteria for inclusion and positioning qualifications in the framework have been adopted. The framework includes all state-recognized qualifications, which have to meet two basic criteria: be defined in terms of qualifications standards based on learning outcomes (curriculum or professional standard) and awarded by nationally-accredited institutions.

Implementation of the overarching framework has triggered discussions between stakeholders and has been used to identify gaps and imbalances in provision of qualifications. For instance, EstQF Level 5 was a focus of public debate since formal adoption of the framework in 2008. The main discussion concerned the fact that there were no qualifications from initial education and training identified at this level, only occupational qualifications. There is a need, supported by different stakeholders, for these types of qualifications in the labour market, which has resulted in certain policy decisions. The new VET Act stipulates five types of VET qualifications certificates:

- VET certificate, EstQF Level 2;
- VET certificate, EstQF Level 3;
- Upper-secondary VET certificate, EstQF Level 4;
- VET certificate, EstQF Level 4;
- VET certificate, EstQF Level 5.

Additionally, the framework has been used to revisit current provision of higher vocational qualifications referenced to EstQF Level 6. The framework also informs curriculum reform in VET and fine-tuning qualification descriptions from VET and higher education with NQF level descriptors (see level descriptors below).

A permanent platform was set up – a steering group – including representatives of all competent bodies and stakeholders (ministries, the Estonian Qualifications Authority, chambers, social partners, students, the European Network of Information Centres/National Academic Recognition Information Centres, etc.) to oversee implementation and evaluate EstQF's impact.

Level descriptors and learning outcomes

The NQF is based on eight levels. Level descriptors for lifelong learning are identical to EQF level descriptors. They are defined as knowledge (theoretical and factual), skills (cognitive skills – use of logical, intuitive and creative thinking – and practical skills, manual dexterity and use of methods, materials, tools and instruments) and scope of responsibility and autonomy (Government of Estonia, 2008). More detailed descriptors have been developed in four sub-frameworks for general education, initial vocational education, higher education and occupational qualifications.

Two types of qualification are included:

- Formal education qualifications, awarded after completion of educational programmes at all levels (general, vocational, higher);
- Occupational qualifications,[40] where individuals are issued a certificate of knowledge, skills and competences required for working in a specific occupation or profession.

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

Learning outcomes of different types of VET are described in the vocational education standard and correspond to levels 2 to 5 of the EstQF. The vocational education standard describes the requirements for national and school curricula, including objectives, expected learning outcomes, volumes of study and graduation requirements for different types of initial and continuous VET programmes, and requirements for pedagogical professionals. Learning outcomes are defined as occupation-specific knowledge and skills as well as transversal skills (communicative, learning, social, entrepreneurial and self-awareness, independence and responsibility). A new reform of VET curricula was launched in September 2013. By August 2014, thirteen new national VET curricula were approved, four are in the process of approval and two under development. With national curricula of the previous generation they cover the whole spectrum of specialities. Since 2013, the volume of VET has been expressed using Estonian VET credit points.

40 There are 620 occupational qualifications based on occupational standards, which can be placed at levels 2 to 8 of the NQF. They can be gained through formal education, adult education and in-service training. Information obtained from Kutsekoda and Estonian Ministry of Education and Research, 2012.

In general education, the current national curriculum was enforced in 2011. It sets out goals and objectives, expected learning outcomes, assessment criteria and requirements for the learning and teaching environment, graduation and school curriculum.

New learning programmes were implemented in higher education institutions from September 2009. The Universities Act and the Applied Higher Education Institutions Act now allow for accreditation of prior and experiential learning in higher education curricula.

Validation of non-formal and informal learning and links to the NQF[41]

Validation practices in Estonia are well developed in the formal education sector. Higher education has led developments in relation to validation, though other sectors – such as the VET sector – are following the same path. Thus, the challenge in Estonia is for other sectors to follow suit in terms of their developments in RPL to create a unified system. The current model is fragmented and for potential applicants it could be difficult to find their way around the various sector-specific systems.

Development of the EstQF has among its objectives to support validation, and the referencing report clearly signalled the NQF's link to validation (Kutsekoda and Estonian Ministry of Education and Research, 2012, p. 9, 29, 37, 49 and 55). Validation in higher education is regulated by the University Act and the standard of higher education. Validation in VET is regulated in the standard of vocational education. Validation allows for access and exemption of parts of the programme, but in both cases a final examination/thesis needs to be taken. At primary school, certain learning outcomes may be recognized with agreement of a student's parents and the school's representatives. It is only for 'occupational qualifications' that full qualifications can be awarded through RPL.

For validation, higher education has developed rapidly due to European Social Fund funding of the Primus programme (Archimedes foundation, 2008) that ended in 2013. The project ran since 2008 and produced a network of validation professionals with various specialities that created and gathered statistics on validation, and developed guideline materials for applicants, assessors and consultants. In VET, pilot projects are being carried out on collecting statistics.

41 This section draws mainly on input from European Commission et al., 2014.

Development of the NQF has been accompanied by development of programmes based on learning outcomes that have helped the introduction of validation principles.

Referencing to regional frameworks

Estonia referenced the EstQF to the EQF and self-certified compatibility of the EstQF for higher education with the qualification framework for the European Higher Education Area in October 2011.

Table 16 Level correspondence between the EstQF and the EQF

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

Source: Kutsekoda and Estonian Ministry of Education and Research, 2012.

Important lessons and future plans

One key objective of the EstQF is to improve comparability between formal school leaving certificates and occupational qualifications. EstQF has contributed to this objective in recent years by building up a more coherent and responsive lifelong learning system. The process has been intense. Recently, 'a remarkable convergence of the formal educational system and professional qualification system has taken place' (Kutsekoda and Estonian Ministry of Education and Research, 2012).

Occupational qualifications that link lifelong learning with the labour market can be distributed at levels 2 to 8 of the EstQF, clearly indicating that not only higher education qualifications can be assigned to levels 5 to 8. Strict quality criteria have to be met (qualifications are based on professional standards and developed in close cooperation with social partners, awarding bodies have to be accredited, etc.). The relationship between occupational and VET qualifications was discussed in the EQF advisory group, such as how occupational qualifications differ and/or complement qualifications awarded in the initial education system. In general, there are two ways to obtain qualifications in Estonia: either via work experience and assessment against a professional standard or via a VET programme, developed based on professional standards, as well as broader educational objectives. Both types of qualifications have the same value on the labour market. According to the Professions Act of 2011 both VET and higher education institutions, which have curricula based on professional standards and are accredited against quality standards, could apply to become an awarding body of occupational qualifications and the school leaving diploma or certificate. Some kind of convergence of these two systems is expected.

Main sources of information

[URLs accessed 22.10.2014]

The Estonian Qualification Authority is designated as EQF national coordination point:
http://www.kutsekoda.ee
Information on NQF development is available from:
http://bit.ly/1Vp0zCF

List of abbreviations

ENIC	European Network of Information Centres
EQF	European Qualifications Framework
EstQF	Estonian Qualifications Framework
NARIC	National Academic Recognition Information Centres
NQF	national qualifications framework
RPL	recognition of prior learning
VET	vocational education and training

References

[URLs accessed 22.10.2014]

Archimedes Foundation. 2008. Primus: higher education quality enhancement programme in Estonia (2008–14). http://primus.archimedes.ee/sites/default/files/teavitus/Primus_eng.pdf

Cedefop. 2014. *Qualifications at level 5: progressing in a career or to higher education*. Luxembourg: Publications Office. Cedefop working paper: No 23. http://www.cedefop.europa.eu/EN/Files/6123_en.pdf

European Commission. 2013. *Education and training monitor. Country report on Estonia.* http://ec.europa.eu/education/library/publications/monitor13_en.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Estonia.* http://libserver.cedefop.europa.eu/vetelib/2014/87055_EE.pdf.

Government of Estonia. 2008. Occupational Qualifications Act. http://www.kutsekoda.ee/fwk/contenthelper/10445708/10445709

Kutsekoda; Estonian Ministry of Education and Research. 2012. *Referencing of Estonian qualifications and qualifications framework to the EQF.* http://www.kutsekoda.ee/fwk/contenthelper/10447220/10447221

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

ETHIOPIA

Introduction

The Ethiopian National Qualifications Framework (ENQF) is being developed by a taskforce set up in 2007 by the Ministry of Education (MoE). In 2010, the Higher Education Strategy Centre (HESC) was mandated to coordinate the process of ENQF development and implementation in close collaboration with the Ministry of Education and other relevant agencies (Proclamation No. 650/2009 and 691/2011, HESC, 2011). A sub-framework designed to integrate into the ENQF, the Ethiopian Technical and Vocational Education and Training Qualifications Framework (NTQF), was proposed in 2006 (MoE, 2006*c*).

The population of Ethiopia is about 80 million and its economy is predominantly agrarian. In keeping with its commitment to participate in the competitive global market economy and become a middle-income country by 2025, Ethiopia has set a human resource development agenda to raise the quality of its workforce to international standards and build a culture of entrepreneurship among graduates (Solomon, 2011).

Providing adequate employment opportunities for the growing labour force, particularly for young people, constitutes a major socio-economic challenge. According to the 2007/08 census, 15 to 24-year-olds accounted in that year for 20.5 per cent of the total population. A significant proportion of those young people work in the agricultural sector, distantly followed by the wholesale and retail trade, suggesting that young people are mainly engaged in sectors characterised by low productivity and incomes.

Ethiopia's current labour market information system, by which data about the labour market is made available, is insufficiently developed, fragmented, limited in scope and out of date. Strengthening the labour market information system is therefore an important objective of the Ethiopian Government (OECD, 2012). Ethiopia's technical and vocational education and training (TVET) system is in dire need of government attention in order to remedy the many challenges it currently faces. The system struggles to coordinate a variety of providers at different qualification levels (MoE, 2008). Demand for TVET far exceeds supply; formal TVET caters for less than 3 per cent of the relevant age group. Partially as a result of underfunding, Ethiopia lacks a qualified corps of TVET teachers/instructors. A mismatch between the content of TVET courses and industry requirements means that many TVET graduates remain unemployed even in occupational fields with a high demand for skilled labour. Employers are not consulted during the planning of courses. Mechanisms for assessment and certification of TVET candidates are inadequate. Since few people are aware of the benefits of TVET, the sector suffers from a lack of prestige (MoE, 2008).

A number of reform initiatives have been put forward in the last twenty years to address the challenges facing Ethiopia's education and training system. The National TVET Strategy was developed in August 2006 (MoE, 2006*b*). In September 2006, the Federal Ministry of Education developed a National TVET Qualifications Framework (NTQF) to improve the quality and relevance of the TVET system and create ways to recognize the wide range of formal, non-formal and informal learning existing in Ethiopia, hence opening access to qualifications for previously neglected target groups (MoE, 2006*c*). A TVET Leaders' and Trainers' Qualifications Framework (TLTQF) was introduced in 2010 (MoE, 2010*b*).

The Education and Training Policy of 1994 (Teshome, 2005; Solomon, 2011) led to the preparation in 1996 of the Education Sector Development Programme, ESDP IV. This programme outlined a comprehensive development vision for the education sector, covering formal, non-formal, initial and further training, provided open access to certification, and created pathways between the general, TVET and higher education sectors (MoE, 2010*a*).

The national Growth and Transformation Plan (GTP) adopted by the Federal Government of Ethiopia for the years 2010 to 2014 identified education as one of the key sectors contributing to the production of high-quality skilled manpower for the Ethiopian economy (Assegidew, 2012).

Main policy objectives

The ENQF aims to:

- raise the quality of educational programmes, and hence the credibility of qualifications, by establishing quality-assurance processes and setting out nationally valid standards detailing the knowledge, skills and competences expected of graduates of all ENQF qualifications;
- make Ethiopian qualifications more relevant to industry and the labour market;
- promote equity and access to education for all Ethiopians;
- provide mechanisms for the recognition of learning gained in formal, non-formal and informal settings;
- harmonize the three sub-sectors (general, TVET and higher education) by setting out common standards and progression pathways between them, improving the transparency and comparability of qualifications.

The ENQF builds on the objectives of the already existing NTQF (MoE, 2006*c*), which are to:

- improve the transparency of the TVET qualifications system, ensuring that trainees know what they need to learn and employers know what they can expect of graduates;
- ensure flexibility, transferability and progression between different occupational and training fields and between different training venues;
- eliminate the barriers that currently block horizontal and vertical educational pathways;
- establish and maintain a levels system, based on standards of competence, detailing the knowledge, skills and attitudes (KSA) acquired by trainees;
- create a single nationally and internationally accepted system against which all learning achievements may be measured and understood.

Involvement of stakeholders and legal arrangements

In June 2004 a team of inquiry into governance, leadership and management in higher education produced a report entitled *Higher Education System Overhaul* (HESO, recommending the development of a national qualifications framework for Ethiopia. The intention was to design a qualifications framework focusing on post-secondary certification (post-Grade 12) and providing mechanisms for the recognition of prior learning and for skills upgrading in the workplace (MoE, 2004).

The endorsement of Higher Education Proclamation No. 651/2003 (FDRE), which was repealed and replaced by Proclamation No. 650/2009, constituted a major step forward in educational policy making. The new Proclamation states that 'the Ministry [of Education], the Centre [HESC], and the Agency [HERQA] shall also guide institutional quality enhancement efforts as well as curricula development through a national qualifications framework that shall, as the case may be, determine or indicate core learning outcomes or graduate competences'. (Assegidew, 2012; emphasis added by author). At the same time, tools for public-sector reforms such as Business Process Re-Engineering (BPR)[42] and Balanced Score Card (BSC)[43] of public institutions created a need to reorganize the sub-sectors of education and training and establish the ENQF (HESC, 2011).

The period between 2004 and 2008 saw limited progress on the ENQF despite several attempts to maintain momentum through strategy papers, consultative documents and implementation plans (Assegidew, 2012). The reason for this was that Ethiopia's education and training policies continued to emphasize formal education to the neglect of non-formal and informal learning. As a result, awareness of the ENQF was low in both the public and private sectors, and there was little interaction between education and training providers, and the labour market. Moreover, an overwhelming variety of models and suggestions from other countries ended up complicating, rather than facilitating the design process of the ENQF. Various organizations, such as SAQA, DeLPHE, GIZ, NUFFIC and the Tuning Project for engineering and technology programmes, offered different models of NQFs and proposed different orientations for the education system (British, American, German and Australian) (ibid. p. 90). The influence of other international developments, such as the South African Development Community (SADC) regional qualifications framework, the European Qualifications Framework and the African Qualifications Framework proposed by the African Union further complicated proceedings.

The South African Qualifications Authority (SAQA) was appointed in January 2008 to provide technical assistance to the ENQF Taskforce with financial aid from an Italian contribution to the Education Sector Development Programme (ENQF Taskforce, 2008).

42 Business Process Re-Engineering (BPR) is tool for strengthening managerial capacities of public institutions.

43 Balanced Score Card (BSC) is a tool to measure and analyze organizational and individual performance information for timely informed decision-making in public institutions.

The responsibilities of the ENQF Taskforce were:

- to consider how best to harmonize the existing national qualifications;
- to regulate national standards of knowledge and skills by defining qualifications levels with descriptors based on learning outcomes;
- to create a system for comparing qualifications, making them more comprehensible to learners, providers and employers and thus increasing confidence in the national qualifications system;
- to investigate procedures to improve access to learning and possibilities for credit transfer and progression;
- to investigate the establishment of dedicated agencies to manage, monitor and evaluate the ENQF and support further reform;
- to hold discussions with all relevant stakeholders in order to ensure a common and deep understanding on all matters relating to the ENQF;
- to develop a Consultative Document for the Development of a National Qualifications Framework for Ethiopia (ENQF Taskforce, 2008).[44]

The most recent developments in ENQF-related policy have had a direct effect on implementation of the ENQF (Assegidew, 2012). This can be seen in the preparation of a road map and strategy to establish an ENQF advisory group, a technical working group and an ENQF management information system.

Level descriptors and learning outcomes

The ten-level ENQF covers general education, TVET and higher education. The level descriptors from the work with SAQA in 2008 will be reworked and presented to the partners and stakeholders for comment (ENQF Taskforce, 2008).

44 This was completed in 2008 and is awaiting formalization (Assegidew, 2012).

Table 17 Ethiopia: Levels of the ENQF

ENQF Level	Grade	General and Higher Education	TVET
10		Ph.D.	
9		Master's degree (240 Credits)	
8		Graduate diploma (120 Credits)	
7		Bachelor's degree (360 Credits)	
6		Diploma (120 Credits)	Advanced diploma (120 Credits)
5	12	Higher education entrance examination certificate (120 Credits)	Diploma (120 Credits)
4	11		Level 4 certificate (120 Credits)
3	10	General education certificate (120 Credits)	Level 3 certificate (120 Credits)
2	8		Level 2 certificate
1		Primary school certificate (120 Credits)	Basic certificate
Access	1-4 Including adult basic education		

Source: ENQF Taskforce, 2008

The NTQF (the Ethiopian NQF for TVET) has five levels, from National TVET Certificates I to V (NTQF, 2006*c*). Occupational standards are formulated in terms of knowledge, skills and attitudes (KSA) (Ministry of Education, 2006*c*). Level descriptors in the NTQF are supported by mechanisms for standard-setting, assessment and certification in cooperation with employers, as well as a competence-based assessment system to support the validation of non-formal and informal learning (Ministry of Education, 2006*c*).

Recognition and validation of non-formal and informal learning and links to the NQF

Strengthening progression pathways between non-formal post-primary education and the TVET qualifications framework is one of the key objectives of the ENQF. The Federal Ministry of Education developed the Non-formal TVET Implementation Framework to facilitate this (MoE, 2006*a*).

Mobility in the TVET system takes place horizontally and vertically. Horizontal mobility involves trainees moving from one programme to another in a different occupational field but at the same qualifications level (for example from Accounting Level II to Plumbing Level II). Vertical mobility involves trainees moving from one certification level to another or from a certificate level to a diploma level in the same occupational field (MoE, 2006*c*).

While progression pathways are relatively easy to identify and maintain within a single sub-framework, the matter becomes more complicated in the context of an overarching ENQF covering all three educational sectors. In this situation, proper coordination between stakeholders is crucial, as the different sectors may fall under different jurisdictions. Additionally, a common language is essential in order to facilitate the transfer of credits from TVET to higher education (Assegidew 2012, p. 92).

Referencing to regional frameworks

The Annex to the Protocol for the Establishment of the East African Community (EAC) Common Market on Mutual Recognition of Academic and Professional Qualifications recommends that qualifications frameworks in the region should have ten levels. An audit covering regulated qualifications issued by national examination and awarding bodies in the EAC also resulted in the recommendation of a ten-level framework for academic and vocational qualifications. Other countries with ten-level frameworks include Tanzania, Mauritius and Australia.

Partner States have agreed to harmonize all national qualifications within the EAC. The exercise on Harmonization of the East African Education Systems and Training Curricula is still ongoing.

Important lessons and future plans

Overall, the prospects for implementing the ENQF seem bright. Political will, policy directives and global influence are in place, and importance is already being given in reform initiatives to raising the quality of education in Ethiopia and improving economic growth. One of the main strengths of the ENQF development process is that it provides a platform for dialogue between stakeholders who do not usually interact with one another (Assegidew, 2012, p. 92). The Government of Ethiopia introduced the ENQF not as a stand-alone reform, but as an integral part of other reform initiatives. Making the ENQF operational has been the work of many different reform initiatives over a period of time, a number of which are already bearing fruit.

Nevertheless, ENQF implementation requires hard work. It requires the co-operation of national and regional governments and other relevant stakeholders, as well as an understanding among all concerned parties of how the proposed changes are to be achieved (Teshome, 2005). It is often tempting to favour 'quick-fix solutions', but NQF developments in other countries have repeatedly demonstrated that NQFs are instruments of 'communication, collaboration and cooperation' that entail an iterative development process and take time to become familiar and accepted (SAQA Bulletin, 2012).

A recent study on the critical factors in ENQF implementation (Assegidew, 2012) made the following recommendations:

- More attention should be given to programme design and curriculum development;
- The government should take full ownership of the ENQF by allotting appropriate funds and resources to the ENQF development process;
- The MoE and HESC should facilitate collaboration between different stakeholders, ministries, NGOs and the private sector;
- Labour market linkages should be strengthened and comparability of qualifications improved;
- There should be greater involvement of experienced and knowledgeable academics in research;

- Communication strategies should be developed for 'buy-in' of policy makers' involvement, commitment and persistence;
- The language of the ENQF should be made more comprehensible to the public;
- A strong institutional support base should be established both at the level of manpower and of infrastructure;
- A plan should be developed for implementation and monitoring.

The next step for the Federal Minister of Education is to approve the Consultative Document (HESC, 2011). The HESC will consult with stakeholders, examine current qualifications, implement key pilot projects with universities, TVET institutions and schools, and set up a communications strategy and a database to record qualifications and register institutions.

References

Assegidew Tesfaye. 2012. *The Challenges and Prospects of the Proposed Ethiopian National Qualifications Framework to Enhance the Quality of Education*. (A compilation of contributions from the class of 2012). Cape Town, University of the Western Cape, South Africa).

ENQF Taskforce. 2008. *Conceptual Framework for the Development of the Ethiopian National Qualifications Framework (ENQF).* (Taskforce Document prepared by the ENQF Taskforce appointed by the Ministry of Education under the Guidance of the ESD Planning and Policy Analysis Department with technical assistance from the South African Qualifications Authority, SAQA). Addis Ababa, MoE.

Higher Education Strategy Center. 2011. *Ethiopian National Qualifications Framework Strategy Document and Roadmap 2011–2015*. Addis Ababa, HESC.

Ministry of Education. 2004. *Higher Education Systems Overhaul: Report of the Committee of Inquiry into Governance, Leadership and Management in Ethiopia's Higher Education System*. Draft. Addis Ababa: Ministry of Education

Ministry of Education. 2006*a*. *Non-formal TVET implementation Framework.* (Engineering Capacity Building Programme). Addis Ababa, MoE.

Ministry of Education. 2006*b*. *The National TVET Strategy* (Draft for Discussion) (Engineering Capacity Building Programme). Addis Ababa, MoE.

Ministry of Education. 2006*c*. *National TVET Qualifications Framework (NTQF)*. (Engineering Capacity Building Programme). Addis Ababa, MoE.

Ministry of Education. 2008. *National Technical and Vocational Education and Training (TVET): Strategy.* Addis Ababa, Ministry of Education.

Ministry of Education. 2010*a*. *Education Sector Development Program IV*. Addis Ababa, Federal Ministry of Education.

Ministry of Education. 2010*b*. *TVET Leaders' and Trainers' Qualifications Framework (TLTQF).* (Engineering Capacity Building Programme). Addis Ababa, Federal Ministry of Education. Nuffic. Accessed 2013. *Strengthening the Ethiopian National Qualifications Framework (ENQF) unit at the Higher Education Strategy Centre (HESC).* http://www.nuffic.nl/en/capacity-building/niche/countries-and-projects/ethiopia/niche-eth-113.

OECD. 2012. *African Economic Outlook 2012,* Paris, OECD.

Solomon, Areaya. 2011.Top-Down Reform Implementation and its impact on Quality of Education in Ethiopian Public Universities. *Ethiopian Journal of Business and Development*, Unity University, Vol. 5, No. 1, p. 2

Solomon, Belay. 2011. Recapturing Cultural Spiritual Values into Science Education: the Case of Ethiopia. *Ethiopian Journal of Business and Development,* Unity University, Vol. 5, No. 1, p. 2.

South African Qualifications Authority (SAQA). 2011. *Development of the Ethiopian NQF on track.* http://www.sawa.org.za/nes/2011/ethiopian, html. (Accessed 17 February 2013.)

South African Qualifications Authority (SAQA). 2012. The South African NQF from 1995-2011 (special edition in recognition of the contribution of Samuel B.A. Isaacs to the development of NQF in South Africa). *SAQA Bulletin, Key Readings,* Vol. 12, No. 2, February 2012.

Teshome Yizengaw. 2005. *Policy Development in Higher Education in Ethiopia and the Role of Donors and Development Partners* (Paper presented at the International Expert Meeting Formulas that work: Making Higher education Support More effective). Addis Ababa.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

FINLAND

Introduction

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

Following a change of government in 2011, the original proposal was slightly revised and resubmitted to parliament in May 2012 (Finnish Government, 2012). In its proposal the government expected the Act to be in force by 1 January 2013. As no progress was made by parliament, this deadline was not met and it is currently not clear if and when the framework will be taken forward. The momentum created during initial stages of the work (2008–12) seems largely to have been lost and there is currently only limited discussion on how to move into an operational stage.

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

Main policy objectives

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

Transparency and comparability of qualifications, at national and European levels, are core objectives of the draft NQF. This is to be achieved by describing all existing qualifications coherently 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 formal learning. Recognition of prior learning is emphasized as an important feature of the NQF and as a necessary element in a strategy for lifelong learning.

Several stakeholders have underlined that the framework provides an opportunity to strengthen overall consistency of use of learning outcomes across education and different institutions. Explicit level descriptors may help to clarify what is expected from a qualification and can improve overall quality of Finnish education and training. As well as officially-recognized qualifications (general, VET and higher education) at all levels, the framework will also cover official qualifications awarded outside the Ministry of Education and Culture's remit, for example, related to the armed services, police and prison and rescue services.

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

- Regulated professions, where legal requirements for certification beyond initial education and training exist. This is the case

for professions in the health and social sectors, as well as for teachers, divers and various groups within the construction sector;
- All areas where there is need for increased competences and specializations beyond initial education and training. The NQF proposal refers to the need to improve visibility and valuing of 'specializations' beyond initial education and training. These specializations form a significant part of the existing Finnish lifelong learning landscape (in vocational training, higher education and in liberal adult education).

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

Stakeholder involvement

Development of the Finnish NQF during the period 2008–12 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 Economy, Defence Command Finland (Ministry of Defence), Finnish National Board of Education, Confederation of Unions for Professional and Managerial Staff in Finland, Confederation of Finnish Industries, Central Organization of Finnish Trade Unions, Association of Finnish Local and Regional Authorities, Finnish Confederation of Professionals, Association of Vocational Adult Education Centres, Rectors' Conference of Finnish Universities of Applied Sciences, Vocational Education Providers in Finland, Finnish Association of Principals, Finnish Council of University Rectors, Finnish Adult Education Association, National Union of University Students in Finland and the Union of Finnish Upper Secondary Students.

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

Framework implementation

Following a change of government in 2011 the Ministry of Education resubmitted the NQF proposal to parliament. The main changes to the proposal were linked to allocating particular qualifications to NQF levels, and the original and somewhat controversial proposal to place some specialist vocational training qualifications, including one for riding teachers, at Level 6 were removed.

Lack of adoption by parliament has stopped preparations for implementation. It has not been possible to identify why adoption of the framework has been delayed.

Level descriptors and learning outcomes

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

The government proposal now being discussed by parliament introduces an eight-level framework reflecting (but slightly adjusting) the knowledge, skills and competence components introduced by the EQF. 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 dimensions of key competences and lifelong learning. Including the aspect 'evaluation' specifies that individuals must be able to reflect on their knowledge, skills and competences and to judge how to improve them. The descriptors for levels 6 to 8 use the same basic approach, but also largely reflect descriptors of the earlier proposal for a higher education qualifications framework. Table 18 shows the components used to define and describe levels in the Finnish NQF.

Table 18 Level descriptor in the Finnish NQF	
Levels 1 to 8	Knowledge
	Work method and application (skills)
	Responsibility, management and entrepreneurship
	Evaluation
	Key skills for lifelong learning

Source: ENQF Taskforce, 2008

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

The background document for the government proposal illustrates the main principles for placing qualifications at particular levels and how the learning outcomes approach has been applied. Qualifications of the same type have been placed at the same level. This applies also to vocational qualifications (levels 4 and 5). To ensure clarity of the education and qualifications system, all qualifications of a certain type would normally be placed at the same level in the framework. This is important as it signals a willingness to use the learning outcomes approach actively and an acknowledgement that this may lead to different level placement within one group or qualifications.

While creating no controversy at national level, placing the basic education syllabus at Level 3 of the NQF has triggered intense discussion with the four other Nordic countries (Denmark, Iceland, Norway and Sweden). They have now decided to place their primary and lower secondary education at Level 2. Given that Finland at some stage presents a referencing report to the EQF, this particular choice will thus be of particular interest to several countries.

Validation of non-formal and informal learning and links to the NQF[45]

Validation is well established in Finland, with detailed policies and legislation. Laws and regulations define validation for each education sector separately, with the same central message: validation is an individual right, independent of where learning has been acquired. There have been no changes in this legislation since 2010, but, currently, a change in legislation regarding VET is proposed, with consequences for both the Vocational Education Act and the Vocational Adult Education Act. Objectives include clarification on validation, and the draft proposal emphasizes use of learning outcomes and flexibility in learning pathways. Enforcement is foreseen in 2015.

National strategy is in line with the upcoming NQF, with arrangements for validation in all education sectors and good links between sectors. Although the NQF is not yet legally enforced, it is relatively well known and used by practitioners and development of the NQF and accompanying work on a learning-outcomes approach for all levels has revitalized discussion on validation. The NQF, with legislation for each sector/level, is seen as ensuring flexible pathways and comprehensive possibilities for validation, as any prior learning can be validated against a qualification in the NQF. The Finnish Government's development plan for education and research 2011–16 discusses validation of non-formal and informal learning and recommends that it is developed in all sectors.

Validation procedures are embedded in formal education. In initial and continuing VET, it is possible to get a full qualification through validation. Such a qualification follows the same standards (national requirements described in terms of learning outcomes) and holds equal worth as a qualification from the formal education system. It is also possible to get certificates for units of a full qualification. An initial VET qualification at NQF Level 4 (upper secondary) gives access to higher education irrespective of whether it is based on validation or achieved through the formal education system. In higher education, on the other hand, it is not possible to award a full qualification, but any number of credits can be gained through validation. Certification is identical for credits achieved through validation or formal learning. There are no national standards – institutions are responsible for developing their own curricula.

Although options for validation exist in all sectors of education, with a firm legislative basis, there are differences in approach and usage. In general upper-secondary education, students have the right to have relevant competences validated, but the option is not widely used, as opposed to IVET, where a substantial recent increase in validation is reported. The area with the most comprehensive strategies and policies for validation is adult VET (competence-based qualifications). The private

45 This section draws mainly on input from European Commission et al., 2014.

sector is involved in tripartite collaboration in validation, especially in IVET and the competence-based qualifications system, both at strategic level and in practice. In higher education, institutions are autonomous and decide independently on validation procedures. Some higher education institutions have opted out, while others work along similar lines as in IVET. Those that have adopted validation procedures have started developing learning outcomes-based curricula. Third-sector actors/NGOs also play a role, providing information and guidance and, in some cases, also validation services and tools and certification based on learning outcomes.

Referencing to regional frameworks

The Finnish national coordination point for EQF (which is the National Board of Education) was appointed in June 2008, before work on the NQF started. Preparations for referencing national qualifications levels to the EQF have been going on in parallel to work on the NQF proposal itself. Due to the delays encountered, no information is available as regards future referencing to the EQF.

Important lessons and future plans

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

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

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

Main sources of information

[URLs accessed 20.10.2014]

Finnish Ministry of Education and Culture:
http://www.minedu.fi/OPM/?lang=en
The Finnish National Board of Education acts as national coordination point:
http://www.oph.fi/qualificationsframework

List of abbreviations

EQF	European Qualifications Framework
IVET	initial vocational education and training
NQF	national qualifications framework
VET	vocational education and training

References

[URLs accessed 20.10.2014]

European Commission; Cedefop; ICF International. 2014. *European Inventory on validation of non-formal and informal learning 2014: country report Finland.* http://libserver.cedefop.europa.eu/vetelib/2014/87057_FI.pdf

Finnish Government. 2012. *Regeringens proposition till riksdagen med förslag till lag om en referensram för examensbaserat och övrigt kunnande [Government proposal for act on a national framework for exam-based and other competences].* http://www.oph.fi/download/141018_HE_laiksi_viitekehyksesta_toukok_2012_sv.pdf

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

FRANCE

Introduction

The setting up, in 2002, of the National Committee on Vocational Qualifications (CNCP) and the National Register of Vocational Qualifications (RNCP) signalled 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* (VAE)), 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.

Several stakeholders consider the existing five-level structure dating back to 1969 to be in need of replacement, possibly by an eight-level structure more closely aligned with the EQF. It is, for the moment, unclear when a new structure could be put in place.

The framework was referenced to the EQF in October 2010, using the original five-level structure. The EQF levels, and their alignment with the five-level structure, are clearly indicated in databases as well as in certificate and diploma supplements. A new referencing report will be submitted as soon as a revised structure is in place.

Main policy objectives

The French NQF, as defined by the RNCP, covers all vocationally or professionally oriented qualifications, including all higher education qualifications with a vocational and professional orientation and purpose.[46] The framework covers three main types of qualification:

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

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

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

The French NQF is defined by its labour market focus, the framework responding to a situation where candidates increasingly find themselves without jobs after finishing education and training. Recent policy initiatives and reforms have emphasized the need to give higher priority to employability and having candidates better suited to the labour-market. Education and training providers (including universities) have been obliged to reformulate and clarify their qualifications, also in terms of labour market relevance, using the same qualifications descriptors (skills, knowledge, competence). This movement towards employability has been present in French policies since 2006.

46 The RNCP currently covers more than 6,000 qualifications published in the Official Journal; 1,260 of these are 'old' certificates no longer awarded. Since October 2012, degrees in higher education consist of: 870 masters; 323 *titres d'ingénieur* (master); 160 *licences générales* (bachelor); 1,523 *licences professionnelles* (professional bachelors); 1,280 qualifications at EQF Level 5 (including higher education short cycles): 117 *brevets de technicien supérieur* (BTS), (2011) 29 BTSA (same thing in the field of agriculture), (2011) 43 DUT (*diplômes universitaires technologiques*).

While there is increasing emphasis on employability and competences for the qualifications forming part of the responsibility of the CNCP, this principle is only partly applied for general education at primary and upper secondary level.

Stakeholder involvement

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

CNCP is a platform for cooperation between all ministries involved in the design and award of qualifications (education, higher education, labour, social affairs, agriculture, culture, youth and sports, defence, finance) and for the social partners and other relevant stakeholders (such as chambers) in coordinating the French qualifications system and framework. This broad involvement is seen as necessary (both for technical and administrative reasons) to capture the diversity of qualifications in France, but also for reasons of credibility and ownership. CNCP is also entitled to be informed about any vocational qualification created by social partners, even in cases where there is no intention to place them in the national register.

Framework implementation

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

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

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

The French Centre international d'études pédagogiques (CIEP) published a survey (CIEP, 2014) on whether stakeholders are aware of qualifications frameworks (in public administration, in public as well as in private education and training institutions, among employers and among recruiters).[47] The following main findings are of interest: 79 per cent of those asked were aware of the French framework, 53 per cent and 45 per cent (respectively) answered that they lack knowledge of the EQF and QF-EHEA (qualifications frameworks in the European Higher Education Area). The survey shows that employers generally lack understanding of the frameworks and seem to attribute relatively little priority to them, though only 273 stakeholders were contacted and only 91 responded, reducing the overall value of the survey.

47 This survey formed part of an international comparison where also stakeholders in eight other European countries were asked the same questions.

Level descriptors and learning outcomes

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

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

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

Table 19 Levels in the French National Qualifications Framework

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

Source: French National Council of Statistics (CNIS), 1969.

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

The learning outcomes approach has only been partially introduced in higher education. Traditionally, university qualifications have been input-based and very much focused on knowledge and research. 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 students.

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

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

There are also many 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 for higher education. A nationwide process was initiated in 2009/10 and regional meetings have been/are being held explaining the rationale behind this approach.

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

- qualifications based on training modules, the learning outcomes of each module being assessed separately;
- qualifications based on a two-block approach, theory and practical experience, the learning outcomes of the two blocks being assessed separately;
- qualifications linked to a single, coherent block of learning outcomes/competences requiring a holistic approach to assessment of learning outcomes;
- qualifications based on units of learning outcomes, which can be assessed separately, and capitalized 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 uses the Europass certificate supplement. This format is seen as important for transparency and as relevant at all levels, including higher education. The supplement has been strengthened as regards competence/learning outcomes. The main focus is on the three descriptor elements – knowledge, skills and competences – but the link to quality assurance and to validation of non-formal and informal learning is also addressed by the framework.

Validation of non-formal and informal learning and links to the NQF[48]

Recognition and validation of non-formal and informal learning outcomes is directly linked to formal qualifications, as VAE specifically aims at the award of an official formal qualification (certification). VAE procedure can be organized for all qualifications registered in the RNCP, except when a qualification is linked to a 'regulated profession'.

No changes have been made to the legislative framework for validation in recent years but, according to the *European Inventory*, reform is currently under discussion at inter-ministerial level with a view to simplifying the current provisions in the Labour and Education Codes concerning VAE. This reform will bring clarification but is not expected to change significantly the purpose or the content of the procedure or governance systems.

48 This section draws mainly on input from European Commission et al., 2014.

Other key policy objectives at the inter-ministerial level are encouraging use of VAE among the less qualified and improving monitoring and data collection systems based on common indicators used at regional level.

Referencing to regional frameworks

Work on referencing to the EQF has been under way since 2006 and the referencing report was presented to the EQF advisory group (EQF AG) in October 2010. From the start, referencing involved all ministries, social partners and other stakeholders (represented in the CNCP). The referencing work was also supported by the EQF test and pilot projects, notably the Leonardo da Vinci Net-testing project. The result of the referencing can be seen in Table 20.

Table 20 Level correspondence between the French qualifications framework and the EQF

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

Source: French national commission of professional certification, 2012.

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

Important lessons and future plans

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

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

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

Main sources of information

Information is available on the web site of the National Committee on Vocational Qualifications (CNCP): http://www.cncp.gouv.fr [accessed 6.10.2014]

List of abbreviations

CIEP	Centre international d'études pédagogiques
CNCP	Commission nationale de la certification professionnelle (National Committee on Vocational Qualifications)
CNIS	Conseil national de l'information statistique (National Council of Statistics)
CPC	Commission professionnelle consultative (consultative vocational committee)
EQF	European Qualifications Framework
NQF	national qualifications framework
QF-EHEA	qualifications frameworks in the European Higher Education Area
RNCP	Registre national de la certification professionnelle (national register of vocational qualifications)
ROME	Répertoire opérationnel des métiers et des emplois (register of occupations in the French labour market)
VAE	validation des acquis de l'expérience (validation of non-formal and informal learning)

References

[URLs accessed 4.2.2015]

CIEP. 2010. *The use or potential use of QFs by HEIs and other stakeholders linked to mobility.* Sèvres: CIEP. http://bit.ly/1O4mKZ0

CNCP. 2010. *Referencing of the national framework of French certification in the light of the European framework of certification for lifelong learning.* https://ec.europa.eu/ploteus/sites/eac-eqf/files/Report-FR-NQF-EQF-VF.pdf

CNIS. 1969. *Nomenclature des niveaux de formation: approuvée par décision du groupe permanent de la formation professionnelle et de la promotion sociale* [training levels approved by decision of the standing group of vocational training and social promotion]. http://www.rncp.cncp.gouv.fr/grand-public/explorerBaseDocumentaire?dossier=64

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report France.* http://libserver.cedefop.europa.eu/vetelib/2014/87058_FR.pdf.

Ministère de l'enseignement supérieur et de la recherche. 2012. *Référentiels de compétences en licence* [detailed criteria for writing learning outcomes for bachelor level]. http://cache.media.enseignementsup-recherche.gouv.fr/file/Plan_licence/61/4/referentiel_227614.pdf

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

GAMBIA

Introduction

Introduced in 2006, the Gambian Skills Qualifications Framework (GSQF) is a partial qualifications framework concerned with improving and standardising the attainment of occupational skills. As such, it is aimed primarily at Gambia's TVET sector (Gambian National Training Authority, 2006, p. 4). The GSQF is also an integrated framework in the sense that it includes qualifications that can be attained through formal, non-formal and informal learning. In future, the government intends to extend the GSQF into a comprehensive qualifications framework covering all education and training sectors.

Gambia has a greatly limited productivity and employment outcome of the population. This is a result of its narrow economic base, its reduced internal market and low human capital levels. The majority of the population continues to work in subsistence agriculture. A significant proportion of young people works in rural areas and leaves school early. Many of those who do reach higher education choose to emigrate.

The main challenges in the TVET sector are: inadequate financing, the lack of tracer studies on labour market outcome, inadequate opportunities for access to training by youth, inadequate coverage in priority areas such as horticulture, and insufficient entrepreneurship training.

The GSQF has been specifically designed to address some of these challenges. The GSQF aims first and foremost to target young people, employees, the self-employed and people working in the informal economy, as well as the long-term unemployed and illiterate people, from both urban and rural districts. GSQF will be a tool to help these target groups to graduate from public and private training providers and industry in as many occupations as possible with GSQF qualifications, and contribute to the economy of the country.

Also, Gambia will utilize its existing potential to the fullest. It has key organizations like the National Training Authority (NTA) to spearhead reforms. Market analysis is being increasingly being used to realize the relevance of training. The Gambia Technical Training Institution (GTTI) is reputed for providing post-secondary diploma and certificate courses. Gambia also has a long tradition of skills provision, in particular, an extensive non-governmental and community-based provision of TVET and a widespread system of informal apprenticeship.

Main policy objectives

The objectives of the GSQF are to:

- address the challenges currently facing Gambia's education system and labour market;
- support human resource development across all economic sectors by setting out clearly defined skills standards to support vocational training;
- support learners whose literacy levels are functional but low.

Stakeholder involvement and framework implementation

The GSQF was developed with the active participation of a number of stakeholders, including labour market stakeholders. The development process was led by the NTA in collaboration with governmental and non-governmental institutions, and the private sector (Ministry of Trade, Regional Integration and Employment, 2010).

The National Training Authority Act 2002 mandated the NTA to regulate national vocational qualifications and coordinate the quality of TVET delivery, with the goal of making TVET relevant to all occupations and promoting lifelong learning for all Gambians (GSQF, 2006).

As part of its work to fulfil this mandate, the NTA has introduced occupational field Lead Bodies (LBs) and Standard Panels (SPs). The LBs drive the development of new qualifications, prioritizing them according to economic demand. As well as allocating levels to each qualification and suggesting titles and types, they provide

information about the suitability of qualifications for illiterate candidates and establish progression routes to jobs and higher-level qualifications. Training providers who are responsible for skills training within their fields, such as employers from key enterprises, may be invited by the NTA to form an LB (GSQF, 2006, pp. 14-15).

The role of the SPs is to develop standards in the occupational fields involved in consultation with a representative of the West African Examination Council (WAEC) and at least one training provider. The qualifications are then validated by the LBs. The institutions involved in pilot SPs are Gambia College, Gambia Technical Training Institute (GTTI), the National Water and Electricity Company (NAWEC), the Department of State for Agriculture and the Gambia Hotel Association (GHA). The Adult and Non-formal Education Unit (ANFEU) and the Basic and Secondary Education Directorate at the Ministry of Basic and Secondary Education (MoBSE) have also developed strategies and implementation mechanisms for the recognition and certification of learning outcomes of adult literacy and non-formal education (Revised Policy for NFE, 2010-2015).

A classification system detailing thirteen fields of learning has been developed (GSQF, 2006, p. 15). This system specifies the training fields for which training providers and/or assessment centres wish to be accredited. Trainers and assessors can also be accredited to train and assess learning outcomes in the different unit standards, making up a whole qualification in the framework.

Level descriptors and learning outcomes

The GSQF contains skills standards and qualifications organized according to four priority fields and several other key skills:

- Agriculture (horticulture);
- Hospitality (customer care, food hygiene and safety);
- Construction (domestic house wiring);
- Engineering (motor mechanic);
- Key skills (literacy, numeracy, ICT, English communication, work skills and life skills).

The GSQF is based on occupational competences and learning outcomes, both of which go to make up the skills standards against which assessment is conducted (Gambian National Training Authority, 2006, p. 4). The GSQF focuses on competences irrespective of where they were gained, marking a break with traditional school-based TVET which focuses on input rather than output. Assessment is based on evidence of competences and outcomes of learning (Gambian National Training Authority, 2006, p. 6).

The GSQF has four levels which are differentiated in terms of the difficulty of the tasks demanded and the degree of responsibility required. A summary of the GSQF level descriptors is shown in Table 21 below.

Table 21 Gambia Skills Qualifications Framework (GSQF)

Qualifications		Level Descriptor
Level 4		Competent to perform managerial, analytical and/or specialist tasks associated with jobs that are non-routine, e.g. middle manager/ professional worker
Level 3 Practical	Level 3	Competent to perform tasks associated with skilled jobs of a routine yet complex nature, sometimes with supervisory functions, e.g. team leader
Level 2 Practical	Level 2	Competent to perform routine and sometimes non-routine tasks under minimum guidance and supervision, e.g. skilled worker
Level 1 Practical	Level 1	Competent to perform a limited range of work activities under supervision, e.g. trained worker
Foundation level		Basic skills in English communication, life skills,[49] numeracy and work skills, with literacy in mother tongue as an option

Source: Gambian National Training Authority, 2006, p. 9.

49 Life skills are an important component of key skills. The learning outcomes in the life skills units, as described in the GSQF (2006), include: Health/Malaria/Personal Hygiene; Nutrition; Human Rights, Women's Rights, Child Rights; Equal Opportunities and Non-discrimination; Care of the Environment; Civic Responsibility, and Access to Development Finance.

The GSQF is adapted to the Gambian context where only half the workforce is literate. The framework caters for this workforce in three ways:

- The foundation level acts as a stepping stone into entry-level occupational qualifications for early school leavers, adults and trainees with a non-formal training background.
- Unit standards, particularly at levels 1 to 3, are assessed through practical demonstrations rather than written assignments.
- Skills standards include key skills such as numeracy, literacy, English communication and ICT skills, practical occupational and business skills, and life skills. These skills are considered critical for eradicating poverty and promoting economic growth in Gambia.

Recognition and validation of non-formal and informal learning and links to the NQF

The GSQF policy document recognizes the need for accreditation of prior experiential learning (APEL). This marks a real change against the traditional Gambian TVET school that was input-based. Instead a qualification is clearly focused on the assessment of learning outcomes, regardless of where they are acquired. However, quality-assurance policy guidelines for assessment have yet to be developed. Although no standard mechanisms are yet in place for the recognition, validation and accreditation of non-formal and informal learning, RPL is nevertheless taking place through assessments based on job performance and demonstration of occupational competences. The Adult and Non-formal Education Unit (ANFEU) of the Ministry of Education acknowledges the role of RPL in the context of the numerous adult and non-formal education programmes being implemented by NGOs and community organizations. RPL is considered particularly important for the following target groups:

- Unemployed people seeking recognition for past work or achievement, either for entry into courses or for career development purposes;
- People who wish to 'upgrade' an existing qualification into a GSQ (e.g. by combining a previous certificate with work experience);
- People who have left a programme before completion, and who wish to count that learning towards another award;
- People with overseas qualifications who wish to gain a GSQ or credit towards one.

Referencing to regional frameworks

The government aspires to establish clear pathways between GSQF qualifications and other qualifications and courses within Gambia, West African countries, and countries of the European Union (EU).

A credit system has been built into the GSQF to help provide international comparability, e.g. for the purposes of entering overseas higher education courses. The GSQF document (2006) proposes a system of measuring educational achievement based on credits: 'Credits allocated to a unit standard reflect the notional learning time it is expected to take candidates to meet the outcome performance requirements in the unit standards. Notional learning time includes: time spent in structured tuition; self-directed learning and practice; time taken to gather and provide evidence for assessment purposes; and time taken for assessment in all the outcomes and contexts of the unit standard.'

One GSQF credit represents a notional 10 hours of learning (formal, non-formal or informal) assessed against the relevant unit standard (Gambian National Training Authority, 2006, p. 11).

Gambia is one of the member states in the Economic Community of West African States (ECOWAS). Descriptions provided for each qualification included in the GSQF, as well as quality assurance in the assessment process, permits legibility for another country in the ECOWAS sub-region. The Gambian approach permits the recognition of learning outcomes of the owner of the Gambian qualifications. This will facilitate individual mobility.

The National Training Authority has benchmarked some occupational skills with ECOWAS-recommended standards.

Important lessons and future plans

The GSQF is an important step in the right direction. It has the potential to give many Gambians access to qualifications they would otherwise have been unable to gain.

The process of developing the GSQF has demonstrated the importance of tailoring a qualifications framework to the specific realities of the country concerned. The GSQF is designed with Gambia's low literacy levels in mind. Concepts are introduced orally with the aid of diagrams, symbols, pictures, flow charts and artefacts, so as

to be accessible to illiterate trainees; outcomes are also assessed orally and through demonstrations. Far from being an isolated piece of educational policy, the GSQF is embedded in other broader training policies and reform initiatives in Gambia, for example in the areas of adult literacy, apprenticeship policy, and national economic development projects. The government and concerned stakeholders recognize that training providers and employers need to take into account resource availability before setting standards and designing training programmes.

At present, the GSQF is aimed at only a few economic sectors and occupational fields. The next step would be to develop a comprehensive suite of internationally accepted qualifications accessible to and affordable by all Gambians, covering all economic sectors (Gambian National Training Authority, 2006, p. 6). Turning the GSQF into a comprehensive national qualifications framework is a major undertaking which would need to be planned and implemented incrementally.

Implementing a GSQF entails a paradigmatic shift that separates the training process from the certification process. This gives legibility to the content and value of the learning outcomes of the owner of a qualification. While quality training is important, qualifications are different because they focus on the meaning and value of learning outcomes after the training process.

Gambia has made significant strides to improve educational standards across basic and secondary, as well as tertiary and higher education sub-sectors. However, despite the collaboration that exists between these sub-sectors, the lack of a unified national framework across the entire education system has resulted in poor linkage between the two subsectors, preventing technical and vocational education and training graduates from pursuing higher education qualifications in tertiary and higher institutions, in particular, the University of The Gambia.

The Ministry of Higher Education Research Science and Technology (MoHERST) is determined to establish a tertiary and higher education system that is effectively and efficiently responsive to national and international needs. MoHERST is in the process of establishing a national qualifications framework.

The national framework will contribute significantly to a more unified educational system, and will promote lifelong learning mobility and progression between education and training sectors. This will be achieved by integrating existing vocational education and training, general education and higher education into the framework, with levels accommodating all learners from various educational backgrounds

References

Department of State for Education. 2006. *Strategic Plan 2000–2015*. Banjul, Department of State for Education. http://planipolis.iiep.unesco.org/upload/Gambia/Gambia%20ESSP%202006-2015.pdf (Accessed 2 January 2012.)

Gambia National Training Authority. 2006. Gambia Skills Qualification Framework (GSQF) (Policy document, discussed and approved by NTA senior management on 27 November 2006). Banjul,

Lahire, N., Johanson, R. and Wilcox, R.T. 2011. *Youth Employment and Skills Development in the Gambia.* Washington, D.C., The World Bank.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

GEORGIA

Introduction

Georgia's population was approximately 4.484 million in 2013, and shows signs of aging. The age groups 0–14 and 15–24 represent 17 per cent and 14.5 per cent respectively (2013), in a declining trend. The age groups 25–54 and 55–64 increased their share to 43.3 per cent and 11.3 per cent. The rural population is around 47 per cent of the total, an indicator that has been stable over the past years. Georgia is only moderately urbanized and about 65 per cent of the population is employed in rural areas.

Real GDP grew at rates above 6.4 per cent annually between 2010 and 2012, but a deceleration was registered in 2013 (3.2 per cent). However, preliminary data for 2014 indicate a visible recovery (5.6 per cent in quarter III, according to the latest GEOSTAT data).

The services sector has the largest share of value-added (share of GDP), with 66.8 per cent in 2013, in a growing trend, while the share of industry was 23.9 per cent (up from 22.2 per cent in 2010).

Figures from 2013 show that agriculture contributed only a very low 9.3 per cent to GDP, but it is nonetheless the biggest employer (53.4 per cent of the employed population). This high concentration of employment in the sector with lowest productivity (agriculture) represent one of the challenges for the Georgian economy and human resource development policy.

Labour market indicators show improvement. The activity rate (15+) increased to 66.2 per cent in 2013 (from 64.2 per cent in 2010). The employment rate is on a growing trend (56.6 per cent in 2013) and the unemployment rate declined by 1.7 percentage points (to 14.6 per cent in 2013).

However, the Georgian labour market faces persisting challenges, such as: i) high self-employment, reaching 61 per cent of total employment in 2013; ii) high unemployment rates among the population (15–64) with higher education (19.5 per cent in 2013): iii) high urban unemployment rate - 26.5 per cent in 2011. Youth unemployment (25–24) is relatively high (35.6 per cent) but shows signs of improvement.

The adult literacy rate of Georgia is among the highest worldwide (99.73 per cent, 2011). The share of population (15+) with higher education exceeds 30 per cent, while the part with lowest levels of education (primary or basic) was relatively low – 8.4 per cent in 2013.

Main policy objectives

The NQF was first adopted in 2010 and is now undergoing a process of revision, a process started in June 2014, and led by the National Centre for Educational Quality Enhancement (NCEQE) and based on the contributions of a special working group of stakeholders and experts. These draft texts are not available for this update at the time of writing

Major challenges that this review is tackling are:

- Separation of the sub-frameworks, deprived of a coherent link with each other;
- Difficulties in permeability between sub-frameworks, and in particular between VET and higher education, as well as between levels 4 and 5, and 6;
- The categories of level descriptors.

In December 2014, after the structural reorganization of the NEQEC, a new unit was created, specialized in qualifications development, bearing also the responsibility for development and management of the NQF.

The NQF-review group elaborated a new draft of an eight-level NQF, made necessary amendments to respective laws and drafted an action plan for implementation. At the time of writing, March 2015, these changes are not approved yet. The adoption of the new VET law conditions the coming into force of the revised NQF.

The main objective for the revision was development of the eight-level NQF, which allows progression from VET to higher education.

To facilitate permeability from VET to higher education, a new secondary VET qualification will be introduced (at Level 4), and a new vocational qualification (associate degree) will be introduced at Level 5.

In addition, it is worth mentioning that the revised draft NQF adopted the EQF terminology. The level descriptors are set out in terms of knowledge, skills and competences

Georgia plans to introduce a credit system for VET.

As a transition country, Georgia is implementing reforms of education and training, qualifications and employment policies aimed at addressing simultaneously the objectives of growth and competitiveness, employment and social inclusion. The social policy objectives and renewed attention to employment have been reinforced with the arrival of the new government, after the elections of October 2013. Unemployment was a key problem the new government had to tackle with a high priority. The steady economic growth in the last decade had not been accompanied by commensurate job creation.

The NQF, adopted by a decree of the Ministry of Education and Science in December 2010, was intended to act as a driver of system change, and is a key tool in reform of the VET system (see international booklet online: http://eqe.ge/uploads/VocationalEducation/e-booklet onOSandQFENGforwebfinal.pdf and the website http://eqe.ge/eng/education/national_qualifications_framework).

The Georgian NQF, established in 2010, however, represented a compromise between existing education structures and the ongoing shift to outcomes-based approaches in development of curricula, standards and qualifications.

- The NQF aims to contribute to outcomes orientation of curricula and in VET – to better coherence of programmes and profiles with labour market demands, through alignment with higher quality occupational standards.
- The NQF was designed in close relationship with quality assurance in education, managed by the same institution (National Centre for Educational Quality Enhancement). Hence the close articulation of quality assurance of programmes and of VET providers.
- Finally, the NQF had the ambition to remove or minimize obstacles hindering access and progression between the various sub-sectors of the education and training system. Access and permeability are especially difficult issues: there is insufficient permeability between the various sub-sectors of the education and training system, partly caused by existing legislation determining access to key cycles (notably tertiary). The NQF has come up against these hurdles.

The NQF adopted in 2010 pursues the following policy objectives:

- Establishment of a learner-, vocational student- and student-oriented educational system;
- Support to quality assurance in education, as compliance with the NQF became one of the criteria for the accreditation of programmes in higher education, which started in 2011;
- Facilitating integration of learning-outcomes concepts throughout the system to final beneficiaries through new generation training programmes and qualifications based on learning outcome;
- Setting the fundamentals for establishment of mechanisms of recognition and validation of non-formal and informal learning;
- Providing a base for student and learner mobility;
- Promoting education received in Georgia and its compliance with international practice, and integration in the European Higher Education Area (EHEA);
- Informing users and the wider public, notably via the online registry of occupational standards (NCEQE, 2012).

The NQF structure reveals some influence from the European Qualifications Framework for lifelong learning. However, the separation of sub-frameworks, and the difficulties in progression mark, in fact, a fundamental difference.

The NQF (2010) consists of five documents:

1. General Education Qualifications Framework – a document which systematizes qualifications of basic general and complete general education.
2. Vocational Qualification Framework – a document which systematizes qualifications existing in vocational education in Georgia.
3. Higher Education Qualification Framework – a document which systematizes qualifications existing in higher (academic) education in Georgia.
4. The fourth Annex of the NQF gives a list of directions, fields/specialties, subfields/specialties and vocational specialisations.
5. The fifth Annex – Rule on Qualification Formation – is a document, which defines how to add new qualifications to the list of qualifications.

Stakeholder involvement

The revision of the NQF in 2014 was carried out in cooperation and consultation with the different stakeholders, employers' representatives and experts.

The process of development and adoption of the Georgian NQF was led by the National Centre for Educational Quality Enhancement (NCEQE), the agency which assures the management and maintenance of the components of the NQF, including online publication of the legal basis and of the register of occupational standards for vocational qualifications.

Level descriptors and learning outcomes

The Georgian NQF, which was adopted by order of the Ministry of Education and Science (MES) on 10 December 2010, represents a compromise between the existing education structure (cycles and principles for progression), with a new model based on learning outcomes, which are defined with reference to the level descriptors included in the legal act of the NQF, notably in its three annexes describing the sub-frameworks: general, vocational and higher (academic).

The NQF systematizes the existing qualifications in three separated sub-frameworks: general, vocational and higher, and is thus comprehensive. The vocational sub-framework contains five levels, and the higher three levels and so – implicitly – the NQF comprises eight levels. However, the NQF legal act does not refer explicitly to eight levels. The general education sub-framework is not explicitly related with the structure of eight levels, although it is said that, in practice, the secondary education diploma corresponds to NQF Level 3. Table 5 summarises the NQF architecture.

The NQF clearly specifies that enrolment in each cycle (level) of vocational education is conditional on 'completion of the educational programme of the previous cycle or recognition of the knowledge, skills and values envisaged by the educational programme of the previous cycle' (Annex 2, Article 2, 5). Learning outcomes of each level cover the learning outcomes of the previous level, and are marked by a higher level of professional knowledge, advanced skills and values.

Learning outcomes

Learning outcomes approaches in the QF's reference level descriptors, the occupational standards and in VET programmes are being developed and implemented. Providers are required by quality-assurance criteria (authorization and accreditation) to align their VET programmes both with labour-market demand (showing evidence that courses have demand) and with the relevant occupational standards. Learning outcomes are described against six criteria: knowledge and understanding, applying knowledge, making judgements, communication skills, learning skills, and values. The six criteria are identical for all cycles of the education system and should be the basis for defining learning outcomes in occupational standards, and differentiating levels of qualification.

NCEQE is responsible for updating the list of qualifications placed in the NQF, in consultation with sector committees, social partners and other stakeholders. A first revision of the list of qualifications was completed in 2012.

Occupational standards

The register of occupational standards hosted by the NCEQE website has been revised and the number of occupational standards reduced to 118. This reduction might be linked with the process of development of new, higher-quality, occupational standards. This process of improvement of occupational standards started in 2013.

In the period from 2010, from the adoption of the NQF (December 2010) to June 2012, Georgia adopted 247 occupational standards for qualifications according to the five-level vocational qualifications sub-framework. Most of the standards were developed in 2011. Distributed in nine areas, and structured according to a common outline, all occupational standards are published in the online registry managed by the relevant specialized agency, the National Centre for Educational Quality Enhancement.

In the definition given by NCEQE, 'Occupational Standards define levels of vocational education, minimum credit value and mandatory competences in terms of knowledge, skills and values for each level. They also state additional requirements based on specifications of the profession. Occupational Standards stand as the key source for creation of vocational educational programmes. Occupational Standards are developed based on the Vocational Qualification Framework (VQF) with participation of professional associations and other interested stakeholders and approved by the LEPL.'

http://eqe.ge/eng/education/professional_education/occupational_standards_list

Validation of non-formal learning and links to the NQF

The amended VET Law (2010) acknowledges the possibility of recognition of non-formal and informal vocational learning (Art.10). A concept paper on non-formal and informal vocational learning was developed in 2013, with ETF support, to guide future policy and measures in this area. Several aspects of this concept paper were implemented in 2014.

The adopted legal basis (order of MES, February 2011) concerns the conditions and procedure of recognition of informal (non-formal) professional education, and is a short regulatory document specifying authorized bodies, required documents, conditions for submission, decision-making and specific features of recognition for Level 3 of VET. In 2012, NCEQE proposed a complementary document containing more detailed recommendations for educational institutions on implementation of validation of informal education. In the context of this renewed reflection, NCEQE carried out discussion meetings with VET institutions on conceptual issues, such as definition of the learning outcomes in self-assessment reports, grading system, condition for partial recognition, possibility of automatic recognition, along with questions of institutional and organizational nature (NCEQE, 2012).

Referencing to regional frameworks

According to the Association Agreement between Georgia and the EU, signed in 2014, 'Georgia will conduct and develop policy consistent with the framework of EU policies and practices with reference to documents in Annex XXXII' (Article 361), which includes Recommendation No. 2008/C 111/01 of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning. Georgia plans to ask for cooperation the EQF.

Georgia joined the Bologna Process in 2005 and has reached step three, meaning it has formally adopted a National Qualifications Framework for Higher Education and started implementing it. In Georgia, compliance with the NQF became one of the criteria for the accreditation of higher education programmes, which started in 2011.

Important lessons and future plans

Georgia reviewed its NQF in a process begun in 2014 and involving stakeholders and experts. The new structure, the revised level descriptors and the new qualifications that facilitate permeability address some of the key problems and inconsistencies of the original NQF, adopted in 2010. If the new NQF is communicated more widely than the original one, and implemented under monitoring, this case of learning from experience, could be considered good practice. The establishment of the new qualifications and NQF unit at NCEQE is another positive development, to reinforce coordination and institutional capacity to manage the new NQF. The adoption of the new VET law will condition the coming into force of the new NQF.

For the time being, Georgia cannot reference its NQF to the EQF, in the sense of the EQF Recommendation of 2008. But Georgia plans to seek cooperation with the EQF, on the basis of the terms of the Association Agreement with the EU, signed in 2014. Such an endeavour will represent a higher level of demand on the NQF institutions and stakeholders, on transparency of qualifications. The NQF will be populated, and the use of transparent mechanisms for this purpose is a major requirement.

Prepared by:
The European Training Foundation (ETF) in collaboration with national experts

GERMANY

Introduction

Germany is implementing an eight-level national qualifications framework (NQF) for lifelong learning based on learning outcomes (German Qualifications Framework for Lifelong Learning [*Deutsche Qualifikationsrahmen für lebenslanges Lernen* or DQR]). It was formally launched in May 2013 by the joint resolution of the Standing Conference of the Ministers for Education and Cultural Affairs, the Federal Ministry of Education and Research, the conference of Ministers for Economics of the Länder and the Federal Ministry of Economics and Technology.[50] This resolution creates prerequisites for further steps of DQR implementation (establishment of federal government/Länder national coordination points and indicating EQF levels on new certificates and diplomas). A complete list of allocated qualifications to DQR levels and the DQR manual are included as annexes to the joint resolution.[51] Currently, the DQR does not comprise all formal qualifications. It includes the main VET and higher education qualifications. Qualifications from general education (including the general school leaving certificate, *Allgemeine Hochschulreife*) are not yet included in the framework and consequently not linked to the EQF. A decision on which levels will be included has been postponed and will be reviewed after a five-year period.

The DQR is a result of lengthy development work which started in 2006, when the Federal Ministry of Education and Research (Bundesministerium für Bildung und Frauen) (BMBF) and the Standing Conference of the Ministers for Education and Cultural Affairs of the Länder *(Kultursminister Konferenz*) (KMK) agreed to work together on it in response to the emerging European Qualifications Framework. Following extensive preparatory work, a proposal for a German NQF was published in February 2009. This proposal provided the basis for extensive testing to be followed by full-scale implementation. The piloting stage (May–October 2009) used qualifications from four selected sectors (information technology, metal, health and trade) as a 'testing ground' to link qualifications to DQR levels. A broad range of stakeholders, including experts from school-based and work-based VET, continuing education and training, general education, higher education, trade unions and employers, collaborated in testing the proposal.[52] Following evaluation of the testing phase, amendments to the original proposal were introduced, for example, to level descriptors. A final agreement on a comprehensive DQR was adopted in March 2011 by the German Qualifications Framework working group (Arbeitskreis DQR) (DQR, 2011). At a high-level meeting on 31 January 2012, stakeholders extended the agreement to align important qualifications from vocational education and training (VET) and higher education to DQR levels.

Main policy objectives

Germany has actively supported the EQF initiative from the start and the extensive effort put into developing the DQR reflects this. The EQF, with its insistence on the learning-outcomes perspective, is seen as an opportunity to classify German qualifications adequately and to use it as a tool to improve opportunities for German citizens in the European labour market (Hanft, 2011, p. 50).[53]

The learning outcome approach is seen as a catalyst for strengthening coherence of the whole education and training system, linking and

50 See *Gemeinsamer Beschluss der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland, des Bundesministeriums für Bildung und Forschung, der Wirtschaftsministerkonferenz und des Bundesministeriums für Wirtschaft und Technologie zum Deutschen Qualifikationsrahmen für lebenslanges Lernen (DQR).* http://www.bmbf.de/pubRD/Gemeinsamer_Beschluss_final_ohne_Unterschriften.pdf [accessed 22.7.2014].

51 For more information see http://www.dqr.de [accessed 22.7.2014].

52 http://www.dqr.de/content/2328.php [accessed 22.7.2014].

53 '... 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.'

integrating various sub-systems and improving progression possibilities.[54] The shift to learning outcomes is seen as a precondition for strengthening overall permeability (*Durchlässigkeit*) of German education and training. Learners should be allowed to move between levels and institutions according to their actual knowledge, skills and competences, and be less restrained by formal, institutional barriers.

The DQR and the shift to learning outcomes are seen by all relevant stakeholders, notably the social partners, as an opportunity to focus on parity of esteem between general education and VET.

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).[55]

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

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

Stakeholder involvement

Development and implementation of the DQR is characterized by a bottom-up and consensus-seeking approach (Klenk, 2013). A national steering group (Bund-Länder-Koordinierungsgruppe) was jointly established by the BMBF and the KMK at the beginning of 2007. This coordination group appointed a working group (Arbeitskreis DQR) which comprises stakeholders from higher education, school education, VET, social partners, public institutions from education and the labour market, as well as researchers and practitioners. Decisions are based on consensus and each of the members works closely with their respective constituent institutions and organizations.

At the beginning of 2012 an agreement was reached to assign qualifications from VET and higher education to DQR levels.[56] Additionally, a working group has developed 11 recommendations for inclusion of non-formal and informal learning in the DQR. In November 2012, the working group (Arbeitskreis) published a position paper with a proposal to establish a working group, which will align 'examples' of qualifications from the non-formal sector with the DQR.[57]

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

Framework implementation

The DQR is operational. Key documents and responsibilities for DQR implementation have been agreed among key stakeholders and published.[58] These include:

- A joint resolution with complete list of allocated qualifications. A new DQR website and database was launched in mid-2014;

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

55 'One of the main concerns in the past 15 years in Germany is increased enrolment in the so-called "transitional sector", where students stay for about 0.5–1.5 years; this includes different training schemes, which do not lead to full qualifications. A total of 70–80 per cent of students move into the dual system or full-time vocational schools afterwards'.

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

57 See *Empfehlungen der Arbeitsgruppen zur Einbeziehung nicht-formal und informell erworbener Kompetenzen in den DQR*. http://bit.ly/1j2hcmH.

58 See *Gemeinsamer Beschluss der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland, des Bundesministeriums für Bildung und Forschung, der Wirtschaftsministerkonferenz und des Bundesministeriums für Wirtschaft und Technologie zum Deutschen Qualifikationsrahmen für lebenslanges Lernen* (DQR). http://www.bmbf.de/pubRD/Gemeinsamer_Beschluss_final_ohne_Unterschriften.pdf [accessed 22.7.2014].

- DQR manual. It describes responsibilities, procedures,[59] standards and methods of qualification allocation. It will be updated continuously. A description of the procedure for allocating qualifications from non-formal learning contexts will be added when agreed.

The main body in charge of implementation is a coordination point for the German Qualifications Framework, set up by a joint initiative of the federal government and the Länder. It has six members, including representatives from BMBF and the Federal Ministry of Economics and Technology and the KMK and the conference of Ministers for Economics of the Länder. Its main role is to monitor allocation of qualifications to ensure consistency in the overall DQR structure. Direct involvement of other ministries, social partners, representatives of business organizations and interested associations is, where their field of responsibility is concerned, ensured by the federal government/Länder coordination point for the German Qualifications Framework. The German Qualifications Framework working group remains active as an advisory body and retains its former composition (BMBF and KMK, 2013).

Main qualifications from VET and higher education have been included in the framework. An important characteristic of DQR is that each qualification level should always be accessible via various education pathways. Consequently, VET qualifications were allocated from levels 1 to 7. An example is allocation of the bachelor and master craftsman qualification to Level 6, which shows that higher DQR levels are open to qualifications from different education sectors and regarded as equal.[60]

Qualifications from general education (including the general school leaving certificate, *Allgemeine Hochschulreife*) are not yet allocated and consequently not linked to the EQF. A decision on which level they will be included has been postponed and will be reviewed after a five-year period. Higher education levels and qualifications have been integrated into the DQR.

Currently, discussions are ongoing on assigning remaining qualifications from regulated further training to the DQR. Additionally, an expert group is starting to examine possibilities to allocate qualifications from a non-formal learning context to the DQR.

The DQR is a non-regulatory framework and its integration into policies of different education sectors is an evolutionary process. First references to the DQR and its categories have already been made in regulatory instruments of the formal sector and in curricula of the non-formal sector, as in the new framework curricula for part-time vocational schools (*Berufsschule*) of the Länder. In addition, the DQR is used in the academic sector for development of accreditation procedures. BMBF, with the Federal Institute for VET (Bundesinstitut für Berufsbildung) (BIBB), social partners and universities, is currently exploring possibilities of joint offers at DQR Level 5. The aim is to link VET better with higher education. Further, BIBB and the Institute for Quality in Education have agreed on further research work on strengthening learning outcomes approaches in VET and general education. The DQR, with its clear learning outcomes approach, also aims at improving opportunities for recognising informally-acquired learning outcomes and strengthening lifelong learning. Promoting permeability across sub-systems is also an explicit aim of the framework (Büchter et al., 2012).

Level descriptors and learning outcomes

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

Level descriptors describe the competences required to obtain a qualification. The overall structure is guided by the established German terminological and conceptual approach referring to the ability to act (*Handlungskompetenz*). The DQR differentiates between two categories of competence: professional and personal. The term competence lies at the heart of the DQR and signals readiness to use knowledge, skills and personal, social and methodological competences in work or study situations and for occupational and personal development. Competence is understood in this sense as comprehensive action competence (see Table 1). Methodological competence is understood as a transversal competence and is not separately stated in 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.[61]

59 See http://www.dqr.de/content/2445.php [accessed 22.7.2014].

60 See http://www.bmbf.de/press/3574.php [accessed 22.7.2014].

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

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

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

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

Orientation to learning outcomes is increasingly becoming standard in education, vocational training and higher education (BMBF and KMK, 2013, p. 96).

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

Competence orientation is also characteristic of the reform process in general education and development of national educational standards (*Bildungsstandards*). They currently exist for German and mathematics in primary education (*Hauptschule*); German, mathematics and first foreign language for the intermediate leaving certificate (*Realschule*); and German, mathematics and foreign language for the upper secondary school leaving certificate (*Abitur*) (ibid. p. 98). In higher education, the modular structure and a learning outcome-oriented description of study modules are key prerequisites for approval of a study course.

Validation of non-formal and informal learning and links to the NQF[63]

Germany does not have an overall strategy for validation. Development of the NQF has, however strengthened work on validation. A working group is examining how to link learning outcomes of non-formal education to the DQR.[64]

There are, however, various arrangements that permit full or partial recognition of informally or non-formally acquired competences.

Legislation for validation of non-formal and informal learning is in place in VET. This includes the external students' examination under paragraph 45 (2) of the Vocational Training Act and paragraph

Table 22 Level descriptors in the German Qualifications Framework for Lifelong Learning

Level indicator[62]			
Structure of requirements			
Professional competence		Personal competence	
Knowledge	Skills	Social competence	Autonomy
Depth and breadth	Instrumental and systemic skills, judgement	Team/leadership skills, involvement and communication	Autonomous responsibility, reflectiveness and learning competence

Source: DQR (2011).

62 This is just the analytical differentiation; the interdependence between different aspects of competence is emphasized (DQR, 2011, p. 5).

63 This section draws mainly on input from European Commission et al., 2014.

64 See http://www.dqr.de/content/2321.php [accessed 22.7.2014].

37 (2) of the Crafts Code. These arrangements lead to award of a full qualification (equal to those formally acquired) in a recognized apprenticeship trade. Admission to the external exam is subject to specific employment requirements (1.5 times the length of the formal programme). The Vocational Qualifications Assessment Law (BQFG), introduced in April 2012, provides individuals with the right to have their foreign-acquired qualifications matched to a German qualification by a competent authority. Appropriate work experience can be used for recognition where formal certificates are missing (see BQFG paragraph 3, section 1), although the law focuses on comparison of formal qualifications. General education school leaving certificates can be also acquired through an external examination (*Schulfremdenprüfung, Externenprüfung*) in all Länders, fulfilling the residence and minimum age requirements, as well as evidence of appropriate examination preparation.

In higher education, two decisions of the KMK provide the basis for validation. The first refers to access to higher education for qualified workers and is in place since March 2009. People that hold certain vocational qualifications, without a proper upper-secondary qualification, can be admitted to higher education. The second refers to granting credits for competence acquired at work. Procedures to credit non-formal and informal learning were developed and tested in the 'Transitions from VET to Higher Education (*Übergänge von der beruflichen in die hochschulische Bildung*) (ANKOM) initiative.[65] According to these decisions, knowledge and skills acquired outside the higher education system can be recognised up to a maximum of 50 per cent if content and level are equal to the equivalent of formal qualifications.

There are also several initiatives below legislative level, in form of projects or different stakeholders' programmes. These relate mainly to identification and documentation of learning outcomes and are not generally linked to NQF developments. One of the most successful initiatives is the ProfilPASS system. It is a system of counselling and documentation of learning outcomes based on biographical methods. A working group was set up by the BMBF to explore possible ways of creating a systematic approach to validation, including a possibility of further developing ProfilPASS into a validation instrument. The German Federal Council (Bundesrat) clarified that a decision on whether, when and how to implement arrangements for validation will be decided at national level (see Bundesrat, 2012).

65 See http://ankom.his.de/beschluesse [accessed 22.7.2014].

Referencing to regional frameworks

The joint steering committee set up by the federal government and the Länder in 2007 is in charge of referencing, supported by the DQR office. The referencing report was presented in December 2012. The framework for higher education was self-certified against the QF-EHEA in 2009.

Gradually from January 2014, EQF and NQF levels feature on VET certificates and higher education diploma supplements. German master craftsperson certificates show corresponding NQF and EQF levels. Like the bachelor's degree, they are related to Level 6. From an education and training policy perspective, this is considered a milestone.[66] Allocation to this level and reference on certificates signal the high value and quality of this qualification. In Germany, VET qualifications are placed on nearly all DQR/EQF levels with three-year apprenticeships leading to Level 4.

Table 23 Level correspondence between the DQR and the EQF

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

Source: BMBF and KMK, 2013.

Important lessons and future plans

First, development of the DQR is embedded in a broader context of reforms to strengthen the outcomes-based orientation of German education and training. It is also linked to initiatives to support permeability within VET and between VET and higher education, such as the ANKOM initiative,[67]

66 See http://www.bmbf.de/press/3574.php [accessed 22.7.2014].

67 For more information see http://ankom.his.de [accessed 22.7.2014].

that involves stakeholders from VET and higher education to support recognition of learning outcomes.

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

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

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

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

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

Main sources of information

[URLs accessed 22.7.2014]

The federal government/Länder coordination point assumes functions of the EQF NCP. Information on DQR development is available at:
http://www.dqr.de/content/2445.php

List of abbreviations

ANKOM	Übergänge von der beruflichen in die hochschulische Bildung [transitions from vocational high school education]
BIBB	Bundesinstitut für Berufsbildung [Federal Institute for VET]
BMBF	Bundesministerium für Bildung und Forschung [Federal Ministry of Education and Research]
BQFG	Vocational Qualifications Assessment Law
DQR	Deutsche Qualifikationsrahmen für lebenslanges Lernen [German Qualifications Framework for Lifelong Learning]
IT	information technology
KMK	Kultusminister Konferenz [Standing Conference of the Ministers for Education and Cultural Affairs of the Länder]
NQF	national qualifications framework
VET	vocational education and training

References

(URLs accessed 22.7.2014)

BMBF; KMK. 2013. *German EQF referencing report.* http://ec.europa.eu/eqf/documentation_en.htm

Büchter, K. et al. 2012. *Der Deutsche Qualifikationsrahmen (DQR): Ein Konzept zur Erhöhung von Durchlässigkeit und Chancengleichheit im Bildungssystem?* [German Qualifications Framework (DQR): a framework for increasing permeability and opportunities in the educational system?]. Gütersloh: Bertelsmann.

Bundesrat. 2012. *Empfehlungen der Ausschüsse. Drucksache 535/1/12* [Commitee's recommendations. Printed matter 535/1/12]. http://www.umwelt-online.de/PDFBR/2012/0535_2D1_2D12.pdf

DQR. 2011. *The German Qualifications Framework for Lifelong Learning.* Adopted by the German Qualifications Framework Working Group (AK DQR). http://empleo.ugr.es/unilo/documentos/dqr_document_en_110322.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Germany.* http://libserver.cedefop.europa.eu/vetelib/2014/87053_DE.pdf.

Gehmlich. V. 2009. 'Kompetenz' and 'Beruf' in the context of the proposed German qualifications framework for lifelong learning. *Journal of European industrial training,* Vol. 33, No 8/9, pp. 736–754. http://dx.doi.org/10.1108/03090590910993607

Hanft, G. 2011. Changing relevance of the Beruf. Brockman, M.; Clarke, L.; Winch, C. *Knowledge, skills and competence in the European labour market: What's in a vocational qualification?* London: Routledge, pp. 50–67.

Klenk, J. 2013. *Nationale Qualifikationsrahmen in dualen Berufsbildungssystemen. Akteure, Interessen und politischer Prozess in Dänemark, Österreich und Deutschland* [NQF in dual VET systems. Actors, interests and political process in Denmark, Austria and Germany]. Bielefeld: Bertelsmann W.

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

GHANA

Ghana's National Technical and Vocational Education and Training Qualifications Framework (NTVETQF) was launched on 23 October 2012 following the passing of law LI 2195 under the Council for Technical and Vocational Education and Training (COTVET) Act of 3 September 2012. The new eight-level framework is tailored to the present realities of the Ghanaian education system and labour force. Its qualifications are designed to merge seamlessly with Ghana's existing qualifications, while also providing the improvement and modernization necessary to take Ghana's education system into the future.

Introduction

The education and training currently on offer in Ghana is failing to meet the needs of the country's labour market. The majority of graduates lack the skills required for effective participation in industry. In a Nuffic report (Gondwe and Walenkamp, 2011, p. 41), a spokesperson for the Ministry of Employment and Social Welfare (2009) is quoted as saying: 'Yet the fact that our educational system continues to pour unskilled, semi-skilled, and unemployable young graduates into a job market with comparably few job opportunities, shows there is a need for sober reflection and deeper thoughtfulness on the kind of policy interventions which will be needed to overcome the challenges'.

Current statistics reveal that over 90 per cent of employees in Ghana have less than secondary education and that only 9.4 per cent of graduates enter the labour force from secondary and higher education institutions. The Nuffic report concludes that 'even if these graduates who enter the labour market were perfectly aligned and suited to the requirements of the labour market, the labour market would still have a problem since 90 per cent of the workforce would still not have passed through the education system at an advanced enough level, or at all, to benefit from improvements' (Gondwe and Walenkamp, 2011, p. 41).

The Ghanaian labour market is fragmented and uncoordinated, making it difficult to gather data. It is doubtful whether some of the agencies which are supposed to gather information on groups of learners actually exist.

Together with the numerous African heads of state and ministers of education gathered at the last ADEA[68] meeting in Ouagadougou, Burkina Faso, Ghana believes that NQFs should no longer be reserved for formal qualifications, as is currently the case in most countries in the region, but should also take into account the informal and non-formal means by which many people acquire technical and vocational skills. In keeping with this belief, NTVETQF qualifications are modular and outcomes-based and are not restricted to academic attainment.

Main policy objectives

The NTVETQF has the following objectives:

- To bring all post-basic, occupation-oriented qualifications together under a unified qualifications framework;
- To facilitate access to further education and training for individuals in technical and vocational occupations;
- To improve product and service quality by ensuring uniform standards of practice in the trades and professions;
- To promote access to lifelong learning for all, especially those working in the informal economy.

68 Every two or three years, the Association for the Development of Education in Africa (ADEA) organizes a major conference on key educational challenges facing African countries. At the last conference in Burkina Faso in 2012, which gathered together 650 representatives of some 45 countries including four heads of state and 33 ministers of education, participants strongly agreed that it is time to move away from the traditional dichotomies between post-primary education and TVET, and between TVET and alternative paths to technical and vocational skills development (TVSD).

Stakeholder involvement

The NTVETQF is governed and coordinated by the Council for Technical and Vocational Education and Training (COTVET), a semi-autonomous body under the Ministry of Education. COTVET is responsible for coordinating TVET programmes in both public and private TVET institutions. It answers to a 15-member board made up of stakeholders from various sectors, including industry.

Act 718 of 2006, which established COTVET, has been mandated to set up five standing committees to support its activities. The following committees are currently operational:

1. The Industry Training Advisory Committee (ITAC), which is responsible for national occupational standards development;
2. The National Training Quality Assurance Committee (NTQAC), which is responsible for quality delivery in the TVET sector;
3. The National Technical and Vocational Education and Training Qualifications Framework Committee (NTVETQFC), which is responsible for overseeing the NTVETQF, taking into account non-formal and informal learning;
4. The National Apprenticeship Committee (NAC), which is responsible for the preparation of apprenticeship policy to support the national apprenticeship programme;
5. The Skills Development Fund Committee.

COTVET has teamed up with a number of leading employers to develop competency-based training (CBT) programmes. The CBT approach is currently being rolled out on a national scale. CBT programmes have been successfully piloted in three TVET institutions: Accra Polytechnic (HND in Plant Engineering, Level 5), Accra Technical Training Centre (Certificate 2 in Welding and Fabrication, Level 4) and the National Vocational Training Pilot Centre in Accra (Certificate 1 in Electronics, Level 3).

Nevertheless, significant challenges remain. Participation from industry stakeholders in the creation of CBT programmes and the training and assessing of students has so far been limited. Many TVET institutions have neither the infrastructure nor the teaching staff they need to deliver CBT programmes, and coordination problems across the many different ministries implementing the programmes are rife. Partly as a result of these difficulties, the quality of students admitted onto CBT programmes is variable at best.

COTVET is making efforts to develop demand and supply analysis to support the recognition and validation of non-formal and informal learning in Ghana.

COTVET and the Japanese International Cooperation Agency (JICA) are currently working together on the introduction of demand-oriented, competence-based TVET curricula which will incorporate creative and innovative skills acquired through work and informal learning. It is hoped that these curricula will produce students who are better capable of responding to the practical demands of a wide variety of workplace challenges.

General education qualifications in Ghana fall within the ambit of the Ministry of Education, whereas tertiary qualifications are coordinated by the National Council on Tertiary Education (NCTE) and the National Accreditation Board (NAB), semi-autonomous organizations under the Ministry of Education. The NCTE has the financial authority to approve programmes for public universities, while the NAB, which was established through the National Accreditation Board Act 744 of 2007, provides quality assurance for programmes in both public and private tertiary institutions.

Level descriptors and learning outcomes

The NTVETQF is an eight-level national qualifications framework for TVET. Levels 1 and 2, covering informal apprenticeships, are the lowest and least demanding, whilst Level 8 (doctorate in technology) is the highest and most demanding.

Recognition and validation of non-formal and informal learning

Within the general education system, transfer from one programme to another remains difficult. By contrast, the recently approved TVET qualifications framework is designed to offer learners who opt for the TVET pathway the possibility of credit transfer and progression from the lowest to the highest qualification level in all subject areas. Validation of informal and non-formal learning is a key component of Ghana's lifelong learning strategy. National regulations on the recognition of prior learning (RPL) have been developed and are in the process of legal formalization. As a first step, the lowest two qualifications, Proficiency I and II, recognize competences from the traditional informal apprenticeship, an important means of training in Ghana. The new RPL policy will enable informal and non-formal learners to benefit from both formative and summative assessment. Some mechanisms for RPL are already in use, such as oral, observation and demonstration-based assessment.

Table 24 Ghana National TVET Qualifications Framework

Level	Qualification	Status	Certifying institution
8	Doctor of Technology	Formal	-
7	Master of Technology	Formal	-
6	Bachelor of Technology	Formal	Polytechnics
5	Higher National Diploma	Formal	Polytechnics
4	Certificate II	Formal	GES-TVET Inst.
3	Certificate I	Formal	GES-TVET Inst.
2	Proficiency II	Informal/non-formal	NVTI / Informal trade associations
1	Proficiency I	Informal/non-formal	NVTI / Informal trade associations

Source: COTVET Legislative Instrument LI 2195 of 2012.

Equivalency programmes which allow non-formal learners to re-enter formal education, leading to a Basic Certificate of Education, are currently permitted only in primary or junior high school (nine years of schooling) (Ministry of Education, 2010). Similarly, recognition of non-formal and informal learning in the TVET sector is currently possible only within National Vocational Training Institutes leading to Trade Test Grades I and II (TVET Final Report, 2007). The NTVETQF will reform this situation, allowing employees to work towards new qualifications on the job through workplace-based assessment. Employees in industry may choose to work towards specific modules only, in order to ensure that their skills keep pace with changes in technology.

Referencing to regional frameworks

The regional referencing of qualifications frameworks in Africa is led by ADEA. At the second meeting of the Inter-Country Quality Node on Technical and Vocational Skills Development (ICQN/TVSD) held in Abidjan, Côte d'Ivoire, in September 2011, the ministers and representatives of the 20 countries present decided to create thematic groups on the following three topics:

- The transition to work;
- National qualifications frameworks;
- The role of trade and business associations in the field of TVSD.

ADEA held a seminar on NQFs in July 2013 in Abidjan. The seminar produced a final synthesis of the regional referencing of qualifications frameworks in Africa, which was adopted by all participating countries and submitted to the ministerial meeting of the Inter-Country Quality Node on Technical and Vocational Skills Development (ICQN/TVSD) in mid-September 2013.

Important lessons and future plans

The following lessons have been learned over the two-and-a-half year period that Ghana has been working on the NTVETQF (Baffour-Awuah, 2013).

It is important to hold regular discussions with all stakeholders so that they feel a sense of trust and ownership of the framework. Since setting up a comprehensive NQF needs to be done incrementally, for a start the country has settled for a sub-framework in the TVET sector and it is hoped that general education will be integrated into a full framework in the future.

Policy-makers need to decide which levels of a qualifications framework are the most important. In a country like Ghana, where approximately 80 per cent of all basic skills and 82 per cent of economic activity is in the informal economy,[69] the focus needs to be on levels 1 and 2.

In setting up the committees, it was important to find the right people with the requisite expertise. Committee members must be motivated, and should be well remunerated in order to maintain their motivation.

69 2010 Population and Housing Census (final report published in 2012).

Obtaining parliamentary approval for the development of the NTVETQF was a vital step which could not have been taken without the commitment of the ministry responsible for TVET. The Minister of Education was instrumental in the passing of Law LI 2195, which laid the groundwork for the framework.

It is essential that governments provide the necessary financial resources to support the establishment and implementation of an NQF. Most of the funding to set up the NTVETQF came from development partners in Ghana, without whose aid the Council could not have achieved any meaningful results.

References

Agency for the Development of Education in Africa (ADEA) 2013. Concept Note for NQF. (Meeting in Abidjan, Ivory Coast, 30 July 2013). Tunis, ADEA.

Association for the Development of Education in Africa (ADEA). 2011. The Inter-Country Quality Node on Technical and Vocational Skills Development (ICQN/TVSD). (Conference held in Abidjan, Ivory Coast from 19 to 21 September 2011). Tunis, ADEA.

Baffour-Awuah, D. 2013. *Workforce Development International.* Tema. Workforce Development International.

Council for Technical and Vocational Education and Training (COTVET) and the Japanese International Co-operation Agency (JICA/TVETS). 2009 *Report of the Technical Committee on the Harmonization of Competency-Based Training (CBT) in Ghana.* Accra, COTVET.

Gesellschaft für Internationale Zusammenarbeit (GIZ). 2012. *Lessons Learned from selected National Qualifications Frameworks in Africa.* (Triennale on Education and Training in Africa Ouagadougou, Burkina Faso, 12-17 February, 2012)

Gondwe, M and Walenkamp, J. 2011. *Alignment of Higher Professional Education with the Needs of the Local Labour Market: The case of Ghana.* Amsterdam, Nuffic.

Government of Ghana (GoG). 2007. *Technical and Vocational Education and Training (TVET) sub-committee Final Report,* (National Education Reform Implementation Committee). Accra, Ministry of Education.

Government of Ghana (GoG). 2009. Education Strategic Plan 2010 to 2020, Volume 1. Policies, Strategies, Delivery, Finance. Accra: Ministry of Education.

Government of Ghana (GoG). 2012. COTVET Legislative Instrument, *LI 2195 of 2012.* Accra, Government of Ghana.

Japanese International Co-operation Agency (JICA/TVETS) and Council for Technical and Vocational Education and Training (COTVET). 2011. *Manual for CBT Curriculum/ Material Development & Training Implementation.* Accra, JICA/TVETS.

Japanese International Co-operation Agency (JICA) TVETS/COTVET. 2011. *Guideline for Managing Competency-Based Training (CBT).* Accra, JICA/TVETS.

National Vocational Training Institute (NVTI). 2007. *The Role of the National Vocational Training Institute in the Technical and Vocational Education and Training Environment.* (A position paper by the NVTI board). Accra, National Vocational Training Institute.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

GREECE

Introduction

Greece has developed its NQF for lifelong learning (Hellenic Qualifications Framework [HQF]), aiming at a coherent and comprehensive system of qualifications from all parts and levels of education and training. Development so far has focused on the range of qualifications awarded in the formal system, but from a long-term perspective, the plan is to accommodate non-formal and informal learning also. The framework was adopted by the Minister for Education and Religious Affairs (July 2013). A draft presidential decree on HQF has been prepared.

The Act on Lifelong Learning (Act 3879/10) came into force in 2010, introducing development of the HQF and the learning outcomes concept as essential elements of awards. The Act provided the basis for a more coherent and integrated approach as coordination of all issues of lifelong learning is now under the Ministry of Education and Religious Affairs. The National Organization for the Certification of Qualifications and Vocational Guidance (EOPPEP) was set up in 2011 to develop and put the HQF into practice, supervised by the Ministry of Education and Religious Affairs.

Main policy objectives

Apart from responding to the European Qualifications Framework (EQF) initiative, HQF work is directly linked to the country's efforts to develop a framework for improving lifelong learning policies and practices, which will allow for recognition and certification of all kinds of education and training. Compared to other European Union (EU) countries, participation of adults in lifelong learning in Greece is among the lowest (only 2.9 per cent in 2012) (European Commission, 2013) 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 recognized throughout their lives. The Act on Lifelong Learning (3879/10) was an important milestone in these developments. Further, recent reforms especially in vocational education and training (VET), underpinned by legislation (2013), have been embedded in the HQF. The HQF is also a tool to increase transparency and strengthen overall coordination of education and training.

The HQF addresses the following challenges and needs to:

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

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

In the medium term, the following objectives will be pursued:

- Improve transparency and currency of qualifications through clear learning-outcomes descriptions;
- Develop procedures for validating non-formal and informal learning;
- Improve access, progression and recognition possibilities;
- Improve quality and portability of qualifications in general.

Although perceived foremost as a communication and transparency tool, its future and long-term reforming role to support development and revision of qualifications and quality-assurance arrangements is acknowledged.

Stakeholder involvement

The Ministry of Education and Religious Affairs is the competent authority. EOPPEP was established to develop the HQF and its referencing to the EQF, as well as to put the HQF and procedures for validation of learning outcomes into practice and assure quality in lifelong learning.

To support EOPPEP in development of the HQF, an advisory committee was established, comprising representatives from public administration, educational institutions, social partners and external experts. Further, working groups were set up to analyse qualification types in the HQF and develop type specifications, core structural elements of HQF levels, with participation of representatives of competent ministries, the Manpower Employment Organization and higher education sector.

For referencing the HQF to EQF, a referencing committee was established involving representatives from the Ministry of Education and Religious Affairs, the higher education sector (universities/technological educational institutions), social partners, the Hellenic Quality Assurance and Accreditation Agency, and international experts.

One benefit of the the HQF is seen to be that it will promote open dialogue and collaboration among a wide range of stakeholders, and that it will help clarify and reinforce the relationship between education and training and the labour market.

Framework implementation

The Ministry of Education and Religious Affairs is responsible for HQF implementation, with EOPPEP as the main actor. The framework is not yet operational. A draft presidential decree on HQF has been prepared, which will clarify many operational aspects.

Inclusion of qualifications in the framework is defined through qualification type specifications. They include title, level, awarding body, summary descriptor, volume of learning, purpose, education sector, learning outcomes, employment relevance and progression possibilities. Allocation procedures have been defined, but they still need to be tested in practice. The framework needs to be populated with qualifications based on learning outcomes. This is work in progress.

In current reform of general education and VET under the 2013 Act 4186/2013 on restructuring secondary education and other provisions, the HQF is referred to as a powerful tool. The shift towards learning outcomes-based provision also represents a significant change, with HQF development a major driver.

An objective for the period 2014/15 is to consolidate the HQF as the main lever for restructuring the Greek education system.

Level descriptors and learning outcomes

At this stage, an eight-level structure has been proposed for the HQF, reflecting the existing formal education and training system in Greece. EQF level descriptors were taken as a starting point and further developed according to national needs. Levels are defined in terms of knowledge, skills and competence. Work on level descriptors for HQF and on a qualifications framework for higher education has taken place separately, but the final objective is to have a comprehensive framework, covering all levels and types of qualifications.

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

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

Working groups were formed under the auspices of the Ministry of Education and Religious Affairs to draft outcomes of qualifications provided in sub-systems of formal education and suggest their allocation to the eight levels of the HQF.

In general education and VET, reforms are initiated under the 2013 Act 4186/2013 on restructuring secondary education and other provisions.

Higher education qualifications are included in the HQF and general descriptors have been developed. Evaluation of higher education institutions has

been completed and the self-certification process against the qualifications framework of the European Higher Education Area is in progress.

The shift to learning outcomes is a significant change in the Greek system, which until now has relied on an 'input' approach. The outcomes-based HQF is expected to support design of future outcomes-based qualifications.

Validation of non-formal and informal learning and links to the NQF[70]

In Greece, there is no comprehensive strategy for validation of non-formal and informal learning. Legislation governing the HQF states that the national framework should be aimed at recognizing and correlating learning outcomes in all types of formal, non-formal and informal learning. In Greek legislation, definition of 'non-formal' differs from the Council recommendation definition and refers mainly to IVET provision.

EOPPEP, which is also responsible for the HQF, is developing a national integrated system for validation under the action 'development of a national system for certification of outputs of non-formal and informal learning' within the operational programme 'human resources development'. This system should indicate how non-formal and informal learning can be introduced into the HQF. Work on the HQF is focusing on formal qualifications; the next stage will include referencing qualifications acquired through non-formal and informal learning. In April 2014, there was a public consultation meeting with social partners to start discussing validation and accreditation issues.

Under the validation framework, professionals that do not hold a formally-recognized qualification/title will be able to apply to EOPPEP for certification directly, regardless of the way they have developed their professional capacities (see European Commission et al., forthcoming). At the moment, this is only possible for professionals in private security services and for certification in specific technical occupations (plumbers, technical works machinery operators, liquid and gas fuel installation and welding). The procedure involves theoretical and practical exams and is based on the standards set out in the respective occupational profiles (*Epaggelmatika perigrammata*). Validation of non-formal and informal learning has been in place in Greece since 2006 for adult trainers of non-formal learning certifying their teaching competence qualification. The certification scheme is based on the accredited occupational profile of an adult trainer developed in consultation with social partners and stakeholders (the profile is renewed every five years and was last revised in 2011). Under new legislation, certification procedures are currently open to all interested parties fulfilling prescribed eligibility criteria. The updated system foresees three paths:

- Direct certification upon conditions and criteria;
- Participation in an evaluation process and then certification;
- Enrolment in training programmes and subsequent certification. This certification system has been upgraded in line with the EU recommendation on validation of non-formal and informal learning.

It is expected that development of the HQF and occupational standards using a learning outcomes approach will ease validation of non-formal and informal learning in Greece.

Referencing to regional frameworks

The referencing of the HQF to the EQF is ongoing, in dialogue with the EQF advisory group. EOPPEP is responsible for referencing the HQF to the EQF, under supervision of the Ministry of Education and Religious Affairs.

Table 25 Level correspondence between the HQF and the EQF

HQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Ministry of Education and Religious Affairs and EOPPEP, 2014.

70 This section draws mainly on input from European Commission *et al.*, 2014.

Important lessons and future plans

On the whole, the HQF is expected to have an impact on education. It is expected to provoke reforms of education and training and improve links to the labour market, and bring issues of lifelong learning, validation, informal learning, and quality assurance to the general public's attention. Since one explicit aim of the HQF is to support lifelong learning, it is expected the development and implementation process will open up possibilities for transitions and progression along flexible pathways within the system. Such flexibility will increase when the HQF at a later stage includes qualifications acquired via non-formal learning.

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 and Religious Affairs, but linking the two current development processes, NQF for lifelong learning and qualification framework developments in higher education, is a challenge.

Other challenges ahead include referencing international sectoral qualifications to the HQF, identifying and referencing qualifications awarded for specific economic sectors, such as agriculture, shipping and tourism, as well as qualifications acquired through programmes run by foreign universities, which cooperate with private institutions in Greece. There is a clear division between non-university, mostly private, institutions and the university sector, which is public, charges no fees and facilitates entrance through national entrance examinations, in accordance with the Greek constitution. Universities have an exclusive right to award traditional higher education qualifications (master's degree, bachelor's degree and doctorate). Referencing higher education qualifications awarded outside traditional universities, using level descriptors based on learning outcomes, is seen as a challenge.

A project to be undertaken shortly is reconstruction of the qualifications registry, already operating in EOPPEP, in accordance with compatibility requirements and specifications of both the EQF portal and the European skills, competences, qualifications and occupations portal.

Compared to many other EU countries, Greece has a weak tradition of using learning outcomes for defining and describing qualifications. Putting into effect the shift to learning outcomes and developing all necessary methodologies, procedures and standards remains a major challenge.

Main sources of information

[URLs accessed 22.7.2014]

EOPPEP is the national contact point: http://www.nqf.gov.gr/ΑρχικήΣελίδα/tabid/36/Default.aspx

List of abbreviations

CVET	continuous vocational education and training
EOPPEP	National Organization for the Certification of Qualifications and Vocational Guidance
EPAL	epaggelmatika lykeia [vocational upper secondary school]
EPAS	epaggelmatikes sxoles [vocational school]
EQF	European Qualifications Framework
EU	European Union
HQF	Hellenic Qualifications Framework
IEK	institouto epagelmatikis katartisis [vocational training institute]
IVET	initial vocational education and training
SEK	sxoli epaggelmatikis katartisis [vocational training school]
TEI	technological educational institutions
VET	vocational education and training

References

[URLs accessed 22.7.2014]

Greek Ministry of Education and Religious Affairs; EOPPEP. 2014. *Greece EQF referencing report.* http://www.esos.gr/uploads/kcfinder/file/GREECE%20REFERENCING%20REPORT_January%20_2014.pdf

European Commission. 2013. *Education and training monitor 2013.* Greece. http://ec.europa.eu/education/tools/et-monitor_en.htm

European Commission; Cedefop; ICF International. 2014. E*uropean inventory on validation of non-formal and informal learning 2014: Country report Greece.* http://libserver.cedefop.europa.eu/vetelib/2014/87059_EL.pdf

Prepared by:

The European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts

HONG KONG SAR, CHINA

Introduction

The Hong Kong Qualifications Framework (HKQF) grew out of the 1990 comprehensive education reform which included a complete reorganization of the lifelong learning system. In order to develop the continuing education sector and promote lifelong learning, in 2000 the Education Commission proposed the establishment of a comprehensive qualifications framework (QF) covering the vocational, academic and continuing education sectors. The Education Bureau of the Hong Kong Special Administrative Region (HKSAR) Government launched the HKQF in 2008 (EDB, 2012) with the intention of establishing a comprehensive and voluntary network of pathways between academic, vocational and continuing education, thus ensuring sustainable manpower development for the rapidly changing world.

During the past forty-five years, Hong Kong has undergone a dramatic transformation to become a leading international financial centre. To stay ahead in an increasingly competitive market, Hong Kong must constantly upgrade the capability of its workforce. However, with a shift in Hong Kong's economy towards highly skilled activities, jobs for workers with low educational attainment are disappearing rapidly while demand for workers with higher education continues to grow. To narrow this gap, the government has taken steps over the past two decades to provide workers with more effective training in order to motivate them to enhance their employment potential.

In response, the educational attainment of Hong Kong's workforce has improved significantly. The proportion of workers with tertiary education increased from 10 per cent in 1985 to 27 per cent in 2004 (EDB, 2004). However, with the proliferation of training programmes and qualifications comes the potential difficulty that learners may not know which qualification is recognized and thus which course to choose. On the other hand, when presented with an assortment of certificates, an employer may remain in the dark as to the actual level of competency of the holder.

Main policy objectives

The main policy objectives of the HKQF are to:

- clearly define the standards of different qualifications;
- ensure the quality of qualifications;
- enable citizens to obtain recognized qualifications either through continuing education and training or through the recognition of prior learning (RPL) mechanism;
- ensure that education and training providers, employers and the public understand the range of qualifications available and appreciate how they can contribute to improving the skills of the workforce;
- delineate the links between different types and levels of qualifications, both vocational and academic and clearly articulate the qualifications;
- recognize workers' existing skills, knowledge, and work experience through an RPL mechanism developed for industries which have set out a Specification of Competency Standards (SCS[71]); and
- simplify and standardize the use of award titles through the Award Title Scheme (ATS), which is applicable to qualifications at all HKQF levels.

Stakeholder involvement

In 2002 the Education Bureau (EDB; previously called Education and Manpower Bureau of the HKSAR Government) issued a public consultation paper on 'the proposed establishment of an HKQF and its associated quality-assurance mechanism in Hong Kong' (EDB, 2004). This was followed by a series of other public consultations, pilot studies and seminars for industries, employers' associations, trade unions and professional bodies, culminating in the launch of the qualifications framework in 2008.

71 In the vocational sector outcome standards for qualifications are set by various industries and are called Specifications of Competency Standards (SCS). Competency Standards can be grouped together to form a qualification at a particular level.

The Qualifications Framework Secretariat (QFS) is the executive arm of the Education Bureau and is responsible for implementing and promoting the HKQF.

Industry Training Advisory Committees (ITACs) or the Cross-Industry Training Advisory Committee (CITAC) play a pivotal role in the implementation of the HKQF and the development of Specification of Competency Standards (SCS). ITACs/CITAC are established by industries with the assistance of the Education Bureau. Labour unions have participated in all the existing nineteen ITACs/CITAC

The ITACs have three main objectives:

1. To develop, maintain and update SCS and to formulate a recognition of prior learning (RPL) mechanism for the industry concerned;
2. To promote the HKQF within the industry concerned;
3. To facilitate closer collaboration between the industry concerned and the Secretary for Education to discuss and advise on matters relating to the HKQF (Education Bureau-Qualifications Framework website).

The Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) is an independent statutory body established under the HKCAAVQ Ordinance, Cap. 1150. This Ordinance of 1 October 2007 represents a legislative amendment of the HKCAA (Hong Kong Council for Academic Accreditation), and came into effect in order to expand the scope of the latter's services to cover accreditation of vocational qualifications. As of this Ordinance, the Council was renamed the HKCAAVQ. In accordance with the Accreditation of Academic and Vocational Qualifications (AAVQ) Ordinance, Cap. 592, which came into operation on 5 May 2008, the HKCAAVQ is the accreditation authority and is responsible for developing and implementing the standards and approach for accreditation of academic and vocational qualifications to underpin the HKQF. HKCAAVQ also has a statutory role of administering the Qualifications Register (QR), an online database containing QF-recognised qualifications, associated programmes and providers.

To encourage people aged 18 to 60 to pursue continuing education, a Continuing Education Fund (CEF) of 5 billion HKD (Hong Kong Dollar) was set up by the government in 2002. In order to provide fair and impartial reviews of the continuing education courses concerned, the CEF was reviewed by a committee of quality-assurance and accreditation experts, as well as specialists from commerce, finance, education and training, and other industries, and all such courses have to be recognized under HKQF. With the aim of enhancing the linkage between CEF and HKQF and the relevancy of CEF courses to industry needs, all training courses that are developed with special reference to Specification of Competency Standards (i.e. SCS-based courses[72]) are eligible to be included in the reimbursable course list under the CEF.

Qualifications recognized under the HKQF are characterized by three key features: (1) level, which reflects the depth and complexity of learning leading to the qualification; (2) award title, which specifies the area of study of the qualification; and (3) credit, which indicates the volume of learning leading to the qualification.

Hong Kong introduced the Award Titles Scheme (ATS) in 2012 with the aim of standardizing and simplifying the titles of HKQF qualifications. The ATS should be seen together with the Operational Guidelines on Use of Credit and Implementation Timetable (Qualifications Framework Secretariat, 2012), which stipulate the following:

- The title 'Certificate' may be awarded for qualifications at levels 1 to 6;
- Qualifications at levels 1 and 2 may also use 'Foundation Certificate' as the title of the award;
- 'Diploma' can only be used for qualifications at levels 3 to 6. A diploma must carry a learning size of 60 or more credits. There is no minimum credit requirement for a certificate programme.

ATS specifies which qualifiers (such as foundation, higher, advanced, professional and postgraduate) providers may use in the titles of their qualifications. No qualifier is allowed for qualifications at Level 3 (i.e. certificate and diploma). Providers may choose to add 'QF Level' to the titles of their qualifications: for example, 'Professional Diploma in Business Management (QF Level 6)'. Providers may continue to use titles traditionally used for degree and sub-degree qualifications in mainstream education (i.e. associate degree at Level 4, bachelor at Level 5, master at Level 6, and doctor at Level 7).

Providers who wish to use non-ATS specified titles for their programmes may apply for approval to the Review Panel on Award Titles, set up under the Education Bureau with effect from 1 January 2013. However, the use of titles outside

72 To qualify for the labelling of a SCS-based Course, at least 60 per cent of the contents of the course (i.e. in terms of number of credits) must come from the SCS.

Table 26 Hong Kong Qualifications Framework (HKQF): Choice of award titles for different levels

QF Level	Choice of Award Titles for Different Levels						
7	**Doctor**						
6	Master	Postgraduate Diploma Postgraduate Certificate	Professional Diploma Professional Certificate	Advanced Diploma Advanced Certificate	Diploma	Certificate	
5	Bachelor						
4	Associate	Higher Diploma Higher Certificate					
3							
2							
1							Foundation Certificate

Source: Qualifications Framework Secretariat, 2013

ATS is not encouraged, as this would be contrary to the intention and purpose of ATS. Only in very exceptional circumstances should a provider be allowed to use titles not specified in ATS.

Recognition and validation of non-formal and informal learning and links to the NQF

A credit accumulation and transfer (CAT) system provides the flexibility needed to suit individual learners' circumstances and minimize duplication of training. The CAT system allows learners to accumulate credits from diverse courses and convert them into a recognized qualification. One QF credit consists of 10 notional learning hours, which takes into account the total time likely to be required by an average learner in all modes of learning, including class attendance, private study, online learning, practical learning, examination, etc. The HKQF is expected to facilitate CAT arrangements between different sectors and training providers by providing a unified platform and common benchmarks.

The HKQF plays a particularly crucial role in secondary education, because the SCSs developed by industries will serve as a useful reference for applied learning courses under the new structure for senior secondary education. These courses will provide students with a wider range of pathways, enabling them to master the skills required by various industries.

The major purpose of setting up a recognition of prior learning (RPL) mechanism, which represents a form of validation of non-formal and informal learning under the HKQF, is to enable workers of various backgrounds to receive formal recognition of the knowledge, skills and experience they have already acquired. However, many employers

and trade unions take the view that if workers have no intention to pursue further education, there is no need to implement RPL. Whether or not to implement RPL and how quickly it are matters to be determined mainly by the industries concerned. If ITACs think that the implementation of RPL will do their industries more harm than good, they may opt not to implement it, or to hold thorough discussions before proceeding with the implementation.

Referencing to regional frameworks

The Education Bureau is committed to developing Hong Kong SAR as the regional 'education hub'. To this end, the Education Bureau is considering how its policies might facilitate the admission of non-local students wishing to study in Hong Kong. With the rapid expansion of the market for continuing and post-secondary education in recent years, the Education Bureau believes that Hong Kong has the potential and the right conditions for recruiting non-local students, in particular mainland chinese (EDB, 2004).

The Education Bureau entered into collaboration with the European Commission in November 2014 in a technical alignment project between HKQF and the European Qualifications Framework (EQF), with a view to providing a translation device to understand and compare the level-to-level relationship between the two frameworks. The major objectives of the technical alignment exercise are to promote better understanding of the qualifications offered under HKQF and by European countries referenced to the EQF, and to facilitate mobility of learners and labour between the two places.

Important lessons and future plans

The smooth development of the HKQF since its implementation in 2008 can be attributed to the following points:

- Stakeholders and partners from various industries have supported and participated actively in the development of the HKQF, providing the valuable human resources needed in a knowledge-based economy;
- A total of nineteen ITACs/CITAC have been set up under the HKQF, covering about 52 per cent of the total labour force in Hong Kong;
- Some industries have applied the results of the HKQF to their work, designing training courses in accordance with HKQF competency standards and applying these standards to human resource management (such as in designing recruitment advertisements, commending staff, formulating job descriptions, deploying manpower and organising internal training), or using the standards as references for performance benchmarking;
- Some training courses have passed the quality-assurance mechanism to become HKQF-recognized courses listed in the Qualifications Register (QR).

The Education Bureau plans to step up its publicity efforts to promote the HKQF as a benchmark for quality in continuing education. Industry-specific websites should enable stakeholders in a particular industry (as well as the general public) to search for the latest information on education and training and the development of the HKQF in the industry concerned.

References

Education Bureau. 2004. Opening Ceremony of the International Conference on 'Internationalization of Lifelong Education: Policy and Issues', 3 December 2004. Hong Kong, EDB.

Education Bureau. 2012. Qualifications Framework Partnerships Commendation Ceremony. Hong Kong, EDB. http://www.info.gov.hk/gia/general/201212/06/P201212060234.htm (Accessed 7 December 2012.)

Education Bureau. 2014. Qualifications Register (QR). Hong Kong, EDB. Available at the qualifications website. www.hkqr.gov.hk (Accessed 15 July 2014.)

Hong Kong Council for Accreditation of Academic and Vocational Qualifications. n.d. Accreditation Authority under the Hong Kong Qualifications Framework. Available at the webpage of the HKCAAVQ. Qualifications Framework Secretariat. 2012. Award Titles Scheme and the use of Credit Qualifications. Hong Kong, QFS. http://www.hkqf.gov.hk/guie/HKQF_ATS_and_Credit.asp (Accessed 31 January 2012.)

Qualifications Framework Secretariat. 2013. *Hong Kong Qualifications Framework*. Hong Kong, Qualifications Framework Authority.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

HUNGARY

Introduction

A comprehensive national qualifications framework (NQF) for lifelong learning was adopted in July 2012 by government decree and published in the Hungarian official journal.[73] It will embrace all national qualifications that can be acquired in general and higher education and those vocational qualifications registered in the national qualifications register (NQR). Inclusion of other formal vocational qualifications (mainly continuing vocational education and training [CVET] qualifications) is on the policy agenda. Qualifications for non-formal training programmes will also be included in the NQF according to the new Act on Adult Training (adopted in June 2013).[74] All sub-systems are included, in accordance with the broad (general) national level descriptors which will allow sub-systems to adopt more specific descriptors. These developments are designed to support validation and recognition of non-formal and informal learning.

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

Main policy objectives

Development of an NQF will:

- promote harmonization of the different sub-systems, helping the national qualification system to become more coherent and supporting national policy coordination;
- improve transparency, transferability and comparability of national qualifications by showing the relationship between qualifications (there are many qualifications at levels 4, 5 and 6);
- support lifelong learning and enable stronger links between adult learning and formal education, and awareness-raising related to different learning paths, leading in the long term to recognition of a broader range of learning forms (including non-formal and informal learning);
- reinforce use of learning outcomes in standard-setting, curricula and assessment,[75] and contribute to establishment of a common approach for describing learning outcomes in different sub-systems;
- make Hungarian qualifications easier to understand abroad and more comparable and transparent, improving common trust, through referencing the NQF to the European Qualifications Framework (EQF);
- improve relevance of qualifications in the labour market;
- support career orientation and the counselling system.

The NQF could play an important role in supporting lifelong learning in Hungary. Adult participation, at 2.8 per cent in 2012, is below the EU average and one of the lowest in Europe (European Commission, 2013). This is regarded as challenging, particularly to maintain and develop new skills and adapt to structural challenges.

Stakeholder involvement

Overall responsibility for development and implementation of the NQF is shared between the Ministry of Human Resources and the Ministry of National Economy; legal acts on NQF are initiated by these ministries.

73 Government decisions on the Hungarian Qualifications Framework. http://bit.ly/1N3tU12 [accessed 19.9.2014].

74 Act LXXVII of 2013 on Adult Training (available in Hungarian). http://bit.ly/1Vp2bwj [accessed 29.9.2014].

75 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.

Conceptualisation of an NQF started in early 2006 under the Ministry of Education and Culture (now part of the Ministry of Human Resources) and the Ministry of Social Affairs and Labour (whose responsibilities are now transferred to the Ministry of National Economy). In June 2008, the government adopted a decision (No. 2069/2008) on development of an NQF for lifelong learning and on joining the EQF by 2013. During 2008–10, NQF developments were taken forward as part of the social renewal programme of the new Hungary development plan (2007–13), mostly funded by the European Social Fund (ESF) and European Regional Development Fund (ERDF).[76] A government decision (No. 1004/2011) was adopted in January 2011, which further supports establishment of a Hungarian Qualifications Framework to be referenced to the EQF. Based on this decision, the relevant ministries worked together to create – in their respective fields of competence – the necessary legal, financial and institutional conditions for implementing the NQF. The last government decision (No. 1229/2012), adopted on 6 July 2012 (Hungarian Government, 2012), accepted the number of levels and descriptors for the Hungarian Qualifications Framework, setting deadlines for EU-funded projects to work further on linking qualifications to these levels.

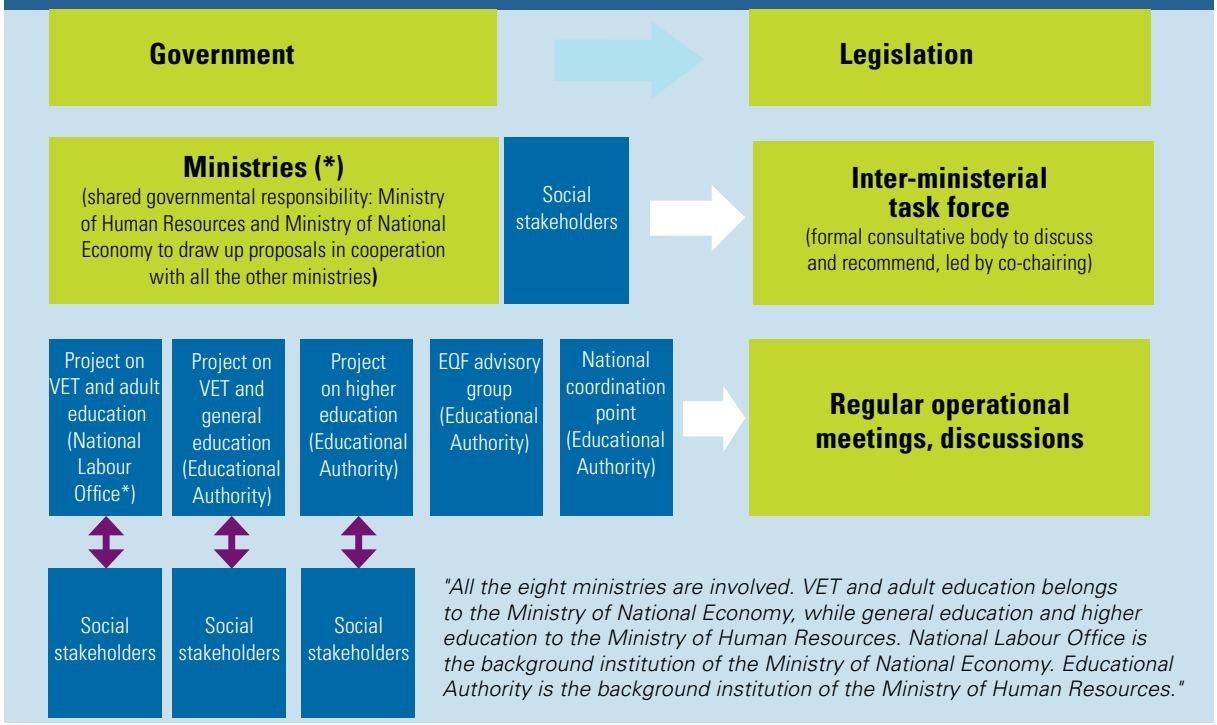
Framework implementation

The framework was formally adopted and is being implemented. It is not operational yet. Three implementing projects (VET and adult learning, higher education and general education) were designed following the logic of three education and training sub-systems.

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

Professional support to the task force has been provided by the Educational Authority since September 2012. In spring 2012, the national coordination point was established as a project unit within the authority mainly to coordinate stakeholders and prepare the referencing process.

Figure 4 Responsibilities related to the development and implementation of Hungarian qualifications



Source: Erzsébet Szlamka.

76 Social renewal operational programme 2007–13. http://www.nfu.hu/?lang=en [accessed 29.9.2014].

Assigning qualifications to NQF levels has started. First, reference qualifications from higher education were assigned to NQF levels.[77] In VET, assignment of VET qualifications to NQF levels is ongoing, using technical comparisons between qualifications and NQF descriptors. If needed, social judgement and legal backgrounds are examined. Implementation of the NQF is closely linked to new legal provisions in all sub-systems of education and training, including the new VET law (2011),[78] the new law on general education (2011),[79] the new act on adult learning (2013)[80] and the amended law on higher education (2012).[81]

Level descriptors and learning outcomes

An eight-level structure was adopted. Learning-outcome levels are defined in four categories: knowledge, skills/abilities, attitudes and autonomy/responsibility. The descriptors were based on analysis of existing approaches in the relevant sub-systems.

'A shift to learning outcomes has not been a clearly articulated policy objective in recent years' (Cedefop, forthcoming). Focus on learning outcomes has support mostly from developers and in research studies in different education and training sub-systems, but stakeholders' views differ based on their previous knowledge, information and involvement. To overcome challenges with various levels of acceptance of learning outcomes, in recent years, several steps were taken towards an outcomes-oriented approach. From 2007, a national core curriculum based on key competences was put in place in school-based education. The newest core curriculum, issued in 2012, also defines the fundamental educational and cultural basis and emphasizes process and content regulation. National competence assessment was introduced into public education. Since 2005, the final secondary school examination (maturity examination) has been reformed, enabling more accurate assessment of competences acquired by students. A two-level school leaving examination finishes secondary education and offers school certification at secondary level and an entry condition to higher education. Exams measure both declarative knowledge and skill, the ability to apply knowledge.

In VET, two reforms have taken place in the past ten years: in 2004–06 and in 2011–12. The NQR was reformed and competence-based vocational qualifications referenced to a four-level structure were developed. In 2004–06, the NQR was redeveloped into a modular system and competence-based training. Simultaneously with NQR development, related professional and examination requirements were developed for each qualification. The professional and examination requirements specify not only professional knowledge and skills necessary to perform various tasks involved in a given occupation/job, but also methodological (logical thinking, problem-solving), social (communication, cooperation and conflict-resolution) and personal (flexibility, creativity, independence) competences. The renewed NQR was generally introduced in all VET schools from 2008. The government formulated a new VET concept in 2011 and introduced it in 2012. The new 'dual VET' type of training was introduced in 2013/14 generally, but was launched in some schools in 2012. Vocational school programmes run for three years, simultaneously providing general education and VET from the start. The proportion of practical training in the new three-year programme is significantly higher, while that of vocational theoretical education and particularly general education is lower. Three-year vocational school training prepares learners for state-recognized vocational qualifications. VET programmes now start at age 14, and the previous decentralized education system is in the process of becoming increasingly centralised.

Advanced VET has been reorganized: it is now solely provided by higher education institutions. Learning outcomes descriptions were prepared in cooperation with providers in 2012 and higher education quality-assurance measures apply.

In higher education, learning outcomes have partly appeared in qualifications requirements through regulatory measures and acts. All first- and second-cycle higher education qualifications in Hungary are increasingly described in terms of both input and outcome criteria, including advanced VET qualifications. However, student-centred learning, outcomes-based orientation and use of

77 A total of 10 per cent of qualifications from each discipline and cycle respectively have been included. The most typical or most popular qualifications were included. Where more qualifications from the same discipline and cycle were sampled, significantly different kinds of qualifications were chosen.

78 Act CLXXXVII of 2011 on VET (available in Hungarian). http://bit.ly/1GjE0mD [accessed 6.10.2014].

79 Act CXC of 2011 on National Public Education. http://bit.ly/1YQmz8J [accessed 6.10.2014].

80 Act LXXVII of 2013 on Adult Training (available in Hungarian). http://bit.ly/1Vp2bwj [accessed 29.9.2014].

81 Act CCIV of 2011 on National Higher Education. http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A1100204.TV [accessed 29.9.2014].

learning outcomes in designing programmes and learning modules are still key challenges in higher education.

Validation of non-formal and informal learning and links to the NQF[82]

The legal framework governing VET, higher education and adult education allows for validation and recognition of prior learning, but practice is still limited. According to the amended Higher Education Act (2011, 2012),[83] at least one-third of the credits in a qualification should be earned in the institution issuing the diploma. Thus, two thirds can be acquired in another way, including through validation of non-formal and informal learning. A prior learning assessment scheme in the adult training system has existed since 2001. The scheme aims to customize training provision. The new Adult Training Act (2013)[84] retained the previous scheme and made assessment of prior learning an obligation in vocational training and language training. These validation procedures, however, do not seem to be much used due to the link between adult education provision and subsidies (European Commission et al., forthcoming). VET provision is modularized and the qualifications and requirements are described in competences. Therefore, VET is closer to the learning outcomes-based approach. The VET examination system regulation has been 'open' to validation since 1993 (Law on VET),[85] so it is possible for applicants to take an examination without entering a formal VET programme, but this option is not much used.

Without an overall policy and procedure on validation, education institutions tend to operate validation autonomously in the given legal environment's framework. The major difficulty in implementing validation in Hungary remains adapting to a learning-outcomes approach, especially in higher education where programmes are still input-oriented. Different sectors are mainly coordinated through development of the NQF by establishing a coordination forum for implementation of government tasks (such as referencing). Further developments on NQF are expected to assist in development of validation of non-formal learning.

Referencing to regional frameworks

Linking qualifications to NQF levels is in progress. A referencing report was presented to the EQF advisory group in February 2015.

Important lessons and future plans

One main role of the NQF is to function as an interface between education and the labour market. It is crucial to get stakeholders on board. As NQF development is running within three separate projects, following three sub-systems (VET, higher education, general education), cooperation across sub-systems is a challenge. Formal consultation takes place in the inter-governmental task force, while operational discussions on methodology, communication and other issues are organized with the three projects and the national coordination point.

Implementation of learning outcomes is an important area for further work. NQF development work and related work on validation has generated common understanding of the learning-outcomes approach and initiated revision of regulatory documents. Three supporting projects in school education, VET and higher education have disseminated the approach to a wider circle of stakeholders. The educational sub-systems are at different stages of development as regards strengthening the learning-outcomes approach.

Main sources of information

The Educational Authority delegates a member to the EQF advisory group and this member also acts as EQF national coordination point.

More information is provided on the homepage of the Educational Authority, available soon in English as well.

List of abbreviations

CVET	continuing vocational education and training
NQF	national qualifications framework
EQF	European Qualifications Framework
ESF	European Social Fund
ERDF	European Regional Development Fund
VET	vocational education and training
NQR	national qualifications register

82 This section draws mainly on input from European Commission et al., 2014.

83 Act CCIV of 2011 on National Higher Education. http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A1100204.TV [accessed 29.9.2014].

84 Act LXXVII of 2013 on Adult Training (available in Hungarian). http://bit.ly/1Vp2bwj [accessed 29.9.2014].

85 Act CLXXXVII of 2011 on VET (available in Hungarian). http://bit.ly/1GjE0mD [accessed 29.9.2014].

References

[URLs accessed 29.9.2014]

Cedefop (forthcoming). 2013. *Application of learning-outcomes approaches across Europe.* European Commission. Education and training monitor 2013. http://ec.europa.eu/education/library/publications/monitor13_en.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Hungary*. http://libserver.cedefop.europa.eu/vetelib/2014/87061_HU.pdf

Hungarian Government. 2008. *Decision 2069/2008 (VI. 6). Korm határozata az Európai Képesítési Keretrendszerhez való csatlakozásról és az Országos Képesítési Keretrendszer létrehozásáró* [Government decision (No 2069/2008) on development of an NQF for lifelong learning]. http://www.okm.gov.hu/kozoktatas/2069-2008-kormhat

Hungarian Government. 2011. 1004/2011. (I. 14.) *Korm. határozat az Országos Képesítési Keretrendszer létrehozásáról és bevezetésérő*l [Government decree: implementation of the NQF]. http://jogszabalykereso.mhk.hu/cgi_bin/njt_doc.cgi?docid=135638.575387

Hungarian Government. 2012. 1229/2012. (VII. 6.) *Korm. határozat a Magyar Képesítési Keretrendszer bevezetéséhez kapcsolódó feladatokról, valamint az Országos Képesítési Keretrendszer létrehozásáról és bevezetésérő*l *szóló 1004/2011. (I.14.) Korm. határozat módosításáról* [Government decree: introduction of the HuQF, establishment of the NQF and introduction of the amending decision of 1004/2011 (I.14)]. http://jogszabalykereso.mhk.hu/cgi_bin/njt_doc.cgi?docid=151757.605035

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

ICELAND

Introduction

Iceland has developed a national qualifications framework (ISQF), consisting of seven learning outcomes-based levels and covering all levels and types of qualification. Work started in 2006 and has been closely linked to extensive reform of the Icelandic education system, including changes in legislation and education policy. The focus on the learning-outcomes principle and the national qualification levels in the reform was underpinned by the parallel development of the ISQF.

While there is currently no single act or decree introducing the ISQF, its role and mandate are explicitly stated through a series of acts and decrees introduced between 2006 and 2010. The Act on Higher Education (Icelandic Ministry of Education, Science and Culture, 2006), followed by acts on pre-school education, compulsory education, upper-secondary education, teacher training and adult education, provided a sufficiently strong formal basis for the framework to be able to move into an early operational stage during 2013.

The ISQF is characterised by a clear borderline between levels 1 to 4 and levels 5 to 7. The development of these two parts of the framework has, partly, taken place separately and responds to the European Qualifications Framework (EQF) and Bologna Process respectively (with separate referencing to the EQF and self-certification to the qualifications framework in the European Higher Education Area [QF-EHEA]). The Icelandic national qualifications framework (NQF) was referenced to the EQF in December 2013.

Main policy objectives

The ISQF is defined as a lifelong learning framework and aims to encompass all levels and types of education and training offered in the country, including adult education. The framework is designed to make the pathways through the education system clearer, to increase student mobility within the country and between countries, and to motivate further learning.

The framework starts with, and is anchored to, continuing reform of Icelandic education and training initiated by the Act on Higher Education (Icelandic Ministry of Education, Science and Culture, 2006), adopted in 2006. While this act referred to the Bologna Process and the introduction of a three-cycle approach for Icelandic higher education, the Acts on Compulsory School and Upper Secondary Education in 2008 (Icelandic Ministry of Education, Science and Culture, 2008) and on Adult Education in 2010 (Icelandic Ministry of Education, Science and Culture, 2010) address the remaining parts of education and training and point towards a comprehensive NQF. No separate legislative basis has yet been developed for the ISQF: this has been deemed unnecessary due to the integration of framework developments into the 2006–10 legal acts.

The Icelandic NQF, through its systematic application of learning outcomes, is seen as a tool for reviewing the overall functioning of education and training and supporting long-term reform. This is exemplified by the Act on Upper Secondary Education (Icelandic Ministry of Education, Science and Culture, 2008) which provides for a new, decentralized approach to the organization of study programmes and curricula. Education providers are entrusted with increased responsibility and enjoy more autonomy in developing study programmes and curricula in general education and VET, using an approach combining learning outcomes, workload and credits. The descriptions have to be validated by the Ministry of Education, Science and Culture.

Stakeholder involvement

A wide range of stakeholders from education and training, as well as the labour market, has been involved in developing the ISQF. Representative working groups have been active during all stages of the process, apart from the political debate surrounding the preparation and passing of the education and training acts (between 2006 and 2010). Development of framework structures has been combined with extensive efforts to introduce the learning-outcomes perspective in curricula and

in teaching and learning practices. The strong link to continuing reforms has benefitted from stakeholder involvement.

More than twenty working groups involving representatives of education and training and occupational sectors were set up from 2009 to work on level descriptors and integration into the framework. Focusing on vocational qualifications, this work proved important for testing the relevance of the learning outcomes approach and the framework to the labour market. All upper secondary schools were also invited to contribute to the level descriptors and give their view on the potential role of the framework. This involvement of stakeholders and practitioners contributed to the 'anchoring' of the NQF proposal not only in education and training, but also among labour-market stakeholders.

The Icelandic higher education sector has been less involved in the development of the ISQF and, since 2007, has mainly focused on the link to the QF-EHEA. There is now, however, agreement that the three cycles of the higher education framework will provide the three highest levels in the Icelandic NQF. The higher education sector has only been partly involved in developing the NQF, the consequence being that the relationship between vocational and academic qualifications (and levels) can still be further elaborated.

A final consultation on the ISQF (and its referencing of the EQF) was carried out in spring 2013. Most comments came from stakeholders in higher education and adult education. Some worries were expressed by the higher education sector regarding ISQF levels 4 and 5 (EQF 5 and 6), noting that the distinction between upper-secondary education and short-cycle higher education is not clear-cut. Adult learning stakeholders expressed concern over the lower levels of the ISQF, noting that there is no level at which adults with low formal qualifications and/or special needs could enter.

The framework has generally been received positively by the different stakeholders. This also applies to teachers and trainers actively involved in continuing reforms related to learning outcomes, curricula and key competences.

Framework implementation

Following referencing to the EQF in December 2013, the ISQF has now reached an early operational stage. The Ministry of Education, Science and Culture plays a key role in driving and coordinating developments. It is also the main quality-assurance body of the Icelandic education system.

The national coordination point (NCP) is currently with the ministry's department of education, the NCP role being carried out by the three ISQF coordination committee experts from this department. There are plans to move the NCP from the ministry to an agency and to develop a national ISQF website and promotional activities.

A coordination committee, consisting of representatives of the Ministry of Education and all stakeholders taking part in designing the framework, will be set up. The framework is used partly as a tool in developing study provisions and education-work relations. Work is ongoing to develop an accreditation process and quality criteria for curricula in adult education. By 2015, all upper-secondary study programmes and course descriptions should be based on learning outcomes and placed at the suitable qualifications level.

Level descriptors and learning outcomes

Iceland has decided to introduce a seven-level framework based on knowledge, skills and competence-oriented descriptors. Developing level descriptors for the ISQF has been an important part of the overall strategy to shift to learning outcomes. NQF descriptors for levels 1 to 4 were published in the national curriculum guide for upper-secondary school in May 2011. Those for three higher education levels were published in the form of a decree in 2011. Combined, these two approaches add up to a seven-level NQF.

Competences are expressed in more detail compared to the EQF and reflect the importance attributed to key competences and transversal skills. This is a positive feature and contributes to the overall national relevance of the descriptors. When comparing the ISQF descriptors to those of the EQF, however, there are frequently observed overlaps between the headline terms, knowledge, skills and competences. This can be illustrated through the 'skills' category where ISQF tends to combine and extend the (EQF) focus on cognitive and procedural skills to aspects like autonomy, initiative and creativity. The implication of this is that the distinction between skills and competence is somewhat blurred. This problem can be overcome by reading across the knowledge, skills and competence categories, but indicates that the internal consistency of the ISQF descriptors could be further strengthened.

Compared to the EQF, and other national framework descriptors, the descriptors at ISQF levels 1 to 4 (EQF 1 to 5) are very much focused on the vocabulary of students and their ability to express themselves orally and verbally. Compared

to the general definition of learning outcomes, where the focus is on what a person knows, is able to do and understand, the ISQF descriptors seem to have adopted a somewhat narrower approach.

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

Validation of non-formal and informal learning and links to the NQF[86]

A national strategy for validation of non-formal and informal learning has been in development in Iceland since 2002. The system of validation originated in the craft and trade sector and has expanded in recent years. The introduction of the learning-outcome approach through the NQF is seen as beneficial for the development of the system. It provides people wishing to re-join vocational education and training, based on validation of learning outcomes, with the opportunity to graduate with ISQF Level 3 qualifications. ISQF learning outcome descriptors for upper-secondary schools also apply to validation of informal learning.

Most of the work has been carried out by the Education and Training Service Centre (ETSC), an organisation owned by the social partners, and has been concentrating on people who have not completed upper-secondary education. Based on a service contract with the Ministry of Education, Science and Culture, the ETSC makes contracts with accredited lifelong learning centres around the country for project implementation. In validation projects, the lifelong learning centres work with stakeholders for each sector and upper-secondary schools, the validation bodies specified in law. The focus is on working with groups of between eleven and twenty individuals in a specific field, while validation itself is individualized. Quality assurance is the responsibility of the Education and Training Service Centre.

Validation procedures are framed within educational legislation for lifelong learning, and have been linked to the development of the NQF.

The 2008 Upper Secondary School Act (Icelandic Ministry of Education, Science and Culture, 2008) and the Adult Education Act (Icelandic Ministry of Education, Science and Culture, 2010) provide individual entitlement to validation of non-formal and informal learning towards credits/units at upper-secondary level. Actual validation is defined in the Regulation for Adult Education of 2011. It was developed through pilot projects (2004–06) in cooperation with stakeholders and through feedback from end-users.

Validation of non-formal and informal learning can be carried out now for upper-secondary education (ISQF Level 3) in thirty sectors. Through the instrument for the pre-accession assistance, a project, Increasing employability of low-qualified workers through the development of a skill recognition system in adult education, was founded. Forty-seven new areas are being piloted in the period 2012–15. This relates to professions not linked to the formal education system, so, through validation, the scope of qualifications is being broadened.

There is no information at present on the use of validation in higher education. For adult learning, although entitlement is made explicit in the Adult Education Act, and seen as a vital part of adult education in practice, it remains to be seen how it will be included in current adult learning development work and connected to the ISQF.

Referencing to regional frameworks

The link between the EQF and the ISQF is described in the Icelandic referencing report, which was submitted to the EQF advisory group in December 2013. The outcome descriptors of the ISQF levels are generally more detailed than those in the EQF and key competences and transversal skills are taken into consideration.

Table 27 Level correspondence between the ISQF and the EQF

ISQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Icelandic Ministry of Education, Science and Culture, 2014.

86 This section draws mainly on input from European Commission et al., 2014.

ISQF Level 4 (EQF Level 5) presents a particular challenge, as it overlaps between upper-secondary level and higher education levels. It covers additional education at upper-secondary school and vocational examinations for professional rights (such as after a journeyman's certificate), as well as a first-level diploma at higher education level, without degree. The aim is to ensure flexibility between the levels. Table 2 shows the types of qualifications now linked to the seven levels.

Important lessons and future plans

Further promotion of the ISQF is planned in the near future, to support implementation. The ISQF is regarded as a living tool that can be regularly revised and adapted according to needs and requirements of the education system of the future.

A main challenge in the next few years is to continue dialogue and information processes: retaining stakeholder involvement and clarifying roles in implementing the framework will be important. It will also be important to establish an active coordination committee consisting of all the relevant stakeholders. Without this, there is a risk that momentum will be lost and the opportunity created by the ISQF not used. Whether this committee would be best supported by an agency outside the ministry is an open question, but could be considered.

The link to higher education seems to be of particular importance in the years to come. The overlaps between ISQF levels 3 and 4 need to be further discussed, as does overall coordination between the ISQF and the QF-EHEA.

Accreditation for curricula in adult education is currently being developed, together with the relevant quality criteria, to support learner mobility and recognition of competences between education levels. The question of validation is of major importance, and is expected to be a vital element when adult learning is being developed and connected to the ISQF.

Main sources of information

[URLs accessed 10.12.2014]

Information and documents covering the Icelandic developments can be found at:
Ministry of Education, Science and Culture:
http://eng.menntamalaraduneyti.is/
The Icelandic referencing report to the EQF is available on: https://ec.europa.eu/ploteus/sites/eac-eqf/files/EQF_Reference_Report_2014.pdf

List of abbreviations

EQF	European Qualifications Framework
ETSC	Education and Training Service Centre
ISQF	Icelandic Qualifications Framework
NCP	national coordination point
NQF	national qualifications framework
QF-EHEA	qualifications framework in the European Higher Education Area

References

[URLs accessed 10.12.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Iceland.* http://libserver.cedefop.europa.eu/vetelib/2014/87063_IS.pdf

Icelandic Ministry of Education, Science and Culture. 2006. *Higher Education Institution Act, No 63.* http://bit.ly/1jzUQsP

Icelandic Ministry of Education, Science and Culture. 2008. *The Upper Secondary School Act.* http://eng.menntamalaraduneyti.is/media/MRN-pdf_Annad/Upper_secondary_school_Act.pdf

Icelandic Ministry of Education, Science and Culture. 2010. *The Adult Education Act.* http://eng.menntamalaraduneyti.is/media/MRN-PDF-Althjodlegt/Adult-Education-Act.pdf

Icelandic Ministry of Education, Science and Culture. 2014. *Reference report of the Icelandic qualifications framework ISQF to the European qualifications framework for lifelong learning EDF.* Reykjavík: Icelandic Ministry of Education, Science and Culture. https://ec.europa.eu/ploteus/sites/eac-eqf/files/EQF_Reference_Report_2014.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

INDIA

Introduction

In the National Skills Development Policy (NSDP), 2009, India recognized the need to train 500 million people if the full potential of its demographic profile is to be achieved. The policy of 2009 continues to guide the skills development strategies and initiatives of all stakeholders (MoLE, 2009). However, a new Policy for Skill Development and Entrepreneurship 2015, is being drafted to reflect the changes that have taken place since 2009, and this new policy will guide efforts in the future.

One of the operational strategies of the policy is to create a national vocational framework of qualifications with an open/flexible system which would permit individuals to accumulate knowledge and skills over a period of time and later convert these, through testing and certification, into higher competencies, recognized in diplomas and degrees. This integrated framework, covering both TVET and general education, is known as the NSQF and is anchored in the National Skills Development Agency (NSDA).

The implementation of the NSQF is supported by an EU-funded technical assistance programme, currently in its third year, whose purpose, *inter alia*, is to increase the capacity of policy-makers and key counterparts to implement the NSQF and support the creation of labour market information systems (LMIS). The overall objective of this exercise is to improve the quality and relevance of training provision and the number of certified skilled workers in various sectors of employment in India (India-EU Skills Development Project, 2013).

India's labour market situation is often described as a paradox. There are many millions of people in the labour market and graduating from schools and colleges, yet the supply of skilled workers remains inadequate in some sectors. The Government Industrial Training Institutes are often criticized as being dead-end pathways, but continue to be the mainstay of skills needed for the manufacturing sector. TVET has often been of poor quality until now, and general education has frequently led to poor employability of secondary school and higher education graduates.

Since India has set its sights on becoming an important source of talent for national and global businesses, the country's great challenge is therefore to ensure that its workforce possesses skills appropriate to the needs of both its internal economy and the global economy.

In 2010 only 12 per cent of young people aged 18 to 24 were enrolled in higher education (*Indian Express*, 21 October 2010. India thus falls not only well below the OECD average of 80 per cent on this count, but also below the global average of 23 per cent (Odisha HRD, 2011). National policies aim to enrol 30 per cent of Indian youth in higher education by 2020 (Indiainfoline, 2011). The Government of India is currently seeking to create alternative pathways to post-secondary and higher education. It also aims to create job opportunities for 150 million students who will not have access to higher education by 2020.

Only 10 per cent of Indian workers have acquired vocational skills. Of these, 8 per cent have done so on the job. This means that less than 2 per cent have acquired recognized vocational qualifications (Planning Commission 2007–12). The 13–30 age group in the Indian population is currently growing by 28 million people each year, yet there are only about 2.5 million vocational training places available in the country (MHRD, 2011). However, the number of persons skilled in non-agricultural trades under various schemes of the Government of India in 2013/14 was over 5 million.Inadequate training of TVET teachers is a significant barrier at present. The share of TVET in education in India needs to be increased if the country is to meet its huge skill needs. At present it is difficult for people with informally-acquired skills to move from informal to formal programmes, though that seems to be changing with various projects on recognition of prior learning (RPL) having been launched in recent months.

The informal economy,[87] both rural and urban, employs up to 94 per cent of the national workforce; yet most training programmes cater to the organized sector (NCEUS Report, 2009).[88]

India therefore urgently needs to find ways of bridging the traditional divide between education and training and working life. In today's climate of rapid change such a strict divide can no longer be sustained. Learning must be made more relevant to the workplace, and must continue to take place during employment (Singh, 2012).

Main policy objectives

The government intends the NSQF to help achieve the following objectives:

- Mapping all recognized qualifications in India into one framework;
- Bringing about a paradigm shift in qualifications, teaching and learning, and shifting the focus towards learning outcomes;
- Making progression pathways more transparent
- Clarifying the roles of employers and education and training providers in the governance of education and training, TVET in particular;
- Improving the link between demand for skills in the labour market and supply of skills through education, by linking the people working on each side and giving industry insiders a voice in educational policy;
- Making better provision for credit transfer and the recognition of prior learning;
- Allowing more flexibility and greater vertical and horizontal mobility for learners throughout India's education and training system;
- Benchmarking knowledge and skills to international standards;
- Countering the negative perception of vocational education by establishing national standards for qualifications irrespective of the method of acquiring those qualifications.

Stakeholder involvement

The National Skill Development Agency (NSDA), an autonomous body (registered as a Society under the Society's Registration Act 1860), was created with the mandate to co-ordinate and harmonize skills development activities in the country, and is now part of the Ministry of Skill Development and Entrepreneurship (MSDE).

The NSDA will facilitate the operationalization of the framework, by bringing together the key sectoral stakeholders through the National Skills Qualifications Committee (NSQC). The NSQC is chaired by the NSDA chairperson, and includes representatives of the key ministries of the Government of India involved in skills development, representatives of State Skills Development Missions, industry representatives, and heads of relevant regulatory and training bodies/agencies. As a preliminary step, the NSDA has launched an evaluation survey to give a better picture of the current situation in India with regard to TVET. This will help highlight good practices which can be built on in future policy making (ibid.).

Within the areas of responsibility of the Ministry of Human Resource Development (MHRD), a number of major reforms are either starting or already underway. These include curriculum reform, the community colleges initiative, and a reform of the polytechnic approach to curriculum development. Inter-ministerial cooperation and engagement with stakeholders is growing, and ways are being sought to incentivize private schools to engage with TVET (Kumar, 2013).

The National Skills Development Corporation (NSDC) is mandated with the task of facilitating private-sector participation in the skills development effort, including incubation of industry-led bodies known as sector skill councils (SSC), which define the National Occupational Standards (NOS) for the respective skills sectors. The SSCs are responsible for providing industry's inputs in terms of quantity and quality of different skilled personnel required, and, for this purpose, engaging with central and state-level implementing agencies regarding the development of curriculum packages, training of vocational teachers, and assessment of skills imparted.

While the MHRD coordinates the efforts of different players in vocational education at secondary level, the Ministry of Labour and Employment (MoLE) is responsible for vocational training and skills development outside the general school sector. The MoLE subsumes the Directorate General for Employment and Training (DGE&T) and the National Council for Vocational Training (NCVT).

87 In India, informal-sector enterprises are considered to be a sub-set of the 'unorganised sector' comprising in addition to the unincorporated proprietary and partnership enterprises, enterprises run by cooperative societies, trusts, private and limited companies (National Accounts Statistics (NAS) (Sharma and Chitkara, nd).

88 ILO's definition of the informal economy comprises three categories: (i) small or microenterprises,(ii) household-based activities carried out by family members, and (iii) independent service activities including domestic helpers, cleaners, street vendors, shoe-shiners, and so on (ILO, 1998, p. 168).

Awarding bodies, such as school boards (including Open Schools for distance education), boards of technical education, the Central Board of Secondary Education (CBSE), the All-India Council for Technical Education (AICTE) and the University Grants Commission (UGC), are expected to ensure that the curriculum is designed and delivered in consultation with industry and trade associations and that it conforms to national standards in the NSQF.

Level descriptors and learning outcomes

NSQF is a competency-based framework that organizes qualifications into ten levels, with an entry level of 1, and a highest level of 10. Each of these levels is characterized by the following categories of competencies:

- Professional knowledge – what the person must know at that level;
- Professional skills – what the person should be able to do at that level;
- Core skills – soft and interpersonal skills;
- Responsibility – the degree of supervision that needs to be exercised over the person while doing the job, or the degree of supervision that person is capable of exercising over others.

These are the competences which the learners must possess regardless of whether they were acquired through formal, informal or non-formal education and training. Levels are described by level descriptors which delineate the knowledge, skills and competences required at the level in question.

Qualifications are made up of occupational standards for specific learning units. This allows learners, educators, training providers and employers to gain information about the broad equivalence of qualifications across different skill sectors. The competence frameworks are expected to align curricula with the skills needs of industry. The NSQF also aims to include a range of qualifications that are currently being provided through TVET programmes run by more than seventeen different ministries (MHRD, 2011). A further objective is to enhance flexibility in the provision of vocational courses by developing a 'modular' competency-based curriculum in collaboration with industry.

Recognition and validation of non-formal and informal learning and links to the NQF

The NSQF will open up several entry and exit points between TVET and general education and will facilitate movement between the two. The NSQF will emphasize industry participation in vocational education, with a specific focus on creating opportunities for students who are unable to enter colleges and universities. Vocational education courses will be designed, assessed and certified in consultation with industry stakeholders and employers. Industry stakeholders will be encouraged to partner with educational institutions so that vocational students can work on their premises. Workshops will be set up for a cluster of schools, polytechnics and other government institutions, and, where possible, in industry.

The NSQF will be used to facilitate seamless transition from VE secondary level (Class X –XII) to undergraduate level, namely bachelor's degrees at colleges and universities. In order to ensure compatibility between academic and vocational courses, the University Grants Commission (UGC) created a task force in 2006 to standardize knowledge and skills imparted by educational institutions and industrial training programmes.

Vocational training is the responsibility of the MoLE, which has been at the forefront of developing courses for school leavers through a network of more than 11,000 Industrial Training Institutes (ITIs) located all over the country. The NSQF will improve the progression pathways between formal TVET programmes in schools and ITIs. It will also improve progression opportunities to polytechnics, colleges of engineering and higher education more generally, and ultimately to employment. Currently, students from vocational streams have limited progression possibilities for further education, but that is now changing through the NSQF. Strengthening linkages between the skills sector and vocational education will call for greater cooperation between MoLE and MHRD.

The NSQF levels will also be assigned to the modular employable skills training being imparted through the Skill Development Initiative (SDI) scheme of the Ministry of Labour and Employment. This is currently a competency-based training (CBT) pathway providing the minimum skill sets needed for gainful employment. The programme targets workers, young people not in school, the unemployed, former child labourers and ITI dropouts (DGE&T, 2008).

Table 28 India: NSQF level descriptors

LEVEL	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
Level 1	Prepares person to carry out processes that are repetitive and require no previous practice	Familiar with common trade terminology and instructional terms	Routine and repetitive, takes safety and security measures	Reading and writing, addition, subtraction, personal financing, familiarity with social and religious diversity, hygiene and environmental awareness	No responsibility, always works under continuous instruction and close supervision
Level 2	Prepares person to carry out processes that are repetitive with little application of understanding, more of practice	Material tools and application in a limited context, understands context of work and quality	Limited service skill used in limited context, select and apply tools, assist in professional works with no variables, differentiates between good and bad quality	Receive and transmit written and oral messages, basic arithmetic, personal financing, understanding of social, political and religious diversity, hygiene and environmental awareness	No responsibility, works under instruction and close supervision
Level 3	Person may carry out a routine and predictable job requiring limited range of activities	Basic facts, process and principle applied in trade of employment	Recall and demonstrate practical skill, routine and repetition in narrow range of application	Written and oral communication, with minimum required clarity, basic arithmetic and algebraic principles, personal banking, basic understanding of social and natural environment	Under close supervision, some responsibility for own work within defined limit
Level 4	Work in familiar, predictable, routine situations of clear choice	Factual knowledge of field of knowledge or study	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, use of appropriate rules and tools, using quality concepts	Written or oral communication with required clarity, basic arithmetic and algebraic principles, basic understanding of social, political and natural environment	Responsibility for own work and learning
Level 5	Job that requires well-developed skill, with clear choice of procedures in familiar context	Knowledge of facts, principles, processes and general concepts within a defined field of work or study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Desired mathematical skill, understanding of social and political environment, some skill in collecting and organizing information, communication	Responsibility for own work and learning and some responsibility for others' works and learning

Source: Qualifications Framework Secretariat, 2013

Skills recognition and certification initiatives will provide an important pathway for the 90 per cent of Indians who work in the so-called unorganized sector (NCEUS Report, 2009). However, the process of skills recognition in the informal economy will need to be supported by RPL infrastructure which is affordable, reliable and efficient. There will be challenges in identifying where skills exist, documenting those skills and communicating with the potential candidates, as well as in administering the process. A number of pilot projects to identify the issues with RPL in the Indian context are currently under way, and most rely on the challenge approach to assessment of skills. An open and transparent examinations system will need to be created which relates to a national qualifications framework, so as to benefit those people who have acquired their knowledge and skills outside the formal education system. Guidance and information campaigns will be needed to guide learners through the process (Singh, 2011).

The National Institute for Open Schooling (NIOS), which offers distance learning courses for out-of-school youth and adults, will align non-formal learning courses to suit the requirements of NSQF levels and will offer bridge or foundation courses to enable seamless progression from one level to another. The recognition of prior learning is an important component of this process. The objectives of RPL will be twofold: (i) recognition of prior learning or qualifications acquired outside the formal education system; and (ii) recognition of credits obtained through formal learning. The NIOS will conduct RPL assessment both at the lowest levels and at community colleges and polytechnics, which offer qualifications such as associate diplomas (MHRD, 2012). In order to conform to the NSQF and to facilitate RPL, community colleges will offer training programmes and courses that are modular, credit-based, career-oriented, flexible as regards entry and exit, and, most importantly, relevant for local employers (Planning Commission, 2013).

An indicative credit framework has also been proposed (MHRD, 2012). A credit framework has the dual objective of achieving both a skill certificate and an academic general education certificate of equivalent level for each job role and level of learning. School boards, technical boards and universities are being encouraged to switch to credit-based curricula and to establish equivalencies between vocational and general education (MHRD, 2012).

Referencing to regional frameworks

Given that India is expected to have a workforce surplus of 56 million by 2020, as against a shortage of 47 million in Western countries, the India-EU Skills Development Project will support labour force mobility in the ever-changing global employment market. The India-EU Skills Development Project now includes the referencing of the NSQF with the EQF as a major objective.

Important lessons and future plans

India's development of the NSQF in the context of its skills development policy has underlined the importance of continually improving both the quality of education and training and its relevance to the labour market and population. The NSQF is at the centre of the biggest ever nation-wide skills transformation, with simultaneous emphasis being placed on increasing the volume of opportunities, improving access, and enhancing the quality of provision through activities and partnership across the sub-sectors.

Progress has been made towards clarifying the functions and design of the NSQF. The MHRD and MoLE have reached agreement, encouraged and supported by the NSDA, the India-EU Skills Development Project and the NSDC. The formation of the NSDA as a gatekeeper of national and sectoral qualifications is an important step. The NSDA will open the door for much-needed recognition of prior learning, so that all learning can be recognized regardless of the way it has been acquired (Castejon, 2013).

India intends to build on the wealth of expertise in vocational education and training already present in the country rather than starting anew. India has expertise in the area of assessment, which is at the core of the qualifications framework. It also already benefits from the work of the National Council for Vocational Training, the All-India Council for Technical Education and the University Grants Commission, all of which have been functioning as awarding bodies for some time. New awarding bodies will be established only if the quantitative targets of the twelfth five-year plan make this necessary.

Partnership with industry and with all levels of governance (notably, with the twenty-nine states) in a country as large as India is important for successful reform. The NSQF provides a forum for this partnership through the sector skills councils. Within the NSQF, India will pay greater attention to creating a balance between public and private sector provision. It hopes to achieve this by

developing national standards in training delivery common to public and private stakeholders (ibid.). The shift from learning input to learning outcomes in training delivery will be an important move towards quality assurance (ibid.). Research will be undertaken to broaden the notion of skills beyond technical and practical skills to include notions such as communication skills and personal skills or attributes (Castejon, 2013).

The road ahead is to understand the NSQF as a useful tool among a range of policies, instruments and activities, rather than to see it as a stand-alone policy. Dialogue across sectors is only starting; all stakeholders still have a lot to learn from each other. An update of the National Policy on Skills Development is envisaged in order to voice a coordinated vision of TVET for the future (India-EU Skills Development Project, 2013).

References

Arthapedia. *Informal sector/unorganised sector.* http://bit.ly/1YQo0nN (Accessed 26 March 2015.)

Castejon, J-M. 2013. *Bulletin of the India–EU Skills Development Project, September 2013.* New Delhi, India-EU Skills Development Project.

Comyn, P. 2009. Vocational qualification frameworks in Asia-Pacific. A cresting wave of educational reform? *Research in Post-Compulsory Education,* Vol.14, No.3, pp. 251–268.

Directorate General of Employment and Training (DGE&T). 2008. *Skills Development Initiative Scheme (SDIS). Implementation Manual.* DGE&T, Ministry of Labour and Employment, Government of India.

EdCIL. 2005. *Studying the Effectiveness of Vocational Training in the Private Sector in India: Analysis of Data in Eight States.* Working Paper prepared for the World Bank by Education Consultants India Limited.

ICBSE news. 2011. TeamLease Vocational Education University, Gujarat Soon, 14 January. http://news.icbse.com/teamlease-vocational-education-university-gujarat-970 (Accessed 14 August 2011.)

ILO. 1998. *World Employment Report*. Geneva, ILO.

India-EU Skills Development Project. 2013. *Report of the Conference on the National Skills Qualifications Framework: Making it happen.* 22–23 May, New Delhi. New Delhi, India-EU Skills Development Project.

Indiainfoline. 2011. National Vocational Education Framework on the Anvil: Kapil Sibal. 6 May. http://bit.ly/1hd7V9t (Accessed 14 August 2011.)

Institute of Applied Manpower Research (IAMR). 2010. *The Challenges Facing Skills Development in India: An Issue Paper.* (International Workshop 'Skills Development: Policy Learning and Exchange', India Habitat Centre, New Delhi, 6–7 May 2010, IAMR in cooperation with the Network for Policy Research, Review and Advice on Education and Training [NORRAG]). New Delhi, IAMR.

Institute of Applied Manpower Research. 2011. *Final Draft of the National Vocational Education Qualifications Framework (NVEQF).* IAMR, New Delhi. International Labour Organization. 1998. World Employment Report 1998–99. Employability in the global economy: How training matters. Geneva, ILO.

International Labour Organization. 2004. R195 *Human Resources Development Recommendation, 2004. Recommendation concerning Human Resources Development: Education, Training and Lifelong learning.* Geneva, ILO.

Kumar, V. 2013. *National Skills Qualifications Framework. Perspective of the Planning Commission. Report of the Conference on the National Skills Qualifications Framework: Making it happen*, 22–23 May, New Delhi. New Delhi, India-EU Skills Development Project.

Ministry of Human Resource Development. 2011. *Fifty Eighth Meeting of the Central Advisory Board of Education. Agenda Items and Background Notes.* MHRD, Government of India, New Delhi.

Ministry of Human Resource Development. 2012. *National Vocational Education Qualifications Framework (NVEQF)* New Delhi, 3 September, 2012 F. No.1-4/2011- VE. New Delhi, MHRD. http://www.aicte-india.org/downloads/NVEQF_Notification_MHRD_GOI.pdf (Accessed 4 February 2013.)

Ministry of Human Resource Development. 2013. *Report of the Conference on the National Skills Qualifications Framework: Making it Happen.* 22–23 May, New Delhi. New Delhi, India-EU Skills Development Project.

Ministry of Labour and Employment and International Labour Organization. 2008. *Draft Proceedings of the National Consultation on Development of Training Policy in India.* (ILO and MoLE in collaboration with KUT, New Delhi, 20–21 February 2008). New Delhi, ILO.
Ministry of Labour and Employment. 2009. *National Policy on Skills Development.* Ministry of Labour and Employment. Delhi, Government of India. http://labour.nic.in/policy/NationalSkillDevelopmentPolicyMar09.pdf (Accessed 14 August 2011.)
National Accounts Statistics (NAS). (Sharma and Chitkara, nd). Paper No. 6, Expert Group on Informal Sector Statistics (Delhi Group), 'Informal Sector in the Indian System of National Accounts', CSO.
National Commission for Enterprises in the Unorganized Sector. 2009. *Skill Formation and Employment Assurance in the Unorganized Sector.* New Delhi, NCEUS. http://www.nceus.gov.in (Accessed 14 August 2011.)
Odisha HRD. 2011. *India plans a national vocational education framework by mid-2011.* http://orissalinks.com/archives/5806 (Accessed 17 August 2011.)
Planning Commission. 2013. *Twelfth Five Year Plan (2012–2017): Faster, More Inclusive and Sustainable Growth. Volume I.* New Delhi, Sage Publications of India. http://planningcommission.gov.in/plans/planrel/fiveyr/welcome.html (Accessed 23 January 2014.)
Press Information Bureau. 2010. *National Vocational Education Qualification Framework; Shri Kapil Sibil meets with Representatives of Automobile Industry, 8 December.* New Delhi, Ministry of Human Resource Development.
Sharma, R.; Chitkara, S. Paper No. 6, Expert Group on Informal Sector Statistics (Delhi Group), 'Informal Sector in the Indian System of National Accounts', CSO.
Singh, M. 2012. India's National Skills Development Policy and Implications for TVET and Lifelong Learning. M. Pilz (ed.) *The Future of Vocational Education and Training in a Changing World*. Springer.
Singh, M. 2011. Skills recognition in the informal sector. (Towards a new global world of skills development? TVET's turn to make its mark). *NORRAG NEWS,* No. 46, September, pp. 79–81.
Tan; Savchenko. 2005. *In-Service Training in India: Evidence from the India Firm-Level Investment Climate Survey* (World Bank Working Paper). Washington DC, World Bank.
TeamLease. 2007. *India Labour Report 2007: The Youth Un-employability Crisis.* India, TeamLease Services.
World Bank. 2008. *India vocational training improvement project.* Washington DC, World Bank. http://bit.ly/1FHkoOz (Accessed 31 August 2011.)
Young, M.; Allais, S. 2011. *Options for Designing an NVQF for India.* (Submitted to the Ministry of Labour and Employment). New Delhi. ILO/World Bank.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

INDONESIA

Introduction

Indonesia has recently developed the Indonesian Qualifications Framework (IQF). The IQF holds a legal endorsement in the form of Presidential Decree no. 8/2012, and addresses schooling from Year 9 to TVET and higher education. The stages of the IQF's implementation are currently being designed.

The Ministry of Education and Culture has produced a key strategic document on the IQF (Directorate General of Higher Education, n.d.). According to the Minister of Higher Education, the IQF is 'one of the national standards in the education sector from which graduates, education and training institutions under the authority of the Ministry of Education and Culture could assess their learning outcomes or certificates' proficiency in conjunction with one of the relevant qualification levels specified in the IQF' (Directorate General of Higher Education, n.d, p. 3).

The Government of Indonesia sees the legal endorsement of the IQF in the context of other laws and regulations: for example, Law no. 13/2003 pertaining to manpower development, Government Regulation no. 31/2006 regarding the national job training system, and Law no. 20/2003 concerning the national education system. The IQF is also in line with existing regulations endorsed by other ministries and authorized institutions, concerning manpower quality and development and competence certification (Ministry of Education and Culture, 2013).

At present, education and training provision in Indonesia is fragmented and often poor in quality. The IQF is intended to address this in order to meet the demands of an increasingly mobile and globalized higher education market. The IQF will raise the quality of qualifications and clarify their levels, allowing manpower to be deployed more effectively in both formal and informal sectors of the economy. It will specify equivalencies between Indonesian and foreign qualifications, thus improving Indonesia's international competitiveness and making the country more open to global trade.

The IQF is intended to provide a unified reference point for all education and training providers in Indonesia, especially those engaged in efforts to direct the unemployed towards appropriate job opportunities. At present, it is difficult for employees to upgrade their qualifications. The IQF will address this by setting out qualifications levels against which employees can be assessed. Those who fail to attain the expected level will be encouraged to enrol in education or training in order to attain an IQF-approved qualification. In addition, education or training providers whose learning outcomes or certificate statements do not accord with IQF descriptors will be able to carry out internal quality improvements in order to bring their qualifications into line with IQF requirements.

Main policy objectives

In response to the above challenges, the main policy objectives of the IQF are to:

- increase the quantity and quality of Indonesian manpower in order to grant greater access to both national and international job markets;
- increase the contribution of all learning outcomes to national economic growth, whether achieved through formal, non-formal or informal education or work experience;
- increase educational mobility in order to foster mutual understanding and collaboration between higher education institutions across the world;
- increase Indonesia's recognition, both regionally and internationally, without losing sight of its national identity and character (Directorate General of Higher Education, n.d.).

Stakeholder involvement

Two ministries have been chiefly responsible for the development of the IQF: the Ministry of Education and Culture and the Ministry of Manpower and Transmigration. Within the Ministry of Education and Culture, the IQF has been administered by the Directorate-General of Elementary and Secondary Education Management

and the Directorate-General of Early Childhood, Non-Formal and Informal Education. Within the Ministry of Manpower and Transmigration, the IQF has been the responsibility of the Directorate-General of Training and Productivity Development.

The Indonesian Qualifications Board (IQB) will manage the development and implementation of the IQF. The board is expected to oversee matters such as regulations, descriptors, guidelines, standards-setting documents, and other support work, including coordination with institutions or other parties relevant to IQF implementation and international public relations.

The stakeholders consider that the IQF should be a basis for the development of national standards of education and professional (vocational) Competency Standards. These will then provide a point of reference for accreditation, assessment and certification by bodies such the National Accreditation Board (NAB) and the National Professional Certification Board (NPCB), as well as professional and occupational competence certification boards and private accreditation bodies.

The Ministry of Education and Culture has already referenced existing learning outcomes in higher education to qualifications levels in the IQF. In the process, it analysed learning outcome descriptions from more than 1,000 study programmes within ninety-seven higher education institutions all over Indonesia (A and B accreditation category). Institutions were selected which had implemented an appropriate internal quality assurance system, and which held a good track record in international collaborations. The referencing process was enriched by comparative studies carried out by qualifications agencies in various countries, as well as through rigorous discussions with professional associations, scientific collegia, and employers and recruiters of university graduates in Indonesia (Directorate-General of Higher Education, n.d.).

The Ministry of Education and Culture acknowledges that a quality-assurance system is needed if the IQF is to be trusted nationally and internationally. It is envisaged that the National Standards of Education Board will adopt IQF level descriptors in designing national standards of education and associated assessment procedures. In addition, educational institutions will ensure the quality of graduates through their own internal quality-assurance systems. Moreover, the National Accreditation Board is expected to expand its current external quality assurance procedures by taking into account learning outcomes as described in the IQF.

Levels and descriptors and the use of learning outcomes

The IQF consists of nine levels characterized by both learning outcomes and job-specific competences. Descriptors at each level specify the learning outcomes or competences that can be demonstrated by an individual at that level. Descriptors are divided into two categories: general and specific. The general descriptors cover personality, working attitude and ethics, and are applicable to every Indonesian citizen at every level. The specific descriptors describe the knowledge and skills mastered by the individual, and are level-specific.

Table 29 illustrates the referencing scheme between the learning outcomes of different education streams and IQF qualification levels. This scheme will make it easier to ensure that graduates of educational programmes possess the right competences at the right level.

Recognition and validation of non-formal and informal learning and links with the NQF

The Ministry of Education and Culture (2013) defines recognition of prior learning (RPL) as the process by which learning outcomes acquired through non-formal or informal education or life experiences are recognized in the formal education sector. RPL has three purposes. First, to provide wider access to formal educational pathways, thus fulfilling the mandate authorized by Indonesian law for promoting individuals' lifelong learning. Second, to recognize learning outcomes from forms of learning outside the formal education system for the purpose of awarding an equivalent degree. Finally, according to Law no. 14/2005 pertaining to teachers and lecturers, recognize persons with expertise in a particular field such as industry, as lecturers in higher education.

A credit transfer scheme has been designed to improve mobility across the different educational streams with the aim of developing learners' expertise in specific fields. Inbuilt into the scheme are bridging programmes which aim to boost the performance of individuals who fail to meet the minimum requirements of the institution conferring their credits.

Referencing to regional frameworks

The IQF was designed in response to the Indonesian ratification of the International Convention of the Recognition of Studies,

Table 29 Indonesia: Equivalencies between learning outcomes from different types of education

Academic Qualifications	IQF	Technical and Vocational Education and Training	
S3	9	S3 (Applied)	Specialist
S2	8	S2 (Applied)	
	7		Profession
S1	6	D IV	
	5	D III	
	4	D II	
	3	D I	
General high school	2	Vocational high school	
Junior high school	1	Junior high school	

Source: Directorate General of Higher Education, n.d.

Diplomas and Degrees in Higher Education in Asia and the Pacific, which was signed on 16 December 1983 and renewed on 30 January 2008. The ratification was legalized by Presidential Decree no. 103/2007.

Important Lessons and future plans

Given the increasingly international nature of the global higher education market, the government sees the IQF as a continuously evolving concept that will need to be regularly updated in order to maintain the highest standards. It is for this reason that the IQF is legally enshrined in a presidential decree rather than a government regulation or law, since this allows the necessary leeway for qualifications and level descriptors to be improved and updated over time.

In the coming years, Indonesia aims to tackle several practical issues, including but not limited to:

- incorporating credit transfer and RPL processes into the IQF;
- establishing a national qualifications and assessment model;
- developing a working group to address how to link the IQF to the ASEAN Regional Qualifications Framework;
- establishing authorities for accreditation, standard-setting and certification;
- harmonizing methods for recognizing institutions and qualifications.

References

Bateman, A., Keating, J., Burke, G., Coles, M., Vickers, A. 2012. *Final Report: ASEAN Regional Qualifications Framework. Education and Training Governance: Capacity Building for National Qualifications Frameworks (AANZ-007).* ASEAN-Australia-New Zealand Free Trade Area (AANZFTA) Economic Cooperation Work Programme (EWCP). Jakarta, ASEAN Secretariat.

Directorate General of Higher Education (n.d.) *Indonesian Qualifications Framework (Kerangka Kualifikasi Nasional Indonesia) Presidential Decree no. 8/2012: Implication and Implementation Strategies.* Jakarta, Ministry of Education and Culture.

Prepared by:
The UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts

IRELAND

Introduction

Ireland has implemented a comprehensive and learning outcomes-based national framework of qualifications (NFQ) covering all sub-systems and levels. Launched in 2003, it is defined as a single nationally and internally accepted entity through which all learning achievements are measured and related to one another coherently. The framework's ten levels capture all learning, from initial stages to the most advanced.

A majority of current and legacy national awards are now included in the NFQ, including those made by the state examinations commission, the Further Education and Training Awards Council (FETAC), the Higher Education and Training Award Council (HETAC),[89] universities and the Dublin Institute of Technology.

Main policy objectives

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

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

89 HETAC was the qualifications awarding body for higher education and training institutions outside the university sector.

It is important to note that NFQ is an inclusive framework, open to qualifications awarded outside the remit of national authorities. Several awards made by professional and international awarding bodies are now included in the framework according to policies and criteria published by the National Qualifications Authority of Ireland (NQAI).[90]

Stakeholder involvement

Development of the NFQ has been coordinated by the NQAI, which was established in 2001 by the Department of Education and Science and the Department of Enterprise, Trade and Employment.

A new agency, Quality and Qualifications Ireland, was established on 6 November 2012 under the Qualifications and Quality Assurance (Education and Training) Act 2012. The new authority was created by an amalgamation of four bodies that have both awarding and quality-assurance responsibilities: FETAC, the Higher Education and Training Awards Council, NQAI and the Irish Universities Quality Board. The new authority assumes all functions of the four legacy bodies while also having responsibility for new or newly-statutory responsibilities in particular areas.[91] This is an important step in consolidating the governance structure for deepening implementation of a comprehensive NFQ. It also shows that Ireland's focus on qualifications has become more systematic, with stronger coordination of qualifications and quality-assurance policies. The new agency sits at the centre of the qualification system and cooperates with ministries, higher education institutions, employers and the voluntary sector.

90 See http://www.nqai.ie/awardsframework.html [accessed 25.7.2014].

91 Based on the Qualifications and Quality Assurance (Education and Training) Act (Irish National Government, 2012).

Framework implementation

The NFQ has reached an advanced operational stage, in particular by promoting more consistent use of learning outcomes across different sub-systems, especially in sectors led by FETAC and HETAC (now part of Qualify and Qualifications Ireland or QQI). In universities and the school sector, NFQ implementation was by agreement and the impact has been more gradual and incremental.

The process is strongly supported by major stakeholders in the country. The NFQ has become widely known and is used as a tool for supporting other reforms and policy development in education, training and qualifications. Visibility and currency of the NFQ inside and outside the education and training environment has increased (NQAI, 2009*a*).[92] It is an outward-looking framework with a strong external dimension through interactive research with non-European countries (such as Australia, New Zealand).[93]

Level descriptors and learning outcomes

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

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

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

The learning-outcomes approach was central to establishment of the NFQ and associated legislation and system reforms. The outcomes are indicators of what a person knows, can do and understands, rather than time spent on a programme. The determinants for the NFQ state that new framework awards are made using learning outcomes. The NFQ is intended to act as a reference point for curriculum development leading to NFQ-recognized qualifications. The framework implementation and impact study (NQAI, 2009*a*) concluded that a learning outcomes-based approach has been implemented in all sub-systems, but is progressing at variable speeds and that the NFQ had a stronger reform role in sectors led by FETAC and HETAC. NFQ implementation was generally slower than expected: '[…] there may still be a gap between redesigned and rewritten programmes and actual delivery and perception of these on the ground' (NQAI, 2009*a*, p. 39).

Validation of non-formal and informal learning and links to the NFQ[94]

There is currently no single national strategy for validation. NQAI principles and operational guidelines for 'recognition of prior learning' (NFQ, 2006) continue to provide the current policy and practice framework. Although theoretically possible for all qualifications, only higher education qualifications and further training qualifications (originally under the HETAC and FETAC remit) can be acquired though validation of non-formal and informal learning. As the qualification framework is based on learning outcomes, qualifications acquired through validation of non-formal or informal learning are based on the same standards as formal qualifications. It is also interesting to note, as the OECD (Harold *et al.*, 2008, p. 39) indicated, that 'RPL arrangements in Ireland that lead to qualifications in the NFQ are fully integrated with existing arrangements for qualifications, e.g. they operate within the overarching funding arrangements, rules and regulations on provision, quality assurance and assessment'.

Through institutional change, Quality and Qualifications Ireland (QQI) is now in charge to establish updated policies and criteria for access, transfer and progression, including RPL. QQI has advanced a comprehensive policy development programme and is consulting and reflecting on development of several different policy areas, including RPL. Consultation on RPL (consultation closed in September 2013) (QQI, 2013) raises

92 The study emphasizes the importance of further strengthening visibility of the framework in relation to the labour market (assisting development of career pathways, certifying learning achievements acquired at work, guidance, etc.).

93 See NQAI and New Zealand Qualifications Authority, 2010.

94 This section draws mainly on input from European Commission *et al.*, 2014.

important issues for debate in terms of the potential for a more coordinated approach and need for a coherent national strategy on RPL. However, it is not yet clear if Ireland will move for a single comprehensive system or not.

Also, the recent national skills strategy[95] acknowledges RPL's importance and identifies that the most significant challenge in Ireland for validation relates to upskilling those holding qualifications below levels 4 and 5. In addition, QQI is exploring (in consultation with providers) that providers are required to submit policies for access, transfer and progression and that this should include arrangements for credit accumulation, credit transfer and identification, and for formal assessment of knowledge, skills and competence previously acquired by learners.

Referencing to regional frameworks

Referencing the Irish NFQ to the EQF was completed in 2009. It built on experiences and conclusions of self-certification of compatibility of the Irish NFQ with the qualifications framework of the European Higher Education Area, completed in 2006. As of 2014, EQF and NFQ levels are indicated on Europass certificates.[96]

Table 30 Level correspondence between the Irish NFQ and the EQF

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

Source: NQAI, 2009*b*.

95 See http://www.skillsstrategy.ie [accessed 25.7.2014].

96 See http://bit.ly/1jzWquJ [accessed 25.7.2014].

Important lessons and future plans

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

An international team of experts who prepared the framework implementation and impact study report summarized some key features in developing NFQs (NQAI, 2009*a*):

- Implementation of an NFQ requires time to develop understanding concepts and to promote cultural change;
- Importance of stakeholder involvement in all phases of development and implementation to ensure ownership;
- NFQ 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 a balance between implementation within sub-systems and cross-system developments;
- 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, increased, following a marketing campaign, from 18 per cent in 2006 to 32 per cent in 2008.

Main sources of information

[URLs accessed 25.7.2014]

The most important information is available on the QQI website, which is also the national coordination point:
http://www.qqi.ie/Pages/default.aspx

List of abbreviations

EQF	European Qualifications Framework
FETAC	Further Education and Training Awards Council
HETAC	Higher Education and Training Award Council
NQAI	National Qualifications Authority of Ireland
NFQ	national framework of qualifications
QQI	Quality and Qualifications Ireland
RPL	recognition of prior learning

References

[URLs accessed 25.7.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Ireland.* http://libserver.cedefop.europa.eu/vetelib/2014/87062_IE.pdf

Harold, A.; Taguma, M.; Hagend, K. 2008. *Thematic review and collaborative policy analysis recognition of non-formal and informal learning: Ireland country note.* Paris: OECD. http://www.nqai.ie/documents/finalcountrynote1.pdf

Irish National Parliament. 2012. *Qualifications and Quality Assurance (Education and Training) Act.* http://www.oireachtas.ie/documents/bills28/acts/2012/a2812.pdf

NQAI. 2006. *Principles and operational guidelines for the recognition of prior learning (RPL) in further and higher education and training*. Dublin: NQAI. http://www.nfq.ie/nfq/en/documents/NFQ-principles06brown.pdf

NQAI. 2009. *Framework implementation and impact study: report of study team.* http://www.nqai.ie/documents/FIISreportFINALsept2009.pdf

NQAI. 2009*b*. *Referencing of the Irish national framework of qualifications (NFQ) to the European qualifications framework for lifelong learning (EQF).* Dublin: NQAI. http://www.nqai.ie/documents/EQFReferencingReportfinalJune2009.pdf

NQAI; New Zealand Qualifications Authority. 2010. *Comparability of qualifications in Ireland and New Zealand.* http://www.nqai.ie/documents/nzqaandnqaiframeworks06.09.10.pdf

QQI. 2013. *Green paper on the recognition of prior learning: for consultation.* http://www.qqi.ie/Downloads/Consultation/Green%20Papers/Green%20Paper%20-%20Section%204.7.pdf

Prepared by:

The European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts

ITALY

Introduction

In recent years, Italy has carried out technical work pointing towards a national qualifications framework (NQF). Since 2003, reforms have been implemented in education and training (upper secondary general education and vocational education and training [VET][97] and higher education) pre-empting the principles of a learning outcomes-based NQF. There is clear need to create a national register of qualifications to ensure wide recognition of skills (European Commission, 2014). Responsibility for taking this initiative forward is shared between the Ministry of Labour and Social Policies and the Ministry of Education, University and Research; the process is supported by regions and social partners.

In spite of not having a comprehensive NQF in Italy, work has been done to reference public national formal qualifications directly to the eight European Qualifications Framework (EQF) levels, as described in the Italian referencing report adopted in December 2012 and presented to the EQF advisory group in May 2013 (Italian technical working group, 2012). The report focuses on describing all levels and sub-systems of formal education and training, along with the formal qualifications awarded throughout, and on referencing them to the EQF in line with the ten European criteria, describing accompanying choices of method and procedure. The referencing process is work in progress as is an attempt to put the NQF in place, in dialogue with all national stakeholders.

As for higher education, the Italian Qualifications Framework for Higher Education (*Quadro dei Titoli Italiano dell'Istruzione Superiore*) (QTI) was published in 2010 by the Ministry of Education, University and Research. It is linked to the official European Higher Education Area website, but the self-referencing process is not yet complete.

97 Regulation for upper secondary school reform was approved by the Council of Ministers in February 2010. The institutional consultation round and the relevant information on reform can be found on http://nuovilicei.indire.it/ [accessed 24.7.2014].

Work on the referencing process started in 2008 and has been carried out by a technical group, in close cooperation with the relevant education and training authorities, regions and social partners.

The work has served to underpin parallel reform processes contributing to a more coherent education and training system in line with European principles.

Main policy objectives

Italy faces a challenge in integrating different levels of its lifelong learning systems into a coherent national qualification system. It is a complex system governed by various legislations considering competences of regional and national authorities in designing and awarding qualifications. Absence of an explicit and adequately regulated national system of qualifications (even if there are regional qualifications systems) is a barrier to making coherent lifelong learning policies, taking the validation of non-formal and informal learning forward, and making learning pathways for lifelong learning more visible (European Commission et al., 2010). This is important to support adult participation in lifelong learning, which was with 6.6 per cent in 2012, lower than the EU average (9 per cent in 2012). Labour market mobility between regions is also hampered because qualifications awarded in some regions are not always recognized in others (European Parliament, 2012, p. 93).

A comprehensive NQF would help with transparency and comparison between different qualification types awarded by different authorities. A more coherent NQF, based on explicit levels of learning outcomes, would also ease validation of non-formal and informal learning. This is important to support adult participation in lifelong learning, an area challenged by both low participation and a large proportion of people with low literacy and numeracy skills.

Development of a system in the NQF direction would respond to needs at:

- make integration of the different systems within the national context easier;
- respond to a request of the EQF recommendation designed to ease dialogue between education systems and the labour market;
- make individual geographic and professional mobility easier, both at national and European levels;
- help individuals, throughout their lives, to capitalize on their non-formal and informal experiences. The system should promote social inclusion with reference to people not holding regular qualifications and competences needed in the labour market. The national system, based on a learning outcomes approach, and involving different stakeholders, is a precondition for validating non-formal and informal learning.

Evidence suggests that all the institutional, national and regional authorities are aiming towards a NQF and a clearer commitment to the EQF. An important milestone is Law 92/2012 on labour market reform,[98] that contains provisions related to lifelong learning, lines to set up a national system of certification of competences, and services for validation of non-formal and informal learning.

Stakeholder involvement

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

Since the referencing process started in 2008, a technical group has involved all stakeholders in the work: the Ministry of Labour and Social Policies, the Ministry of Education, University and Research, the Department for European policies of the Presidency of the Council of Ministers, regions and autonomous provinces and the social partners. In addition, ISFOL and the Information Centre on Academic Mobility and Equivalence, a body of the Ministry of Education, were involved in the process.

98 http://www.dplmodena.it/leggi/92-2012%20legge%20RML.pdf [accessed 9.9.2014].

The referencing report was submitted to an open public consultation process in 2012. A total of 150 stakeholder organizations took part in the consultation, along with universities, regions and enterprises.

Framework implementation

The national coordination point (NCP) is at ISFOL. Main tasks include management of the EQF implementation process and preparing the technical referencing report, communication with stakeholders, and planning and implementation of the national qualifications register.

The qualifications described in the referencing process are already included and positioned in the national education and training system as such, but there is little additional information on overall flexibility of the system, such as possibilities for horizontal progression or alternative pathways.

It is expected that legislation on reform of the labour market (2012) and the ensuing decree on validation (2013) will support work on a comprehensive validation system and further developments towards an NQF. Decree 13/2013 also establishes a 'national register of education, training and professional qualifications' which is the single framework for certification of competences. The register is a comprehensive collection of national, regional and sectoral repertories that already exist, under the responsibility of the competent authorities or 'entitling bodies'.

One important issue not covered by the current report are qualifications awarded by regional authorities, their importance, the methodologies used for developing these qualifications and their recognition beyond regions. This will be dealt with in the second stage of referencing.

According to comments and suggestions related to the first referencing report, Italy is analysing regional vocational qualifications to be included in the national register in accordance with Law 92/2012 and the subsequent decree. Further referencing to the EQF will be carried out according to the procedures defined in the first phase, through involvement of all relevant actors.

Level descriptors and learning outcomes

Italy uses a learning-outcomes approach and EQF level descriptors as a basis for further developments. The eight EQF levels and level descriptors have been used directly in the Italian

referencing process to link all national qualifications from formal education and training to the EQF. In the existing framework for higher education (QTI), Dublin descriptors are used nationally for three cycles agreed within the Bologna Process. More specific descriptors are being defined for each programme by universities.

Italian education and training has introduced the learning-outcomes approach at national and regional levels, with each sub-system having its own characteristics. Over the past decade the whole education and training system has been gradually reformed; a process which is still going on.

At upper-secondary level, there are three main pathways: general (*licei*), technical and vocational education. Each pathway lasts five years, leading to a diploma, and learning outcomes are linked to the EQF.

In vocational training, where regions have the main responsibility, with strong focus on competences, there are two different possibilities; a three-year or a four-year pathway. Both lead to a diploma and a qualification acknowledged at national level. The four-year course can open up higher education options, provided the student takes an additional year and sits a state exam.

The higher (non-academic) technical education and training pathway (*Istruzione e formazione tecnica superiore*) (IFTS) used a national standard system based on competences from 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. With this 2008 amendment, IFTS was reorganized and higher technical education (*istruzione tecnica superior)* (ITS) was established, with higher technical education and training courses organized by higher technical institutes and qualifications awarded by the Ministry of Education. IFTS courses last one year, ITS courses two. Both types of curricula are made up of units consistent with the learning outcomes approach. They are linked to EQF levels.

In academic education (universities), policy-makers strengthened the need to align diplomas and certificates to the commitments of the Bologna Process. In particular, the national decree reforming the academic system (first cycle, three years) and the master's degree (*laurea magistrale*) (second cycle, two years) states that new programmes have to be based on learning outcomes compatible with the Dublin descriptors. Higher education is currently under reform, with the aim of moving the system closer to the European standards designed by the Bologna Process.

Validation of non-formal and informal learning and links to the NQF[99]

In general, the approach to validation in Italy until 2012 could be considered mostly bottom-up; however, from 2012, a new trend emerged in which the bottom-up experiences started to converge methodologically and resulted in certain top-down measures. All the Italian qualification authorities, and especially the regions, formally engaged in establishing the NQF, based on learning outcomes and including a comprehensive credit and validation system. Law 92/2012, reforming the labour market, foresees creation of a national system of competence certification and validation of non-formal and informal learning as key elements to implement lifelong learning. Subsequently, in January 2013, the government adopted Legislative Decree 13/2013 on national certification of competence and validation of non-formal and informal learning, with an implementation phase of 18 months.

This decree establishes the 'national register of education, training and professional qualifications', which is the single framework for certification of competences. The decree states that every qualification can be accessible by validation of non-formal or informal learning, and defines the principles and institutional responsibilities and tasks of the different actors in relation to validation. It also defines three types of standards: process, attestation and system.

Until implementation of the 2013 decree is finalised, validation systems will vary in their scope and degree of implementation in each of the Italian regions. In most cases, validation mainly deals with professional or VET regional qualifications. In the more advanced regions, introduction of the 'citizen learning booklet' (*libretto formativo del cittadino*) is already integrated. It is a tool to record citizens' learning history and acquired competences. Full implementation of the validation system is expected to take from March 2013 to September 2015 (18 months), guided by work already done by the regions. A memorandum of understanding signed by several regions agrees to exchange experiences, tools and technical devices regarding competence recognition. Several pilot projects have been carried out, mainly in the construction, maintenance services, welfare and tourism sectors.

99 This section draws mainly on input from European Commission et al., 2014

Referencing to regional frameworks

A referencing report was presented to the EQF advisory group in May 2013. National qualification descriptors have been analysed in terms of learning outcomes and mapped directly to EQF level descriptors. In the current report, Italy referenced its formal qualifications (general education, VET and higher education qualifications), awarded by Ministry of Education and University, and those awarded by the regions in the state-regions agreement. Only qualifications that are still awarded are included in the report and referenced to the EQF.

Important lessons and future plans

Italy has been implementing reforms consistent with EQF principles and the learning-outcomes approach in various sub-systems of education and training. However, information on implementation status remains scattered. In dialogue with the EQF advisory group, the referencing report will be amended and supplemented with comments on issues raised during presentation of the report.

Table 31 Level correspondence between Italian national qualifications and the EQF

	Referencing framework of Italian national qualifications
EQF levels	**Qualifications**
8	Research doctorate / *Dottorato di ricerca* Academic diploma for research training / *Diploma accademico di formazione alla ricerca* Specialization diploma / *Diploma di specializzazione* Second level university master / *Master universitario di secondo livello* Academic specialization diploma (II) / *Diploma accademico di specializzazione (II)* Higher specialization diploma or master (II) / *Diploma di perfezionamento o Master (II)*
7	Master's degree / *Laurea magistrale* Second-level academic diploma / *Diploma accademico di secondo livello* First level university master / *Master universitario di primo livello* Academic specialization diploma (I) / *Diploma accademico di specializzazione* Higher specialization diploma or master (I) / *Diploma di perfezionamento o Master (I)*
6	Bachelor's degree / *Laurea* First-level academic diploma / *Diploma accademico di primo livello*
5	Higher technical education diploma / *Diploma di tecnico superiore*
4	Professional technician diploma / *Diploma professionale di tecnico*[100] Upper-secondary education diploma / *Licei diploma liceale* Upper-secondary education diploma – technical schools / *Diploma di istruzione tecnica* Upper-secondary education diploma – vocational schools / *Diploma di istruzione professionale* Higher technical specialization certificate / *Certificato di specializzazione tecnica superiore*
3	Professional operator certificate / *Attestato di qualifica di operatore professionale*[101]
2	Compulsory education certificate / *Certificato delle competenze di base acquisite in esito all'assolvimento dell'obbligo di istruzione* [102]
1	Lower-secondary school-leaving diploma / *Diploma di licenza conclusiva del primo ciclo di istruzione*

Source: Italian technical working group, 2012.

100 Competent authority: regions.

101 Competent authority: regions.

102 Competent authority: Ministry of Education, University and Research [*Ministero dell'Istruzione, dell'Università e della Ricerca*] or regions, according to type of education pathway.

It is foreseen that the next stage of the EQF referencing process will profit from the recent law on labour market-reform (2012), setting important priorities in defining national qualifications standards based on learning outcomes and developing a national public certification system and a national register of qualifications as a step towards the NQF. As explained above, the reform also sets out principles for developing validation of non-formal and informal learning.

Main sources of information

[URLs accessed 24.7.2014]

For policy-related information the Ministry of Labour and Social Policies;
for the technical level ISFOL; ISFOL acts as NCP. See http://www.isfol.it;
QTI: http://www.quadrodeititoli.it/index.aspx-?IDL=1

List of abbreviations

EQF	European Qualifications Framework
IFTS	Istruzione e formazione tecnica superiore [higher (non-academic) technical education and training pathway]
ISFOL	National Institute for the Development of Vocational Training
ITS	Istruzione Tecnica Superiore [higher technical education]
NCP	national coordination point
NQF	national qualifications framework
QTI	Quadro dei Titoli Italiano dell'Istruzione Superiore [Italian Qualifications Framework for Higher Education]
VET	vocational education and training

References

[URLs accessed 24.7.2014]

European Commission. 2014. *Recommendation for a Council recommendation on Italy's 2014 national reform programme and delivering a Council opinion on Italy's 2014 stability programme.* SWD(2014) 413 final. http://ec.europa.eu/europe2020/pdf/csr2014/csr2014_italy_en.pdf

European Commission; Cedefop; GHK. 2010. *European inventory on validation of non-formal and informal learning 2010: Country report Italy.* http://libserver.cedefop.europa.eu/vetelib/2011/77467.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Italy.* http://libserver.cedefop.europa.eu/vetelib/2014/87064_IT.pdf

European Parliament. 2012. *State of play of the European qualifications framework implementation.* http://www.europarl.europa.eu/committees/en/studiesdownload.html?languageDocument=EN&file=73578

Italian technical working group. 2012. *First Italian referencing report to the European qualifications framework (EQF).* Adopted on 20 December 2012. http://ec.europa.eu/ploteus/en/documentation#documentation_73

Prepared by:
The European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts

JORDAN

Introduction

The Hashemite Kingdom has a population of approximately 6.4 million. It has a high population growth rate rate (2.2 per cent or 3.5 children per woman), which creates significant demographic pressure – almost 35 per cent of the population is under 15, which in turn requires significant public investment in education, health, employment, housing and infrastructure. The country has high human development and an open economy, but lacks natural resources. It is estimated that 60,000 new entrants join the labour market on a yearly basis, posing a major challenge for the government and society at large as often they are equipped with relatively high, but not always relevant, qualifications. Jordan has a high working-age population, but currently only 1.4 million of 6.5 million work, that is, one person supports four, on average. Participation of women in the labour force is one of the lowest worldwide (13.2 per cent in 2013) despite a very visible increase in education attainment and success. The unemployment rate rose to 12.6 per cent in 2013.

Job creation rates rose from 2.7 per cent in 2006 to around 4,5 per cent in the years immediately before the crisis, but of all the jobs created during the boom between 2000 and 2008, almost 42 per cent were in the public sector. More than half of the jobs created in the private sector went to low-skilled foreign workers as these jobs are generally not attractive to a large segment of the Jordanian labour force. Migration has two significant features: (a) emigration of highly educated people; and (b) immigration of people looking for low-skilled jobs. There is significant brain drain to the Gulf States.

Jordan's education system performs well compared to some of its neighbours, most evident in its literacy rate of 93 per cent, the highest in the region among Arab countries. However, while current enrolment rates are now high, for example, 92 per cent at primary, 94 per cent at lower secondary and 73 per cent at upper secondary, about half the population has education only to primary level because of low education levels among older generations.

VET remains the poor relation within the national education and training system. It suffers from low prestige, receives only a small proportion of the education budget and only 14 per cent of pupils in upper secondary schooling are in VET streams. Most Jordanian parents aspire for their child to pursue the Tawjihli, the general secondary diploma.

Jordan's VET system is, at the same time, complex and fragmented. Provision comes from a number of actors. Vocational schools under the Ministry of Education provide vocational education; graduates progress to university, community college or to the labour market. Vocational training is delivered by the Vocational Training Corporation (VTC), which caters to learners aged 16 and up in specialized training institutes, under the Ministry of Labour; community colleges, some under Al Balqaa University, others under the armed forces and some private community colleges. Graduates go direct to the labour market.

Women's participation in VET is much lower than men's. In 2011/12, only 31 per cent of upper-secondary VET students were women and concentrated in traditional female-dominated occupations such as hairdressing and nursing. At the VTC institutes, women account for 36 per cent of students. While, on the one hand, this imbalance is a result of the success young women have in reaching general upper secondary and higher education (albeit this 'success' further underlines VET's low social status), it also reflects established cultural views of women's roles. In particular, while there is less objection to women studying with men, often there is opposition to working with them, and, of course, work experience is an integral part of VET.

National TVET policy is guided by the E-TVET Council, which comprises 15 experts and officials from ministries and public and private sectors and trades unions. The Council adopted a 2015–20 strategy.

Another key actor in VET is the Centre for Quality Assurance and Qualifications or CAQA, established in 2008. CAQA, under the Ministry of

Labour, accredits providers, licences teachers and develops occupational tests.

Jordan has a stop-start history with qualifications frameworks. It has a notional five-level framework developed by the Arab Labour Organization, but in practice this is used only by the Vocational Training Corporation for its own qualifications, so cannot be counted a full national qualifications framework. Further, its definition of levels is broad and there is no procedure or methodology to objectively allocate individual qualifications to levels.

Additionally, the European Training Foundation (ETF) worked with the authorities in 2006/08 on a draft NQF, but this did not progress beyond discussions and planning.

Currently, there is also an EU-supported project to develop a Technical and Vocational Qualifications Framework for Jordan (TVQF). This initiative is quite separate from the QFs referred to above. While currently still a blueprint only, the intention is to transform the draft TVQF, once implemented, into a full, lifelong learning NQF, by integrating it with levels covering qualifications also in general and higher education .

The TVQF is intended to address fundamental issues in qualifications, most of which are familiar from other countries adopting NQFs. Currently, Jordan's qualifications system is fragmented, poorly regulated, intransparent and characterized by dead ends, with limited flexibility and few pathways for progression from one level of qualifications or one type, to another.

There are also two particular local factors which the TVQF is intended to address. Currently, many students train too narrowly for occupational licences, rather than studying for broader qualifications which would offer a wider range of employment possibilities. A second issue is the high cost of public education, which the government is seeking to offset by encouraging more private provision. However, increasing the number of providers requires a more robust system of regulation, to which the TVQF should contribute.

Main policy objectives

The E-TVET Council stated in an action plan that:

- A national qualifications framework will accommodate certificates/qualifications awarded by the various TVET providers, starting with key industry sectors;
- It aims to establish a comprehensive system to accredit, monitor and evaluate the E-TVET delivery system according to national standards and within a national qualifications framework;
- Programme-planning of TVET providers will increasingly be sector-based with progressive, articulated programmes offered through the various providers in the system;
- The social partners have a key role to play in leading, organizing and supporting a sectoral approach to identifying skill training needs and developing training responses which meet international standards, are accredited and are articulated within a national qualifications framework.

Stakeholder involvement

As currently proposed by the EU project, the E-TVET Council would act as the QF's board, while operational management would lie with CAQA. Jordan will need to adopt legislation to both establish the QF and to designate roles among institutions. Currently, CAQA lacks the necessary staff numbers and technical capabilities to act as a qualifications authority, so capacity-building and financial support are required.

While the E-TVET Council includes labour-market actors, CAQA's board does not.

Under the EU project proposal, CAQA would coordinate technical work on occupational standards then endorse those meeting its criteria; those passed would go to E-TVET Council for final approval. To date, occupational standards have been produced, using the DACUM (Developing a Curriculum) method, for six sectors, while standards for seven other sectors are being prepared.

Level descriptors and learning outcomes

The draft TVQF comprises four levels. Currently, plans for the eventual, lifelong learning NQF provide for an entry level plus seven more levels, i.e. eight altogether. EU influence is evident in this eight-level structure and in the learning outcomes basis of the level descriptors, which are derived from the EQF descriptors.

Validation of non-formal learning and links to the NQF

Progression between the different sub-sectors of the Jordanian education system is limited. There is

no allowance to carry credit from one branch of the system to another, which has a detrimental impact on VET. Students attending VTCs cannot access higher education on successful completion of their VET studies, thus deterring young people from considering VET. Indeed, passing the high-school leaving certificate, the Tawjihi, is the objective of most, as it offers access to university. However, VET students in secondary education can take the Tawjhi to access community colleges, and then go from there to university. Additionally, some VTC institutes enable their VET students to take the Tawjhi as a step to the community colleges. However, both types of bridging are limited in their impact on facilitating pathways for progression, if judged by numbers.

Currently, Jordan has no system for the recognition of skills and validation of non-formal and informal learning. One of CAQA's tasks is to conduct occupational tests for those involved in technical and vocational work and granting occupational licences. This opens up options to validate skills acquired in the workplace or though other forms of non-formal and informal learning, but in practice there is little use of this route.

Referencing to regional frameworks

Currently, there are no regional qualifications frameworks in the Middle East/Arab region, but Jordan has adopted the Unified Arab Standard Classification of Occupations 2008 (ASCO), which is compatible with the International Standard Classification of Occupations (ISCO), as a general framework for occupational classification and standards in Jordan.

Additionally, Jordan is involved in the ETF-coordinated project, Qualifications for the Mediterranean, which aims to develop mechanisms and tools supporting mutual understanding of national and sectoral qualifications.

This regional project currently involves seven countries, four ETF partner countries from the South-Mediterranean region: Egypt, Jordan, Morocco and Tunisia; and three EU member states: France, Italy and Spain. Participating countries are piloting tools and methodologies in two sectors, construction and tourism. To date, the project has produced common profiles for two occupations each in the key sectors of construction and tourism.

Now, in the project's second phase, the participating countries are comparing existing national qualifications in the respective sectors to the agreed common profiles, to identify potential improvements to their national qualifications. Additionally, a governing structure, the Euro-Med Strategic Committee, has been established to better link the project outputs to national processes and lay the foundation for more regional cooperation.

CAQA has played the role of national coordinator for Jordan in the project.

Important lessons and future plans

The TVQF design, scope and its associated policy recommendations were submitted in June 2014 to the E-TVET Council. If approved, a task force will be established to develop an implementation plan. TVQF would then be piloted in one sector. Ultimately, the TVQF should lead to a full NQF. It is important that political backing for the framework is secured; it has already been significantly delayed by disagreements or opposition by various national actors. Without stakeholder and institutional consensus, the framework will not be implemented or will exist only on paper, as has been the fate of the previous NQF initiatives.

To improve the quality and relevance of qualifications (ultimately) the social partners should be engaged at least in the sector teams which are developing occupational standards, if they are not to sit on the CAQA Board.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

KENYA

Introduction

The Kenyan Qualifications Framework (KQF) is currently being developed by the Kenyan Qualifications Authority (KQA) in accordance with the Kenyan Qualifications Framework Act of 2012 and under the supervision of the Ministry of Higher Education, Science and Technology (see Ministry of Education [MoE] and Ministry of Higher Education, Science and Technology [MoHEST], 2012, pp. 99–100).

The Sessional Paper of 2005 (Ministry of Education, 2005) and the Policy Framework of Education of 2012 (MoE, 2012) highlighted the need to both coordinate and rationalize Kenya's education and training system. The current multiplicity of qualifications and awarding bodies[103] makes it difficult for employers to understand what competences they can expect the holder of a particular qualification to possess (Ibid.). The KQF is intended to address this situation by establishing a common regulatory system for the development, assessment and award of qualifications. A central register of qualifications will set out clear criteria for the achievement of awards, detailing the knowledge and skills required in each case (MoHEST, 2012).

Main policy objectives

The KQF needs to be understood in the context of the two major reforms to Kenya's education and training policy, which occurred in 2005 and 2012. The objectives of these reforms were:

- To implement the recommendation in the Mackay Report (1982) to create two parallel progression routes from primary to university education, one for general education and the other for technical and vocational education and training (TVET);
- To unify the fragmented TVET sector, which was previously scattered across fifteen different ministries;
- To create curricula which encourage an entrepreneurial and imaginative attitude to work;
- To put in place mechanisms for the recognition of prior learning (RPL);
- To revitalize the youth polytechnic (YP) programmes;
- To facilitate the horizontal and vertical mobility of vocational trainees and increase progression from TVET to university.

The KQF shares these objectives. The following further objectives of the KQF are highlighted in the Bill of 2012, which established the KQA:

- To improve access to qualifications for all individuals, thus promoting skills development and lifelong learning;
- To align the KQF with international qualifications frameworks in order to enhance the national and international mobility of graduates and workers;
- To strengthen national regulatory and quality-assurance systems for education and training.

Stakeholder involvement

The KQA has the function of maintaining, monitoring and promoting the KQF. It maintains a national database of existing academic and professional qualifications in Kenya and advises government departments on all matters relating to qualifications and standards. It provides quality assurance by ensuring that all qualifications on offer at educational institutions are authorized by accrediting agencies. The KQA sets accreditation indicators for each qualification level and establishes equivalencies between qualifications at all levels. It also advises institutions on the design of new educational programmes in order to ensure that they are responsive to industry needs.

In order to avoid reinventing the wheel, the government intends to reform existing institutions for the implementation of the KQF. One of these institutions is the Kenya National Examination Council (KNEC), which was established in 1980 to oversee national examinations and award certificates in both the formal and informal learning sectors. In the formal education and training system, a

103 Kenya's three main awarding bodies are the Directorate of Industrial Training (DIT), the Kenya National Examination Council (KNEC) and the Council of Higher Education (CHE).

national system of certification from primary through secondary, post-secondary and tertiary education already exists in Kenya. In the informal learning sector, trade tests are used to certify artisans and craftspeople (Kerre and Hollander, 2009). The KQF will continue to use these existing systems of certification.

Level descriptors and learning outcomes

The KQF is aligned to the ten levels of the East African Community (EAC) Qualifications Framework. The EAC Framework is annexed to the Protocol for the Establishment of the EAC Common Market on Mutual Recognition of Academic and Professional Qualifications, to which Kenya is a signatory.

The KQF acknowledges two separate sub-frameworks within this overarching framework, one for academic and the other for vocational qualifications. However, core generic competences involving the application of knowledge in practical situations are the same for both domains. These core competences include the ability to:

- analyse, synthesise and create;
- solve problems;
- organize, plan and communicate;
- use ICT;
- work in teams;
- engage in developing projects, research and innovations;
- work autonomously.

KQF qualifications therefore incorporate both theoretical knowledge and employable skills. Credits obtained through RPL are taken into account in order to determine which level of qualification an individual should work towards.

The KQF contains level descriptors at primary, secondary, tertiary, TVET and university levels. Descriptors are also provided for 'short cycles' linked to the main TVET levels and graded 'sub-cycles' for artisanal skills. See Table 32 below.

Table 32 Kenyan Qualifications Framework

No.	Cycle	KQF Level	Qualification	Holders (Nomenclature: ISCED 97)
1.	Cycle V: HIGHER EDUCATION: HE sub-cycle 3: Doctoral programme	10	Ph.D./ Doctoral degree	Researcher/innovator
2.	HE sub-cycle 2 : Master's programme	9	Master's degree	Scientist/manager
3.	HE sub-cycle 1: Undergraduate programme	8	Bachelor's degree + professional cert./award, bachelor's degree	Professional/non-professional / uncertified worker
4.	Cycle IV : POST-SECONDARY TRAINING Post-cecondary praining sub-cycle 6: Post-Secondary Training sub-cycle 5: Post-Secondary Training sub-cycle 4: Post-Secondary Training sub-cycle 3: Post-Secondary Training sub-cycle 2: Post-Secondary Training sub-cycle 1:	7 6 5	KCVET/KCSE+ Tech. Diploma KVCET/KCSE + Craft Certificate KVCET/ KCSE + Non tech. Diploma KVCET/ KCSE+ craft certificate KVCET + non-employment skill certificate	Associate professional, certified Specialist or technician Master craftsperson Semi-skilled para-professional Craft operator Semi-skilled Semi-skilled
5.	Cycle IV : UPPER SECONDARY EDUCATION	4	KVCET, KCSE	Semi-skilled school-leaver Unskilled school leaver
6.	Cycle III : JUNIOR SECONDARY EDUCATION	3	KJCVET, KJSE Artisan Cert. (Theory and Practice) Artisan Cert. (Practice)	Semi-skilled Unskilled Skilled artisan Skilled operator
7.	Cycle II: UPPER PRIMARY Cycle I: ECDE & LOWER PRIMARY EDUCATION	2 1	CPE + GTT Cert. I CPE + GTT II CPE + GTT III	Teenager Skilled operative Semi-skilled Semi-skilled Child

Source: MoE and MoHEST, 2012.

Recognition and validation of non-formal and informal learning and links with the NQF

One of the key goals of the KQF is to recognize and assess the outcomes of learning in all settings – whether formal, non-formal or informal, including the workplace. A number of measures are being taken to pursue this goal.

Progression pathways from primary to higher education in the TVET sector are being promoted through the TVET Curriculum Development Framework (TCDF), which was established in 2010 according to KQF occupational standards. This is helping to link youth polytechnics (YP) and vocational and industrial training (VIT) qualifications to formal TVET provision.

A wide range of agencies offer courses at various levels to young people and adults. Open universities offer a variety of distance learning courses, evening courses, bridging courses and RPL. Such courses were previously available only at the University of Nairobi, which has offered them since the 1950s. Complementary basic education (COBET) programmes (non-formal programmes equivalent to formal education) offer children and teenagers who have dropped out of school the opportunity to reintegrate into the formal system.

Three international standards guide the assessment of skills in Kenya. These are the International Labour Organization's ISCO 88 Standard, UNESCO's ISCED 97 Standard, and the ISO Standard 9000 Series on Education. In addition, the Kenya National Occupational Classification Standard (KNOCS) guides the Exemption and Credits Transfer System (ECTS), which is promoted through a combination of conventional testing methods and e-assessment methods for RPL.

Referencing to regional frameworks

The Annex to the Protocol for the Establishment of the East African Community (EAC) Common Market on Mutual Recognition of Academic and Professional Qualifications has proposed a ten-level framework designed to accommodate all qualification types and levels in the region. This framework emerged as a result of an audit of qualifications frameworks in the East African Partner States, which have agreed to harmonize the qualifications frameworks within the EAC. Other qualifications frameworks with ten levels include those of Mauritius, Tanzania and Australia. An exercise on harmonization of the East African education systems and training curricula is currently in progress.

Important lessons and future plans

The Kenyan Government sees the KQF as tool to aid accreditation, teaching and assessment in accordance with established national curriculum development practice and standards. The KQF has already had a number of successes. One example concerns the mutual recognition of Kenyan and international qualifications, which has been greatly facilitated by the KQF. Foreign qualifications can now be much more easily assessed, which has resulted in an influx of foreign teachers to Kenya.

Kenya's endeavour to develop the KQF highlights the importance of building on existing institutions and structures, rather than importing models from outside the country or trying to reinvent the wheel.

References

Government of Kenya, Directorate of Technical Accreditation and Quality Assurance. Webpage. (Accessed 10 August 2012.)

Ministry of Education. 2005. *Meeting the Challenges of Education, Training and Research in Kenya in the 21st century, Nairobi, Sessional Paper No 1.* Nairobi, MoE.

Ministry of Education. 2012. *A Policy Framework for Education: Aligning Education and Training to the Constitution of Kenya (2010) and Kenya Vision 2030 and beyond.* Nairobi, MoE.

Ministry of Education and Ministry of Higher Education, Science and Technology. 2012. *Sessional paper of 2012: A policy framework for education and training.* Nairobi, Government of Kenya.

Ministry of Higher Education, Science and Technology. 2012. *Kenya Qualifications Framework Bill.* Nairobi, MoHEST.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

KOSOVO

Introduction

Kosovo's NQF has to be placed within the context of the recent history of the country and its resulting economic, social and educational challenges. Specifically, the continuing political uncertainty, especially the tense relationship with Serbia, hinders the country's economic growth and social stability.

Unemployment levels remain high and indeed the country has the weakest employment record in Europe. Growth is limited, the private sector is small and foreign investment limited. The country depends to a great extent on remittances from the many Kosovars abroad and on donor activity and support.

Approximately 57 per cent of upper-secondary students in Kosovo follow a VET path, but the sector remains dogged by lack of attractiveness to students and their families, with general and higher education enjoying greater prestige. Several surveys of Kosovo's education and training system have emphasized the need to make it more relevant to the labour market and to develop the educational infrastructure. For example, teacher training provision is limited, and most VET instructors, for example, hold no teaching qualification. Work-based learning, whether placements, internships and apprenticeships, or some other variation of professional practice, remain limited, mainly owing to the small size of the private sector and so the opportunities for young people to be placed, and the predominance of small and medium enterprises, which have scant provision to offer structured work experience.

Kosovo governments have sought to address these issues, developing strategies for human resource development and educational reform. In education, the key action plan is the Kosovo Education Strategic Plan 2011–16 (KESP), the overarching national education and training strategy. Lifelong learning and inclusiveness are the key underpinning principles of the plan. The development of the Kosovo NQF is a key element within KESP. Since 2012, the Ministry of Education (MEST) has hosted a joint annual review conference to review progress against KESP.

Kosovo's education and training system reflects the country's very specific circumstances. For example, it is characterized by a large international donor community and strong external influences from the USA and the EU. In VET, a special case is the 'centres of competence', established by donors, in particular Norway and Luxembourg, in regional centres across the country, which specialize in particular VET fields, such as business, medicine or agriculture. This approach is not without its critics as who cite the high set-up costs of the centres and their alleged isolation from the rest of the national VET system. But in recent years, especially in VET, donors have been either scaling down or withdrawing their presence.

The NQF was developed by the Kosovo Government in cooperation with EU support provided under various projects, including KOSVET II, KOSVET III and, finally, KOSVET V. The European Training Foundation has also assisted and advised the Kosovo authorities. KOSVET V concluded its work at the end of 2011. Subsequently, the NQA, as an autonomous agency, has been solely responsible for the implementation of the framework.

Kosovo is implementing its NQF. It was established by the 2008 Law on National Qualifications, possesses defined levels and descriptors, and has been structured on the basis of principles agreed with stakeholders. It is overseen by a dedicated agency in the shape of the National Qualifications Authority (NQA), and is supported by other institutions with responsibility for different education sectors, e.g. HE or VET. A range of supporting manuals and handbooks has been produced to support further development and implementation. It has several qualifications placed in the framework.

Strategic challenges for the NQF are to contribute to achievement of the KESP, including to the overall improvement of quality of education and

training provision; supporting the move to an education training system with lifelong learning at its core; and linking HE and VET more closely.

Specific challenges include conducting accreditation of VET schools and other providers; carrying out validation processes for new qualifications so that these can be registered in the NQF; and ensuring the NQF performs its quality role, e.g. in ensuring qualifications are relevant to the labour market.

Main policy objectives

The Kosovo Qualifications Framework is central to the government's aim to improve the quality of the education and training system and to drive it towards EU standards.

The Kosovo NQF is explicitly intended as a reform instrument. Indeed, it goes beyond even other 'reforming' NQFs in being perceived as a key tool in building and structuring the national education system. It will therefore not only relate or link the different sub-sectors of the national system, but initiate and stimulate curricular and qualifications re-design and promote institutional change.

It is essential to underline the EU influence on the NQF – Kosovo intends that its NQF be compatible with the EQF, an aim reflected in the structure and nature of the framework, which is largely influenced by the EQF. The Kosovo authorities have opened discussions with the European Commission on how to establish a relationship between the Kosovo NQF and the EQF.

Formally, the 2008 Law on Qualifications provides the legal basis for the Kosovo NQF. The law sets out nine main objectives for the NQF, including that it should: provide a basis for cooperation with the EQF; promote transparency of qualifications; ensure the relevance of qualifications to employment and learning; stimulate lifelong learning; increase access to certification; provide learning pathways; establish a system for the accumulation and transfer of credit; increase the quality and relevance of education and training by stimulating the development of qualifications, based on internationally comparable standards of knowledge, skills and competences, and supported by rigorous quality-assurance procedures; and improve employability and learning opportunities for individuals by providing a basis for recognition and certification.

Stakeholder involvement

The development of the NQF has been legally based, with a series of laws on basic principles supported by associated administrative instructions (secondary legislation) on more detailed issues such as quality-assurance measures.

The Law on Qualifications, passed in 2008, established the NQF. Related legal and regulatory measures are the Law on Primary and Secondary Education, the Law on Higher Education, the Law on Adult Education and Training and the Law on Vocational Education and Training.

The National Qualifications Authority, created in 2009, has overall responsibility for the NQF. It has a staff of six and a governing board of thirteen members who are drawn from VET and HE, the trades unions, employers, chambers of commerce and voluntary bodies.

While the NQA leads and coordinates, it shares responsibility for development and implementation of the NQF with MEST, the Kosovo Accreditation Agency for Higher Education (KAA) and the Council for VET (CVET).

In VET, the NQA has responsibility for registering within the framework the VET and adult qualifications developed by VET providers such as VET schools or special occupational schools or academies, such as the police college. It conducts quality-assurance processes relevant to the validation, assessment and certification of these qualifications to ensure they are of sufficient standard to enter the NQF, and is responsible for the accreditation of VET providers.

MEST oversees school qualifications, and develops secondary school-level general qualifications, such as the lower-secondary leaving diploma and the upper-secondary *matura*.

In HE, the Kosovo Accreditation Agency oversees HE provision, and so accredits higher education institutions as providers. Universities generally develop their own qualifications, quality-assured by the KAA.

CVET is a tripartite (government, employers and trades unions) body designed to support the VET sector. It is intended to coordinate contributions from across the VET stakeholder community, including various ministries but in particular the social partners. Its remit includes engaging the social partners in coordinating the development of occupational standards, and initiatives to improve the quality of VET.

Stakeholder involvement, outside the key institutions, is developing but still quite limited. However, this situation is not unique to the NQF field or wider education and training; rather it reflects the position in society generally, where civic institutions are still developing.

A new actor is the Agency for Vocational Education and Training and Adult Education, which began work in spring 2014, supported by the German governmental donor, GIZ. It had, by the 2014 administrative instruction, gained extensive responsibilities in VET, including setting strategic priorities, and over curricula. Its relationship with the NQA and other actors, and their respective remits, needs to be clarified as the agency develops.

Level descriptors and learning outcomes

Kosovo's NQF consists of eight qualification levels. It is a comprehensive, lifelong learning framework and its descriptors are intended to cater to all types of learning contexts and experiences: general education, higher education and VET, whether formal, non-formal or informal.

The level descriptors are accordingly learning outcomes-based, divided into:

- Knowledge – which may be theoretical or practical;
- Skills – which may be cognitive, practical or creative;
- Wider competences – specifically, autonomy and responsibility.

The descriptors, and, indeed, the framework overall, are strongly influenced by the EQF and also draw on elements of some existing NQFs, such as the Scottish framework. They have been developed and refined, though, for Kosovo's context.

Kosovo is revising its specified types of qualification recognized in the NQF. It is in the process of moving from five types to six 'kinds', of qualifications, as they will be titled when the change is implemented. These kinds will be: higher education qualifications; general educational qualifications; national combined qualification; national vocational qualifications; qualifications based on international standards; and tailored qualifications.

Defined outcomes differ for each, according to purpose. Higher education qualifications will follow in design the rules of the Bologna framework in higher education; they will be available at levels 5 to 8 of the NQF. National combined qualifications will combine modules based on national occupational standards, with outcomes related to the Kosovo Curriculum Framework (i.e. the qualifications will combine both vocational and more general knowledge, skills and competences); qualifications of this kind will be placed at Level 2 and up in the NQF. National vocational qualifications will be designed with practical outcomes or expertise in mind and be based on national occupational standards; they will be placed at Level 2 and above in the NQF. Qualifications based on international standards will be based on national standards from another country or internationally-recognized standards not adopted in Kosovo. They can be at any level of the NQF (examples might include, in time, qualifications in language teaching). Tailored qualifications will be designed in accordance with the needs of a particular enterprise or organization, and can be at any level of the framework.

Qualifications are, for the most part, being developed on unit or modular lines, in both VET and HE (general school-based, compulsory education does not, however, use a modular approach).
VET qualifications are developed by VET providers in accordance with criteria set by NQA. Usually, this includes a basis in occupational standards or some form of occupational analysis. Occupational standards are usually developed by donors such as GIZ or Swisscontact with the Chamber of Commerce, and proposed for validation to CVET. NQA then verifies these for use to develop new VET qualifications.

At the time of writing, the NQA had accredited twelve VET providers to offer approximately fifteen qualifications, mainly at levels 3 and 4, in areas such as IT, welding, metal turning, security, commerce, electrical repair and maintenance work and plumbing. Accredited providers include private schools, the police College, the eight vocational training centres run by the Ministry of Labour for adult returnees to the labour market, NGOs and the VET school attached to the KEK power plant.

For the time being, NQA does not accredit the 60 Ministry of Education VET schools, as the government intends that all should reach a level of quality in provision before any can apply for accreditation. However, this obviously disadvantages those schools already capable of meeting the accreditation criteria.

Validation of non-formal and informal learning and links to the NQF

The NQF, as a lifelong learning framework, should support the building of pathways between different sub-sectors of education and training, for example linking HE and VET. The framework has been designed to take account of modern learning and career patterns, so that barriers between sub-sectors are minimized and pathways are opened up to facilitate learner progression.

Additionally, the re-design of qualifications using learning outcomes and the structuring of courses on modular lines in many cases should support progression and transfer – for example, where units or modules are the same or similar between different courses or qualifications.

In practice, though, the direct linking of qualifications to particular types of programme in many cases is a barrier to flexible access to qualifications. Additionally, some institutions remain reluctant to be flexible in offering learners access to programmes or qualifications. Within HE, for example, it can be difficult for students to transfer credit between universities or even across faculties at the same university. In some cases, providers are unwilling to accept the assessments of the learner's previous institution.

Existing programmes or courses are also in some cases inflexible, being mainly designed for younger people in full-time study. Similarly, assessment methods tend to be very traditional, i.e. using formal written examinations, rather than comprising a range of assessment approaches, such as interviews, oral exams and practical assessments. This can also be a cause of discrimination.

There is, potentially considerable, scope in Kosovo for validation of non-formal and informal learning or recognition of prior learning. The country's recent history, which involved the establishment of a parallel underground education system, has resulted in many adults possessing a range of useful skills which are unrecognized formally. Additionally, many Kosovars migrate abroad and then return to the country with skills which are often uncertificated.

The NQA and other actors in the national education and training system are alert to this potential. The NQF aims to support inclusiveness and the 2008 Law on National Qualifications explicitly provides for the validation of non-formal and informal learning. An administrative instruction on recognition of prior learning was adopted in 2014.

The NQA has drafted a set of guidelines on RPL, which describe the conditions for recognizing prior learning that will lead to award of NQF credits, or to advanced standing on a programme or course leading to an NQA-approved qualification. Indeed, one of the general criteria set by the NQA for assessment bodies is that they must ensure access and certification to candidates other than those following traditional courses and provide for validation of non-formal and informal learning. The NQA also has a communication strategy to promote the advantages of RPL and validation among stakeholders such as employers and awarding bodies.

Some organizations in Kosovo do recognize prior learning, and VET qualifications are awarded to RPL candidates. Voluntary bodies, such as the training centre, APPK, also support adults through validation processes. However, in some cases, it is reported that institutions and employers consider qualifications obtained through validation routes inferior to those acquired through the traditional, linear path.

Referencing to regional frameworks

As indicated above, the Kosovo NQF has been heavily influenced in concept, structure and scope by the EQF. One of the objectives of the NQF, set out in the 2008 Law on Qualifications, is indeed to provide a basis for cooperation with the EQF.

There is no question that linking to EU education and training initiatives, and integration into EU structures more widely, has been a great incentive to Kosovo in establishing its NQF. Kosovo ultimately wishes to link its NQF to the EQF. During 2013/14, Kosovo mapped its NQF to the EQF and, with international experts, prepared a comparative report. The NQA submitted this report to the European Commission in Brussels in autumn 2014, seeking agreement to present the report to the EQF advisory group, the EU working group comprising the Commission and member states, which steers implementation of the EQF.

Although it is not yet a member of the Bologna Process, Kosovo aims to join the European Higher Education Area (EHEA) and began work to this end as far back as 2001. Its entry is hindered by opposition from some member countries to recognizing its statehood.

The Kosovo NQF framework descriptors are accordingly intended to read across both to the EQF levels and the Bologna cycles.

Important lessons and future plans

Kosovo is more advanced than most countries in the Balkans in implementing its NQF. The NQF also occupies a central place in the government's education strategy, especially for VET. As a reform instrument, the impact of the NQF is dependent in part on its relationship with other policy measures and institutions.

A key challenge is engaging the full and active participation of the various departments, agencies, institutions and stakeholders necessary to ensure a sustained implementation for the long term.

Principal tasks in the near future include developing the RPL, further population of the framework with new qualifications, and extension of accreditation to the ministry VET schools, currently outside this process.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

KYRGYZSTAN

Introduction

Kyrgyzstan is a developing country with a population of approximately 5.7 million. About one-third of its citizens are aged 15 to 29, while more than 600,000 Kyrgyz live outside the country. Agriculture and construction are key industries, while the service sector is expanding at the fastest rate. Remittances are an important source of revenue. The economy is unable to provide adequate work for many young people, so youth unemployment is high. The informal economy is extensive: it is estimated that three-quarters of all employment is in the informal sector.

Politically, the country crossed a watershed in 2010 with the establishment of a parliamentary system of government; a new government and new president were elected.

The national Education Development Strategy 2012–20, known as EDS 2020, includes VET. The strategy's aims for VET include improving quality, boosting labour-market relevance and increasing access; the strategy foresees introduction of an NQF but does not specify a development strategy.

The qualifications system in Kyrgyzstan is currently input-based and local qualifications do not adequately capture graduates' knowledge or workers' competences. Another concern is external recognition of Kyrgyz qualifications. Because existing qualifications do not communicate the certificate-holder's skills clearly, citizens are at a disadvantage when seeking work outside the country. Inward investors similarly have difficulties in judging candidates' skills, a concern in a country which needs to attract investment.

The country's existing classification systems for qualifications are not flexible enough to either accommodate new qualifications or to allow for adaptations to existing qualifications.

Main policy objectives

Kyrgyzstan is in the early stages of developing an NQF. Essentially, the country has a pilot sectoral framework (in eco-tourism) developed within an EU project, which may provide a model for a future national framework.

A draft decree on a five-level vocational qualifications framework was published in 2012.

A Tempus project in higher education, meanwhile, is testing framework levels catering to higher education qualifications.

Stakeholder involvement

The EU-supported project referred to above is a collaborative effort, developed by EU experts and the eco-tourism industry acting together. It has developed occupational standards, qualifications, assessment methodologies, independent certification of candidates and the framework itself. The qualifications are modular in structure and outcomes-based. As an industry initiative, the project has sought to engage the social partners, and promote cooperation between industry, government and the education and training system.

The project has been engaging with a range of ministries, in particular, Youth, Education, Labour and Tourism.

Level descriptors and learning outcomes

The sectoral framework developed has eight outcomes-based levels; its descriptors draw both on the EQF and those used for the Bologna framework in higher education (the Dublin descriptors).

The project identified three distinct levels of competence in the industry, including at post-secondary or advanced VET; this is new in the country where the conception of VET has traditionally been exclusively initial training at secondary school.

Validation of non-formal and informal learning and links to the NQF

No national system exists yet in the country for validation.

Referencing to regional frameworks

The country is not linked to any regional framework or system, but the EQF and Bologna framework in higher education have provided a technical model for the pilot NQF, influencing its level structure and descriptors.

Although the Kyrgyz Republic ratified the Lisbon Recognition Convention in 2004, it is outside the geographical scope of the European Cultural Convention of the Council of Europe.

Important lessons and future plans

The project will conduct further testing and development of the sectoral framework, including of occupational standards and qualifications.

The results of the project to date will be disseminated and used to inform any future national framework. It has also already influenced the government's tourism development strategy, which encompasses the eco-tourism framework. In summer and autumn 2014 a working group, comprising the Ministry of Education, the VET agency and VET stakeholders, was set up to explore development of an NQF.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

LATVIA

Introduction

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

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

Further developments are planned in projects supported by the European Social Fund (ESF) (see 'Framework implementation' below). An amendment to the Vocational Education Law is in preparation, further supporting implementation of an eight-level NQF.

Main policy objectives

The framework, based on learning outcomes, is seen as an important tool for describing the Latvian education system both for international and national stakeholders, and for ensuring greater lifelong learning opportunities for all individuals according to their needs. Adult participation in lifelong learning in Latvia was 7 per cent in 2012, below the European Union average (9 per cent) (European Commission, 2013).

Development and implementation of a comprehensive LQF aims to:

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

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

Stakeholder involvement

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

The Academic Information Centre was appointed as the national coordination point (NCP) and played a key role in coordination of the referencing process, preparing and updating the referencing report, and communication and dissemination of information among all stakeholders.

Framework implementation

The framework has been formally adopted and is being implemented. Implementation is organized in two phases:

- In the first (2009–11), formal Latvian education qualifications were included in the LQF and linked to the EQF;
- In the second (2013–15), several large ESF projects have supported further implementation of the LQF. For example, an ESF project, 'Development of sectoral qualification system and increasing efficiency and quality of vocational education' (2010–14), has explored professions in twelve sectors, by identifying relevant knowledge, skills and competences for professions, and placed them on the relevant LQF/EQF levels.

A total of twelve sectoral experts' councils were established for the main economic sectors. They involve representatives of sectoral employers' organizations, trade unions, the Ministry of Education and Science and other respective ministries. Their main tasks are developing occupational standards; defining content of vocational qualifications and vocational examination requirements; enrolment of students in vocational education programmes, and so on. In the projects, detailed investigation of occupations and required competences in respective branches was carried out and sectoral qualification structures were elaborated.

Development and implementation of LQF has also reinforced work on validation of non-formal and informal learning as well as implementation of learning outcomes.

In April 2013, amendments to cabinet regulations' procedures on state-recognised higher education certifying documents were approved. As a result, LQF/EQF levels should be indicated in diploma supplements of higher education qualifications.

There was a general need to communicate results of the LQF and its linking to the EQF to a wider audience and strengthen ownership of the framework and commitment to implement it. The leading organization in raising awareness of the LQF is the Academic Information Centre (EQF NCP). It organizes discussions, seminars and conferences, involving stakeholders from all education levels and social partners. Main topics discussed are: definition and use of learning outcomes at different education and qualification levels, development of LQF levels 1 to 4, opening LQF levels 5 to 8 to non-Bologna qualifications, and complementing the LQF with qualifications awarded outside formal education.

To promote quality and efficiency of higher education, an ESF project for evaluating higher education programmes and developing recommendations was conducted (2011–13). The study evaluated the quality, sustainability and international competiveness of higher education programmes. These results were used for accreditation of higher education programmes in 2013.

Level descriptors and learning outcomes

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

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

Subject-based outcomes in general education have been defined in terms of knowledge, skills and attitudes. Compulsory education content is given in cabinet regulations on state standards and subjects in basic education (2006). Content of general secondary education is regulated by cabinet regulations on state general secondary education standards and subjects (2008). Further work is needed to ensure that learning outcomes are incorporated in day-to-day teaching practice (Cedefop, forthcoming).

Content of vocational education is regulated by state vocational education standards, occupational standards and vocational education programmes. State vocational education standards determine the the strategic aims of educational programmes, compulsory education content, and assessment principles and procedures for the education obtained. Occupational standards stipulate the basic tasks and obligations for the respective professional activities, basic requirements of professional qualifications, and the general and professional knowledge, skills, attitudes and competences needed to fulfil them. Their revision is ongoing. Vocational education programmes include 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 state education and occupational standards.

The framework for higher education is founded on three Bologna cycles, based on learning outcomes. They are defined as results of study programmes expected from an average student (Academic Information Centre; Ministry of Education and Science of the Republic of Latvia, 2012). Content of professional higher education programmes is determined by relevant occupational standards and state education standards, outlined in cabinet regulations on the state first-level professional higher education standard (2001). In July 2011, the Latv parliament (*Saeima*) adopted amendments to the Law on Higher Education Institutions which introduced the term 'learning outcomes'. *The Latvian higher education and high school development national conception* (2013–20) states that the learning outcomes of all Latvian higher education study programmes have been completely linked to the LQF (Higher Education Council, 2013).

Validation of non-formal and informal learning and links to the NQF[104]

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

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

In vocational education, a vocational qualification (not educational qualification) can be awarded through a validation procedure identical to the qualification that can be obtained by studying any vocational education programme (LQF levels 3 to 4). In the higher education sector several limitations to validation exist: prior experiential learning can be validated in both academic and professional programmes, but only using up to 30 per cent of the credit points intended for studying the whole academic or professional study programme.

Referencing to regional frameworks

Latvia referenced its national qualifications levels to the EQF and self-certified to the qualifications framework for the European Higher Education Area in October 2011.

Table 33 Level correspondence between the LQF and the EQF

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

Source: Academic Information Centre and Ministry of Education and Science of the Republic of Latvia, 2012.

Important lessons and future plans

The present NQF and the referencing report include qualifications awarded within the formal education system. The second phase of referencing is taking place during 2013–15. The referencing report will be revised in light of new laws and the results of ESF projects (focusing on development of sectoral qualifications, evaluation of programmes, etc.). The LQF is expected to be subject to revision and the introduction of new qualifications, including those awarded outside the formal education system.

The second important issue is implementation of the NQF in qualifications, curricula, assessment and teaching practice. Here, implementation of the NQF is highly dependent on the involvement and contribution of practitioners. They need to understand the concepts and have tools

104 This section draws mainly on input from European Commission et al., 2014.

to engage actively. Experiences from first-generation framework implementation show that understanding concepts and promoting cultural change takes time. In Latvia's case, transition processes were relatively hurried in the past five years. Therefore, continuous work on transition and LQF implementation needs to be carefully monitored and improved. In particular, feedback loops and processes need to be in place to ensure that learning outcomes implementation and assignment of qualifications to levels is systematically reviewed and renewed. Capacity-building on the ground seems to be the key. Views and expectations of different stakeholders need to feed back into policy development and implementation. Further work seems to be necessary to implement policies, support teachers and include learning outcomes in their continuous professional development.

Main sources of information

Information on the referencing process and the self-assessment report is available on the Latvian NCP website (Academic Information Centre): http://nki-latvija.lv or http://nqf-latvia.lv [accessed 4.11.2014].

List of abbreviations

ESF	European Social Fund
EQF	European Qualifications Framework
LQF	Latvian Qualifications Framework
NQF	national qualifications framework
NCP	national coordination point
VET	vocational education and training

References

[URLs accessed 4.11.2014]

Academic Information Centre; Ministry of Education and Science of the Republic of Latvia. 2012. *Referencing 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. Second version.* http://bit.ly/1Pg9u4i

Cedefop (forthcoming). *Application of learning-outcomes approaches across Europe.*

European Commission. 2013. *Education and training monitor. Country report: Latvia.* http://ec.europa.eu/education/tools/docs/etm2013-country-reports_en.pdf

European Commission; Cedefop; ICF International (2014). *European inventory on validation of non-formal and informal learning 2014: Country report Latvia.* http://libserver.cedefop.europa.eu/vetelib/2014/87068_LV.pdf

Higher Education Council. 2013. *Latvijas augstakas izglitibas un augstskolu attistibas nacionala koncepcija 2013–20.* [Latvian higher education and high school development national conception 2013–20]. http://www.aip.lv/getdoc.php?art=AIP_vestules_nr11231_pielik_LAIAANK_Koncepcija.doc

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

LEBANON

Introduction

Lebanon has a population of 4.2 million. The current political system was set up to recognize the plurality of different religious communities in the country. The balance of power established to ensure stability in the country often delays and complicates the decision-making process and policy implementation. On the other hand, Lebanese society is highly flexible, dynamic and entrepreneurial.

The Education and Training System in Lebanon is among the best-performing in the Middle East and North Africa (MENA) region due mainly to its diversified structure and the importance of the private sector. Education is traditionally highly valued. This, combined with wide accessibility, has resulted in high enrolment in elementary education for both girls and boys (99.2% in first grade). However, in the years since the 2006 civil war there has been a decline in the quality and effectiveness of the education system, which calls for urgent reform.

The economy has been growing since 2000. GDP has grown since 2006, rising from 0.6 per cent in 2006 to a peak of 9.3 per cent in 2008, and 8.5 per cent and 7 per cent in 2009 and 2010, respectively. However, growth slowed significantly in both 2011 and 2012. In parallel, GDP per capita has been growing at a quite quick pace, from US $9,857 PPP (purchasing power parity) in 2006 to US $14,709 PPP in 2011. Lebanon's GDP per capita is by far the highest among MENA non-oil exporting countries. The services and banking sectors constitute more than 70 per cent of the country's GDP, the industrial sector 20 per cent and agriculture the remaining 10 per cent. The trend shows a decrease in the relative size of agriculture and industry in favour of the service sector. Major sub-sectors are commerce, tourism and financial services. Other sub-sectors include health care and higher education. The industrial sector, privately-owned, includes production of cement, furniture, paper, detergents, cosmetics, pharmaceuticals, batteries, garments and processed foods.

Despite economic growth, the activity rate in Lebanon remains among the lowest in the Mediterranean, estimated at 48 per cent in 2009. The unemployment rate was estimated at 6 per cent in 2009 (10 per cent for women and 5 per cent for men). The informal sector is large and there is still a strong dependence on family and community connections, particularly in the search for jobs. A recent study carried out by the World Bank within the framework of the MILES project indicates that around 80 per cent of interviewed workers found their jobs through personal contacts.

The main challenges that the NQF should address have been classified into three main types: economic, educational and social.

The economic challenges cover globalization and its impact on the national economy, the absence of regular monitoring of labour-market needs, the weak and unorganized associations dealing with the labour market and, finally, the absence of structured links between the labour market and the education and training system.

As for the education system, the major challenges identified include: i) the weak articulation between the different components of the education system; ii) the lack of mechanisms for the recognition of qualifications gained outside the formal system; and iii) the absence of pathways between the different education segments (general higher and vocational education) and difficult transition to the labour market.

With regard to the social dimension, it should be noted that there is limited involvement of social partners in the design and implementation of VET policies, and a limited offer for continuing education and training as well as for vulnerable groups. The current education and training strategy does not include a vision for lifelong learning. Continuing training and training for disadvantaged groups is mainly offered by NGOs and private associations/providers.

Main policy objectives

The Lebanese National Qualifications Framework (LNQF) should be able to classify all qualifications and certificates issued by the different sectors of the education and training system. In particular, the LQF should ensure:

- transparency and legibility of qualifications delivered in Lebanon and their relevance for the labour market;
- recognition of the qualifications based on well-defined competencies, whether they have been acquired with formal, non-formal or informal education;
- mobility between the different sectors of the education system;
- coherence with qualifications frameworks of other countries.

Stakeholder involvement

In 2010, the Ministry of Education and Higher Education set up a working group composed of the major stakeholders representing the three main sectors of education (T-VET, general education and higher education). The first phase consisted of a mapping of the existing qualifications. This exercise revealed that the current hierarchy of qualifications is not based on clear criteria and that qualifications are barely understandable to users. It revealed as well the absence of a clear idea of the profile of the holder of a qualification and the limited possibilities for vertical and horizontal mobility.

As a follow-up to this first phase, the group worked on the identification of the processes which need to be set up in order to allow for the integration of all qualifications in a national qualifications framework. A first technical paper presenting a draft NQF matrix based on eight levels was produced in 2011 and further defined in 2012. The final grid with eight levels and descriptors was officially presented during a national conference in Beirut in November 2012.

A wider consultation on the Lebanese Qualifications Framework took place between October and November 2012. A synthesis report, which describes the process, the tools produced and the activities implemented, was presented to the Minister of Education and Higher Education in January 2013 with a proposal for further deployment of the LQF. However, due to political instability in the country, no progress was made in 2013. The NQF remains a priority within the Education strategy of 2010 and the european Union-Lebanon Action Plan for cooperation.

Level descriptors and learning outcomes

The proposal drafted in the technical paper envisages a national qualifications framework for Lebanon built around the following components:

- A framework of 8 levels, each level described in terms of knowledge, skills and competences;
- A set of principles or guidelines for quality assurance for the institutions and authorities in charge of designing and delivering qualifications;
- A set of methods and procedures to align qualifications to the LQF and register them in a national registry of qualifications.

Validation of non-formal and informal learning and links to the NQF

The lack of educational pathways is one of the main problems identified within the working group. The support to both vertical and horizontal mobility is one of the main objectives of the LNQF. Given the initial stage of development of the framework, implementation arrangements are yet to be defined.

Referencing to regional frameworks

No referencing to regional frameworks has been considered yet. The group has decided to use the Arab Standard Classification of Occupations (ASCO), although for comparison rather than for referencing.

Important lessons and future plans

Although the NQF remains a priority within the National Education Strategy (it is one of the pillars of the strategy) and is also included in the EU-Lebanon Action Plan, a lot remains to be done to allow the full adoption, functioning and use of the existing NQF. Based on the work already developed by the working group, with the support of the ETF, some actions could be pursued further at technical level. However, regarding legislative frameworks and decision-making at policy level, the current socio-political situation in the country slows down and, in some cases, blocks these processes.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

LIECHTENSTEIN

Introduction

In February 2011, the government decided 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 European Qualifications Framework (EQF) in 2008. In 2013, a qualifications framework for higher education defined in terms of learning outcomes, in line with the qualifications framework in the European Higher Education Area, was adopted and included in higher education law (Government of the Principality of Liechtenstein, 2013). It will constitute an integral part of the NQF for lifelong learning. It is expected that the NQF will be established by end of 2015. Recently, the education strategy 2020 was adopted, which refers to competences as outcomes of learning becoming the most important resource in a globalised world (Government of the Principality of Liechtenstein, 2011).

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

NQF developments are coordinated with NQF development in Switzerland and Austria due to close connections with education and training systems of these neighbouring countries. Most Liechtenstein students (in vocational education and training [VET] or higher education) study 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.

Main policy objectives

A key objective for Liechtenstein is to map and describe national qualifications in the national qualifications framework and reference them to the European Qualification. It is planned that all new certificates will be referenced to NQF and EQF levels.

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

Stakeholder involvement and framework implementation

Work on the NQF was initiated by the government. Acting on behalf of the Ministry of Education, an expert from the National Agency of International Education Affairs (AIBA) was appointed to provide technical and administrative support.

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

For public involvement and information, a national qualification framework Liechtenstein (*Nationaler Qualifikationsrahmen Furstentum Liechtenstein*) (NQFL) homepage was established in spring 2013,[105] containing all relevant information and updates.

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 experience with development of the qualifications framework for higher education.

Level descriptors and learning outcomes

Liechtenstein will have an eight-level framework though descriptors have not yet been formulated.

105 See www.nqfl.li [accessed 16.10.2014].

All sub-systems have made important steps in implementing a learning-outcomes approach, but to varying degrees. Learning outcomes already play an important role in accreditation processes in higher education. A qualifications framework for higher education was implemented in 2013. In general education, educational standards were introduced in 2010 and have since been tested for grades 3, 4, and 8. A competence-based approach is being strengthened in teaching, and in evaluation of general education. In line with the amended VET law in 2008 (Government of the Principality of Liechtenstein, 2008, Article 6), qualifications and curricula have been revised with stronger focus on competences and equipping students with the competence to act (*Handlungskomptenz*) (Cedefop, forthcoming).

Validation of non-formal and informal learning and links to the NQF[106]

The 2014 inventory on non-formal and informal learning maintains that the validation process in Liechtenstein can be characterized as quite pragmatic due to the country's size and that fostering validation is not a political priority. Nevertheless, there are validation arrangements in place. Validation of non-formal and informal learning follows a similar approach to that developed in Switzerland. The Vocational Training Act determines that admission to any examination or qualification does not depend on attending certain educational programmes. Admission is also granted if applicants have at least five years' work experience.

In higher education, most development has occurred in the past four years. Liechtenstein only has a framework for higher education. The Education Authority (*Schulamt*) regards development of the National Qualifications Framework for Higher Education (*Nationaler Qualifikationsrahmen Furstentum Liechtenstein für den Hochschulbereich*) (NQFL-HS) as an opportunity for anchoring lifelong learning more within higher education, and for improving validation and recognition of prior learning achieved outside the higher education system. The legal bases for admission to higher education have been formalized. The Law on Higher Education regulates conditions and processes of admission without a *matura* certificate (Government of the Principality of Liechtenstein, 2005, Article 24) and sets limits on crediting learning acquired outside the higher educational system. It is possible to recognize non-formal and informal learning for achievement of a qualification up to a maximum of one-sixth of the necessary work load (European credit transfer and accumulation system credit points) for the whole qualification.

Standards used in VET and higher education for validation are those of existing programmes. The validation process in VET is based on a similar process to the one developed in Switzerland, following a similar series of steps. The process, however, requires a great deal of effort from individual applicants. Interested persons with work experience often decide to take part in regular educational programmes at vocational schools, because this route can be faster and less cost-intensive than a validation process.

Referencing to regional frameworks

A referencing report will be adopted by the government in 2015.

Main sources of information

[URLs accessed 16.10.2014]

Ministry of Education:
http://www.4icu.org/institutions/177.htm
AIBA in Liechtenstein:
http://www.eeagrants-li.com/

List of abbreviations

AIBA	National Agency of International Education Affairs
EQF	European Qualifications Framework
NQF	national qualifications framework
NQFL	Nationaler Qualifikationsrahmen Furstentum Liechtenstein [National Qualifications Framework Liechtenstein]
NQFL-HS	Nationaler Qualifikationsrahmen Furstentum Liechtenstein für den Hochschulbereich [national qualifications framework for higher education]
VET	vocational education and training

106 This section draws mainly on input from European Commission et al., 2014.

References

[URLs accessed 15.10.2014]

Cedefop (forthcoming). *Application of learning-outcome approaches across Europe.*

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Liechtenstein.* http://libserver.cedefop.europa.eu/vetelib/2014/87065_LIE.pdf

Government of the Principality of Liechtenstein. 2005. Gesetz über das Hochschulwesen (Hochschulgesetz; HSG) [Law on Higher Education (Higher Education Act; HSG)]. *Liechtensteinisches Landesgesetzblatt* [Liechtenstein law gazette], 414.0, No 2. https://www.gesetze.li/DisplayLGBl.jsp?Jahr=2005&Nr=2

Government of the Principality of Liechtenstein. 2008. Berufsbildungsgesetz (BBG) [Vocational Training Act]. *Liechtensteinisches Landesgesetzblatt* [Liechtenstein law gazette], 412.0, No 103. https://www.gesetze.li/DisplayLGBl.jsp?Jahr=2008&Nr=103

Government of the Principality of Liechtenstein. 2011. *Bildungsstrategie Fürstentums Liechtenstein 2020 [*Education strategy of the Principality of Liechtenstein for 2020]. Vaduz: Government of the Principality of Liechtenstein. http://www.regierung.li/fileadmin/dateien/downloads/AEusseres_Bildung_Kultur/Bildungstrategie_2020.pdf

Government of the Principality of Liechtenstein. 2013. *Qualifikationsrahmen für den Hochschulbereich im Fürstentum Liechtenstein (NQFL-HS) [Qualifications framework for higher education in the Principality of Liechtenstein].* http://www.llv.li/files/sa/pdf-llv-sa-qualifikationsrahmen_fuer_den_hochschulbereich_im_fl_nqfl_hs_2013.pdf

Prepared by:

European Centre for Development of Vocational Training (Cedefop) in collaboration with national experts.

LITHUANIA

Introduction

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

Main policy objectives

Development of the LTQF is part of a decade-long effort to reform and modernize Lithuanian education and training. The national education strategy for 2003–12 stressed the need for flexible and open education structures, for better coordination between general education and VET, and for stronger links to non-formal and informal learning (Parliament of the Republic of Lithuania, 2003). The LTQF emerged from this strategy and addresses five main objectives:

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

The Lithuanian National Qualifications Framework (NQF) is based on complete (full) qualifications. However, work is currently in process to introduce qualifications units, defined as combinations of the competences needed for executing certain tasks. The LTQF includes qualifications awarded by formal education and training. There are currently no plans to open the framework up to qualifications offered by the private or non-formal sector.

Stakeholder involvement

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

Development of the LTQF since 2009 has been dominated by stakeholders from education and training. Both the vocational and higher education sectors have contributed actively and jointly to the process, paving the way for one comprehensive framework. The limited direct involvement of social partners in the process does not mean, however, that the link to the labour market has been overlooked. The framework has a clear labour-market orientation, for example defining qualification 'as the ability and right to engage in a certain professional activity recognized under the procedure established by laws, legal acts adopted by the government or an institution authorized by the government' (QVETDC, 2012). This orientation is also reflected in the activity-focused level descriptors (see 'Level descriptors and use of learning outcomes' below), referring back to the

work on VET-standards developed since the late 1990s.

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

Framework implementation

While the LTQF entered an early operational stage following referencing to the EQF in 2011, continuous deepening of the work is being carried out. A decision has been made to update the 2011 referencing report by the end of 2014. In preparation, work is being prioritized in a limited number of areas, notably general education qualifications and higher education qualifications. In both areas the need for increased consistency has been observed. Seminars have been organized with representatives of the two sectors and guidance material is being developed. This process will be summarized in the revised referencing report, which will be formally approved by the Ministry of Education.

The Lithuanian national coordination point has organized several events addressing the different stakeholders seeking to disseminate information on the NQF. Focus has been directed towards the social partners and their involvement in, and commitment to, the framework.

Lithuania started to indicate NQF and EQF levels in vocational qualification certificates from January 2013. This means the framework and its levels now are increasingly visible to individual learners and citizens.

Level descriptors and learning outcomes

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

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

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

Table 34 Level descriptor in the Lithuanian NQF

	Characteristics of activities	Types of competences
Criteria	Complexity of activities	Functional competences
	Autonomy of activities	Cognitive competences
	Variability of activities	General competences

Source: QVETDC, 2012.

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

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

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

The implementation of the LTQF is seen as part of a strategy to move towards a more consistent and comprehensive use of learning outcomes across education and training levels and types. The initiatives taken during 2012/13 to address the use of learning outcomes in general education and higher education show how the framework is playing a role in this area.

Validation of non-formal and informal learning and links to the NQF[107]

Lithuania is building a national system for validation of non-formal and informal learning. Several laws have been amended in the last few years to pave the way for validation of non-formal and informal learning, both at national and sectoral levels. Building a system for validation is seen as a priority and related measures have been included in recent policy documents, including: the national education strategy for 2013–22;[108] the programme for increasing employment for 2014–20;[109] and the draft non-formal adult education development action plan.[110] There is currently no formal strategy in place, but the laws referred to above enable people to validate their learning in the VET and higher education sectors, and employment (though the latter option is not fully developed yet). The conceptual model of the NQF includes the possibility of acquiring qualifications through validation of non-formal and informal learning; however, there are no concrete measures in place to support take-up. The regulations for validation and recognition of qualifications include three main elements: assessment regulations, assessment methods, and assessment and accreditation of institutions.

The system of standards is still incomplete and only VET standards are in place, so procedures for validation are mainly developed within VET.

An accredited competence assessment institution has the right to assess the competences acquired in formal and non-formal education programmes, in employment activities or informally. The list of accredited competence assessment institutions is published on the website of the QVETDC.[111] Further, a representative from formal VET (a VET teacher) is one of the three assessors on the competence assessment panel that operates in each of the accredited institutions.

The 2010 order on Recommendations on the Assessment and Recognition of Non-formally Acquired Competences in Higher Education Institutions only very briefly outlines this process for higher education, leaving full responsibility for the development of validation (including methodologies and the process) to higher education institutions themselves.

Referencing to regional frameworks

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

Table 35 Level correspondences between the LTQF and the EQF

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

Source: QVETDC, 2012.

107 This section draws mainly on input from European Commission et al., 2014.

108 National education strategy 2013–22, 23 December, 2013, No XII-745. http://bit.ly/1MIJbRM [accessed 10.11.2014].

109 Programme for increasing employment for the period 2014–20, 25 September, 2013, No 878. http://bit.ly/1MIJqwe [accessed 10.11.2014].

110 Draft non-formal adult education development action plan for 2014–16 (***Neformaliojo suaugusiųjų švietimo plėtros 2014-16 metų veiksmų planas***). http://bit.ly/1VrNL9t [accessed 10.11.2014].

111 http://www.kpmpc.lt/kpmpc/?page_id=1488 [accessed 10.11.2014].

Important lessons and future plans

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

Main sources of information

QVETDC has been appointed as the EQF national coordination point.
More information to be found at http://www.lnks.lt [accessed 11.11.2014].

List of abbreviations

EQF	European Qualifications Framework
LTQF	Lithuanian Qualifications Framework
NQF	national qualifications framework
QF-EHEA	qualification framework for the European Higher Education Area
QVETDC	Qualifications and VET Development Centre
VET	vocational education and training

References

[URLs accessed 10.11.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Lithuania.* http://libserver.cedefop.europa.eu/vetelib/2014/87065_LT.pdf

Government of Lithuania. 2010. Resolution on approving the description of the Lithuanian qualifications. *Official Gazette*, No 56-2761, 4.5.2010, pp. 1–8. http://www.kpmpc.lt/LTKS_EKS/LTQF_official_translation.pdf

Parliament of the Republic of Lithuania. 2003. *Provisions of the national education strategy 2003–12.* http://bit.ly/1GjNi1U

QVETDC. 2012. *Referencing the Lithuanian qualifications framework to the European qualifications framework for lifelong learning and the qualifications framework for the European Higher Education Area: national report 2012.* Vilnius: QVETDC. https://ec.europa.eu/ploteus/sites/eac-eqf/files/LTQF_EQF_report_ENG.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

LUXEMBOURG

Introduction

Following a Ministry of Education initiative, an outline of a comprehensive national qualifications framework (NQF) was presented to the Council of Ministers in early 2009. Based on an initial governmental go-ahead, detailed work continued during 2010 and 2011, resulting in an eight-level Luxembourg Qualifications Framework (CLQ) covering all types and levels of qualifications.

The Law on Vocational Education and Training (VET) adopted in autumn 2008[112] paves the way for the framework, in particular by stressing the need to promote a shift to learning outcomes, but no separate legislative basis has been introduced for the CLQ. The framework was referenced to the European Qualifications Framework (EQF) in 2012. This referencing was combined with self-certification to the qualification framework for the European Higher Education Area (QF-EHEA). Implementation of the CLQ has been relatively slow during 2013/14, partly reflecting the lack of a clear legislative basis and of an agreed strategy shared by all stakeholders on how to proceed.

Main policy objectives

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

In a second stage, the CLQ may open up to qualifications awarded outside the existing, official system. This reflects the high number of citizens holding unofficial and non-recognized certificates and diplomas. To accomplish this, specific approaches to accreditation and quality assurance of these new qualifications will have to be put in place.

Stakeholder involvement

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

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

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

112 http://bit.ly/1OIDSVG [accessed 31.10.2014].

Framework implementation

Following completion of NQF referencing to the EQF in mid-2012, the process of implementation has slowed down. While the CLQ can be described as having reached an early operational stage, some steps remain to be taken before the framework can be deemed to have reached full operation. A first challenge is to sort out framework legislation, with politicians reluctant so far to develop a separate legal basis and referring mainly to the (learning outcomes) principles introduced by the 2008 Law on VET. A five-year strategy for the CLQ is currently (following elections in 2013) being considered and the first priority is to clarify the legal basis of the framework. This strategy will also require clarification of the relationship between the CLQ and a wider strategy on lifelong learning. The Luxembourg national coordination point plays an active role in implementation and is systematically seeking to promote the development and implementation of the framework. A particular challenge seems to be the highly differing expectations from stakeholders, suggesting a need to provide more systematic information on the framework to relevant parties.

Level descriptors and learning outcomes

Luxembourg has introduced an eight-level reference structure. While the number of levels corresponds with the EQF, the descriptors reflect the national tradition and context. Descriptors are differentiated at each level according to knowledge, skills and attitude (*connaissances, aptitudes, attitudes*). While the level of detail is higher, the relationship to the EQF can be clearly identified. This is, for example, the case for the third (*attitudes*) column which is based on the principles of responsibility, autonomy and context, as with the EQF.

The decision to use these concepts reflects gradual development of a learning outcomes or competence-based approach in VET. During the 1970s and 1980s, this approach was influenced by the German tradition. The experiences related to the development of professional standards played a particularly important role as education standards were directly deduced from them. In recent years these approaches have been developed through extensive cooperation with other European countries, notably those with a dual VET system (Austria, Denmark, Germany and Switzerland). Links to France are also strong, partly influencing the way qualifications are designed and described.

The situation concerning the use of learning outcomes (or 'competences') in Luxembourg education and training has varied between sub-sectors. Recent years have brought about a change and most qualifications are today described through learning outcomes. In initial vocational education, the 2008 law enabled introduction of a module-based system referring to learning outcomes. All qualifications have been described using learning outcomes and can be accessed via the register of the Ministry of Education and Vocational Training.[113] Higher education is organized in modules lasting one semester, each constituting assessable units allocated credit points (European credit transfer and accumulation system). These modules are now increasingly defined and described using learning outcomes.

Validation of non-formal and informal learning and links to the NQF[114]

The 'model' of validation in Luxembourg has emerged from consultation based on long-standing dialogue with different education and training stakeholders, leading to adoption of national legislation. Validation is an individual right in Luxembourg and citizens from other European Union countries are granted the same rights to it. The legal framework on validation consists of several laws. Validation is referred as validation of non-formal and informal learning (*validation des acquis de l'expérience*) (VAE); it can lead to the award of full qualifications or part of a qualification, provided that the candidate can supply evidence that the total length of his/her prior learning experience amounts to at least three years and is effectively related to the targeted qualification. All qualifications included in the NQF in Luxembourg can be acquired through VAE, except the secondary school leaving certificate.

The approaches to VAE and methodologies implemented can differ slightly in practice in secondary and higher education, but are generally consistent and encompass four stages: identification, documentation, assessment and certification. The standards used to support delivery of validation in Luxembourg are the same as those used in formal education and training (based on modular training curricula and/or on competence frameworks).

Outside formal education and training, a validation procedure is in place at the Luxembourg Lifelong Learning Centre (LLLC), the training department of the Chamber of Employees (Chambre des salariés).

113 See http://programmes.myschool.lu [accessed 22.10.2014].
114 This section is based on European Commission *et al.*, 2014.

Some qualifications delivered by the LLLC can be obtained either via participation in evening classes or by a validation procedure, with full or part qualification awarded. Following the 2008 law reforming the VET sector, all VET and LLLC curricula are now based on learning outcomes to aid validation.

Referencing to regional frameworks

Luxembourg referenced its qualifications levels to the EQF and the QF-EHEA in June 2012, as illustrated in Table 36.

Table 36 Level correspondenc between the CLQ and the EQF

CLQ	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Ministry of Education and Vocational Training and Ministry of Higher Education and Research, 2012.

Important lessons and future plans

While a solid basis for an NQF has been established in Luxembourg, implementation has slowed following referencing to the EQF in 2012. This reflects the lack of a clear legal basis and some uncertainty among stakeholders regarding the national role of the CLQ. The CLQ can be considered to have reached an early operational stage. Reaching full operation requires that steps are taken to clarify, among all stakeholders, the role to be played by the framework in the coming years and the legal/political principles on which this work is to be based.

Main sources of information

The Ministry of National Education and Vocational Training (Ministère de l'Education nationale et de la Formation professionnelle) acts as NCP. http://www.men.public.lu [accessed 20.10.2014].

List of abbreviations

CLQ	Luxembourg Qualifications Framework
EQF	European Qualifications Framework
LLLC	Luxembourg Lifelong Learning Centre
NQF	national qualifications framework
QF-EHEA	qualification framework for the European Higher Education Area
VAE	validation des acquis de l'expérience [validation of non-formal and informal learning]
VET	vocational education and training

References

[Urls accessed 22.10.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Luxembourg.* http://libserver.cedefop.europa.eu/vetelib/2014/87067_LU.pdf

Ministry of Education and Vocational Training; Ministry of Higher Education and Research. 2012. *Report on referencing the Luxembourg qualifications framework to the European qualifications framework for lifelong learning and to the qualifications framework in the European Higher Education Area.* https://ec.europa.eu/ploteus/sites/eac-eqf/files/Referencing%20report.pdf

MALAYSIA

Introduction

Malaysia's economy has grown more than tenfold since the 1980s and successive governments have committed themselves to building a knowledge-based economy, as reflected in the Ninth Malaysia Plan (9th MP) (2006–2010) (Government of Malaysia, 2006). In response to this economic plan, the Government of Malaysia also formulated a National Higher Education Strategic Plan (NHESP) to make Malaysia an international hub of excellence for higher education. In pursuit of this objective, the Prime Minister called for a 'higher education revolution' which led to the establishment of a new Ministry of Higher Education in 2004 and the launch, in August 2007, of the Malaysian Qualifications Agency (MQA).

Following these reforms, the Malaysian Qualifications Framework (MQF) was developed in successive stages, through exploration exercises, a series of consultations with key stakeholders, and a national consultation that led finally to approval by the government. The MQF is designed as a unified system of qualifications offered on a national basis by all educational and training institutions, including colleges, universities, vocational institutions, professional bodies and other higher education institutions, in the public and private sectors, and taking into account workplace training and lifelong learning experiences (MQA, 2010).

The main challenges stated in the National Higher Education Strategic Plan (NHESP) were eventually to be addressed by the MQF. These were: to widen access to education and increase equity; to improve the quality of teaching and learning; to empower institutions of higher education (IHEs); to intensify internationalization (collaboration with foreign IHEs); to promote participation in and recognition of lifelong learning; to promote the recognition of prior learning; to promote alternative educational pathways and mobility between programmes (see also Ministry of Higher Education, 2010); to overcome differences in public and private higher education (in, for example, nomenclature, entry requirements, credits and duration); to coordinate the various programmes offered; and to enhance the legitimacy and relevance of qualifications in society and working life (Vassu, 2012).

Main policy objectives

In addressing the challenges set out in the NHESP, the MQF, as stipulated in Section 35 of the Malaysian Qualifications Agency Act 2007, aims to:

- encourage partnerships between the public and private sectors;
- set qualification standards and reinforce policies on quality assurance;
- ensure accuracy and consistency in the naming of qualifications;
- support flexible education by providing a choice of educational pathways and recognizing prior learning (RPL);
- link certificates and diplomas with undergraduate and postgraduate degree-level education;
- encourage people to view academic and vocational qualifications as equally valid;
- establish a common currency for credit accumulation and transfer;
- articulate links with qualifications from other countries;
- provide clear and accessible public information.

Stakeholder involvement

The MQF is overseen by the State as regulator through the Ministry of Higher Education (MOHE), the Malaysian Qualifications Agency (MQA), and the Ministry of Human Resources (MHR). Other stakeholders include professional bodies and examination and certification bodies (Vassu, 2012).

The Malaysian Qualifications Agency (MQA) succeeded two previous quality assurance bodies, the National Accreditation Board[115] and

115 In May 1997, the National Accreditation Board (called *Lembaga Akreditasi Negara* [LAN] in Malay) was established. Its key function was to assure the quality of all programmes and qualifications offered by private higher education

the Quality Audit Division of the Ministry, which dealt with public and private higher education providers respectively. As guardian of the MQF, the main functions of the MQA are to manage and implement the framework, to provide quality assurance and programme accreditation, to facilitate the recognition and articulation of qualifications, and to maintain the Malaysian qualifications register. All types of higher education providers are brought into the purview of the MQA (Allais, 2010).[116] The increased mobility of learners and workers alike in today's education and labour market means that recognition of qualifications is more important than ever. Accreditation of a programme or qualification is the main mark of quality for recognition by various authorities and bodies. Although accreditation is not compulsory according to the Malaysian Qualifications Act, it is made mandatory by other regulations and policies, thus ensuring compliance with the framework. Programmes are accredited if they meet the requirements of the framework. They are then eligible to be registered in the Malaysian qualifications register.

Levels descriptors and learning outcomes

The MQF develops and classifies qualifications based on a set of nationally agreed and internationally benchmarked criteria. It sets out academic levels, learning outcomes, and a credit system based on student academic load. Academic load includes all the activities the student undertakes to achieve a defined set of learning outcomes, such as lectures, tutorials, practical activities, retrieval of information, research, field work, and sitting for examinations. The criteria of the MQF are accepted and used for all qualifications awarded by higher education providers (MQR, 2009).

The MQF is an eight-level framework. It comprises three sub-frameworks: a five-level skills sector (known as the National Occupational Skills Standards); a VET sector (Certificates 1-3, the latter awarded in state polytechnics and community colleges); and a six-level framework for higher education qualifications, the three lowest levels of which overlap with the skills and VET sectors (Allais, 2010, p. 37). The main characteristics of the system are shown in Figure 5 below.

The learning outcomes for each MQF qualification are indicated via descriptors. Learning outcomes are based on the following eight learning domains (Vassu, 2012), which remain constant across all levels:

1. Knowledge of subject area;
2. Practical skills;
3. Social skills and responsibilities;
4. Values, attitudes and professionalism;
5. Communication, leadership and teamwork skills;
6. Problem-solving and scientific skills;
7. Managerial and entrepreneurial skills;
8. Information management skills.

Recognition and validation of non-formal and informal learning and links to the NQF

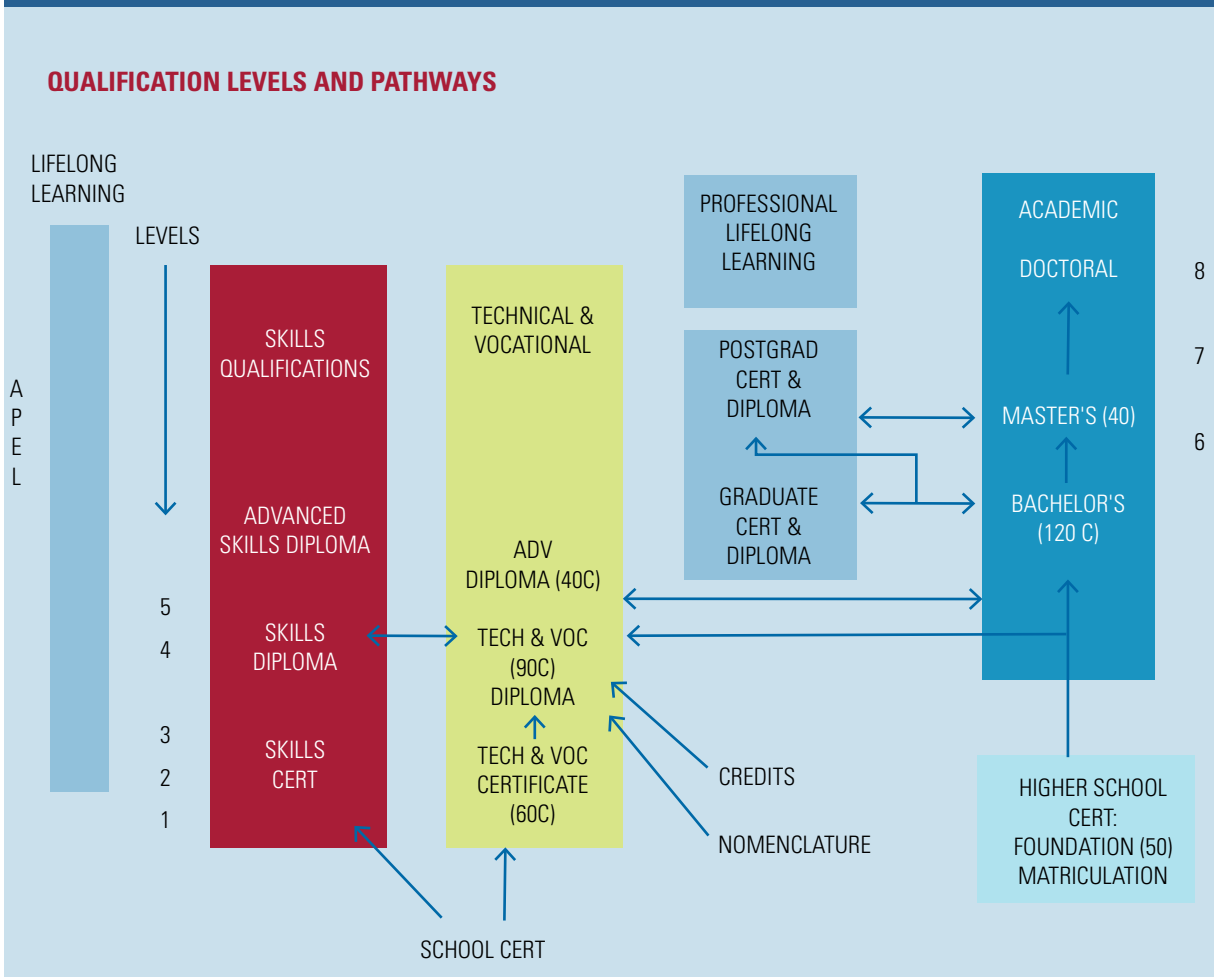
When launched in August 2007, the NHESP identified lifelong learning as one of its seven primary goals. The national blueprint for lifelong learning has since been published (Ministry of Higher Education, 2011). The MQF is an important instrument for realizing lifelong learning policy in Malaysia, which is important in the development of a knowledge-based society and economy (MQA, 2010). It is designed in particular to facilitate access to education for individuals and social groups who have missed educational opportunities. It does this by providing flexible educational pathways for all learners, systematically linking qualifications from different sectors (ibid.). A system of credit accounts and credit transfer will ensure that learners are able to progress both vertically and horizontally and to have their prior learning recognized, whether acquired formally, non-formally or informally. Work was initiated in 2010 to allow cross-sector mobility, i.e. between academic and vocational streams.

A number of courses now have flexible entry points in order to further promote lifelong learning. Adult learners and senior citizens ('lifelong learners') are permitted to make up five per cent of the student body in higher education institutions. At present, six universities have been approved to practice the above-mentioned system of flexible entry points for admission of adults and senior citizens. Assessment of prior experiential learning in these institutions may be conducted in stages (Gobaloo and Fahmi, 2013). Institutions will be required to provide quality-assurance mechanisms to ensure proper, effective and genuine learning.

providers. It developed standards and criteria for the conferment of awards and accredited courses that fulfilled the set standards and criteria. The number of institutions grew and a diverse range of programmes was offered, from certificate to doctorate. Foreign programmes in the form of twinning or '3+0' mode were popular among international students. The quality assurance of public universities remained the responsibility of their internal quality-assurance mechanisms but was constantly monitored by the ministry through its Quality Assurance Division (QAD).

116 'Higher education providers' are institutions which offer qualifications at post-secondary level.

Figure 5 Malaysian Qualifications Framework



Source: MQA, 2010; Vassu, 2012.

Other measures, including financing and support systems, are also essential to lifelong learning plans.

In 2009 the MQA developed guidelines for the accreditation of prior learning. This was followed in 2011 by work to develop instruments and criteria to assess prior learning, and to establish assessment centres. A number of techniques can be used to recognize an individual's prior learning. First, a portfolio of evidence is compiled relating to the learning outcomes of a subject or course. The portfolio may include reports (by referees or other relevant assessors), job descriptions, essays, artefacts and products made, designs, drawings, plans, test results and so forth. A written description of the individual's knowledge and skills may also be submitted. This should be authored by a qualified person, such as the applicant's employer (e.g. manager or supervisor) or client (e.g. student or customer). Finally, written or oral examinations may be conducted.

Important lessons and future plans

The MQF is an important instrument for realizing lifelong learning policy in Malaysia. Thanks to its design as a unified system of qualifications offered on a national basis, the implementation process was able to run smoothly.

The MQF's establishment of benchmarks has improved the international comparability of Malaysian qualifications. Bringing all higher education providers under one umbrella has made it easier to address stakeholder concerns effectively.

Malaysia plans to use the MQF to further harmonize qualifications for both public and private institutions, creating a common currency for accreditation and recognition across sectors. It also plans to develop a regional qualification framework for the Association of Southeast Asian Nations (ASEAN), and to subject the MQF to ongoing review in order to ensure that the highest standards are maintained (Vassu, 2012).

References

Allais, S. 2010. *The Implementation and Impact of National Qualifications Frameworks: Report of a study in 16 countries.* Geneva, ILO.

Gobaloo, V. and Fahmi, Z. M. 2013. The Malaysian Qualifications Framework and the recognition of prior learning. M. Singh and R. Duvekot (eds), *Linking Recognition Practices to National Qualifications Frameworks: International benchmarking of experience and strategies in the recognition, validation and accreditation (RVA) of non-formal and informal learning.* Hamburg, UNESCO Institute for Lifelong Learning.

Government of Malaysia. 2006. *Ninth Malaysia Plan.* Kuala Lumpur, The Government Press.

Government of Malaysia. 2007. *Strategic Plan for Higher Education: Laying the foundation beyond 2020.* Kuala Lumpur, The Government Press.

International Labour Organization. 2010. *Qualifications Frameworks: Implementation and Impact Background Case Study on Malaysia.* Geneva, ILO.

Malaysia Qualifications Agency. 2009. *Malaysia Qualifications Register.* Selangor, MQA.

Malaysian Qualifications Agency. 2010. *Malaysian Qualifications Framework.* Selangor, MQA.

Ministry of Higher Education. 2011. *Blueprint on Enculturation of Lifelong Learning for Malaysia 2011–2020.* Selangor, Univision Press Sdn.

Vassu, B. 2012. *Development Phases of the National Qualifications Frameworks in Perspective: Malaysia.* (Asia-Europe meeting [ASEM]: TVET symposium, Berlin, Germany, 27–28 February 2012). Selangor, MQA.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

MALDIVES

Introduction

The Maldives National Qualifications Framework (MNQF) was established by the Maldives Accreditation Board (MAB) in September 2001. The Maldives Accreditation Board (MAB) was replaced by the Maldives Qualifications Authority (MQA) on 17 May 2010. The revision process of the framework began in 2005 and was completed in February 2009 (MAB, 2009) and implemented on 1 September 2011.

Two main challenges are being addressed by the MNQF:

- The Maldivian post-secondary education sector is growing rapidly, with an increasing number of private providers entering the sector to meet demand. This has resulted in a need to assure the quality of qualifications awarded in relation to educational attainments (MAB, 2009).
- International recognition of Maldivian qualifications abroad, especially in the Asia Pacific region, is emerging as a major issue as more and more students are pursuing higher education at home and abroad. Information needs to be gathered about overseas qualifications, institutions and academic programmes, and the status of institutions needs to be clarified with respect to the recognition and credibility of qualifications.

Main policy objectives

The government sees the revised MNQF as a tool to bring all recognized qualifications together under a single unified structure. The main policy objectives of the strengthened MNQF are:

- to establish national competency standards;
- to assure the quality of teaching, assessment and certification;
- to promote student and learner support and reporting;
- to allow for a possible future interface with secondary education;
- to allow technical and vocational education (TVET) graduates to progress seamlessly to advanced technical, professional and post-graduate learning;
- to provide an internationally benchmarked suite of higher education qualifications from associate and foundation degrees through bachelor's and master's degrees to higher technical and professional diplomas and doctorates;
- to allow valid international higher education qualifications to be recognized in the Maldives;
- to promote mobility and recognition for Maldivian citizens abroad;
- to establish a national technical and vocational qualifications system based on national competency standards, allowing flexibility in worker skills acquisition.

Involvement of stakeholders and legal arrangements

The official accrediting agency of the Maldives is the Maldives Accreditation Board (MAB). This board was formed by the president of the Maldives in 2000. Before the formation of the MAB, the accreditation process was carried out by the Department of Public Examinations (DPE).

On 17 May 2010, the functions of the Maldives Accreditation Board (MAB) were transferred to the Maldives Qualifications Authority (MQA). The Regulatory Board of the MQA, on its first meeting on 30 August 2010, decreed that all rules, regulations and procedures of the former MAB will be adhered to by the MQA until decreed otherwise by the regulatory board (MAB, 2009). The MQA's mandate is to assure the quality of post-secondary qualifications awarded in testimony of educational attainments (MQA, 2010). The process of revising the framework began in 2005. After extensive research and discussion with experts and relevant authorities, the revision process was completed in February 2009. The strengthened MNQF came into effect when the MAB formally endorsed it in September 2009. In September 2011, the Maldives Accreditation Board checked whether all qualifications submitted for approval were consistent with the new national system.

Under the new strengthened MNQF, trainers can modularize training in addition to developing full-time training programmes. Modular programmes offer part-time courses to suit workers so that a full qualification is achieved over time. The new framework allows for a combination of theoretical instruction and training in the workplace, with assessment results being combined towards a full award.

Where qualifications are delivered through training institutions, the MAB proposes three clusters of activities to support the new national qualifications arrangements:

- establishment of a quality-management system at the time of registration;
- programme accreditation;
- ongoing monitoring and institutional quality audit (MQA, 2010).

Level descriptors and learning outcomes

The Maldives Accreditation Board assigns qualifications to a ten-level framework using the descriptors for levels 3–12 of the Scottish Credit and Qualifications Framework (MAB, 2009).

Certificate I recognises the acquisition of a core of entry-level skills for a new worker. Certificates II, III and IV recognize increasing levels of capability and competence through to the fully qualified tradesperson. Diplomas, advanced diplomas and higher diplomas recognise technical, managerial and professional levels of knowledge and skills.

The MNQF descriptors set out the learning outcomes at each level. They provide a general understanding of each level and allow broad comparisons to be made between qualifications and learning at different levels. The learning outcomes include five categories:

- knowledge and understanding;
- practice: applied knowledge and understanding;
- cognitive skills;
- communication, ICT and numeracy skills;
- autonomy, accountability and working with others.

Through the benchmarking already undertaken by Edexcel, it is possible to assign GCSE grades D–G to Level 2, GCSE grades A–C to Level 3 and A-levels to Level 4 of the MNQF (MAB, 2009).

Table 37 The Maldives National Qualifications Framework

LEVEL	QUALIFICATION TITLE
10	Doctoral degree/ Higher professional certificate/Higher professional diploma
9	Master's degree/ Advanced professional certificate/Advanced professional diploma
8	Graduate or postgraduate certificate/Graduate or postgraduate diploma/ Bachelor's degree with honours
7	Bachelor's degree professional certificate/Professional diploma
6	Professional certificate/Advanced diploma associate degree/ Foundation degree
5	Diploma
4	Certificate IV
3	Certificate III
2	Certificate II
1	Certificate I

Source: Maldives Accreditation Board, 2009

Recognition and validation of non-formal and informal learning and links to the NQF

The assigning of levels to all MAB-accredited courses and the inclusion of all post-secondary qualifications under one banner, from initial certificates to advanced academic, technical and professional qualifications, facilitates students' progression pathways and encourages lifelong learning. All qualifications, no matter which subject area, can be recognized under the new competency-based framework. The MAB will include a full listing of all approved programmes on its website, along with the associated levels and objectives of the programmes, for the information of learners and employers.

Some students or workers may achieve only some of the competences required for a full technical and vocational qualification. Nevertheless, they are still able to receive an official record of that partial qualification (Certificate of Achievement). The credit-system therefore, allows students to receive credit for all achievement, no matter how modest. Credits are assigned on the basis of one credit for the achievement of the specified learning outcomes of ten learning hours. In higher education this translates into 120 credits in an academic year. The assessment system makes provision for credit accumulation and transfer, and allows for the recognition of prior learning and of competences towards qualifications, even without course attendance (MQA, 2010), since assessment can also be conducted in the workplace.

Referencing to regional frameworks

MQA's recognition of overseas institutions/colleges/universities is based on the following criteria:

- Recognition of the institution/college/university in that particular country;
- MQAs recognition of an institution/college/university does not mean that all its qualifications are recognized. Qualifications are recognized and accepted in the Maldives:
  - if they are issued by a government recognized institution in the country of origin;
  - if they meet standards and criteria set by the Maldives National Qualifications Framework (MNQF).

MQA also provides the service of checking recognition status of academic programmes and institution for individuals planning to join a programme of study overseas.

Important lessons and future plans

With the strengthened MNQF, the Government of the Maldives hopes to have put in place a sustainable and strategic solution for national and human-resource development. It is hoped that the incorporation of national competency standards and of a broader and more coherent technical and vocational qualifications system will allow for considerable flexibility in worker skills acquisition.

One of lessons to learn from the MNQF is the shift to a unified qualifications system which guarantees more international recognition of the qualifications and the skills and knowledge of Maldivian citizens. Maldives has been successful in making all qualifications consistent with the new national system. It has achieved this by requiring all existing qualifications to be submitted for approval by the Maldives Accreditation Board.

Another important learning is the role played by the MQA in ensuring that students, employers, education providers and the community at large easily understand the learning outcomes involved in various qualifications. Furthermore, the MQA has encouraged employers, parents and students to seek out only accredited programmes, alongside promoting quality assurance of teaching, assessment and certification.

References

Asia and Pacific Accreditation and Certification Council. 2004. *International Accreditation and Certification for TVET Institutions to Face the Challenges of Globalization. Country report of Maldives* http://apacc1.cpsctech.org/newsevents/?b_id=Apacc_news&b_num=46 (Accessed 23 January 2014.)

European Training Foundation (ETF). 2010. *Transnational Qualifications Frameworks.* Torino, European Training Foundation.

Maldives Accreditation Board (MAB). 2009. *The Maldives National Qualifications Framework 2009.* http://www.mqa.gov.mv/downloads/MNQF2009withAmmendment1.pdf (Accessed 27 July 2011.)

Maldives Qualifications Authority (MQA). n.d. *Maldives National Qualifications Framework (MNQF).* Male, Maldives Qualifications Authority.

Prepared by: UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

MALTA

Introduction

Malta has been putting its comprehensive national qualifications framework for lifelong learning (MQF) in place since June 2007. It encompasses qualifications and awards at all levels, provided through formal, non-formal and informal learning.

Important developments took place in 2012 with amendments to the Education Act, which established the legal basis for the National Commission for Further and Higher Education (NCFHE), replacing the Malta Qualifications Council (MQC) and the National Commission for Higher Education (NCHE). Three legal notices were published: on quality assurance and licensing of further and higher education institutions and programmes; on validation of informal and non-formal learning; and on strengthening the legal basis of the MQF for lifelong learning as a regulatory framework for classification of qualifications and awards (Maltese Ministry of Education and Employment, 2012*a*).

Main policy objectives

The MQF addresses the following issues:

- Transparency and understanding of qualifications;
- Valuing all formal, informal and non-formal learning;
- Consistency and coherence in relating to different qualifications frameworks in European and international cooperation;
- Parity of esteem of qualifications from different learning pathways, including vocational and professional degrees and academic study programmes;
- Lifelong learning, access and progression and mobility;
- The shift towards qualifications based on learning outcomes;
- A credit structure and units as building blocks of qualifications;
- The concept of mutual trust through quality-assurance mechanisms that cut across all levels of the framework.

The MQF is seen as an important tool in putting lifelong learning and adult learning opportunities into practice. Adult participation in lifelong learning was 7 per cent in 2012, below the EU average (9 per cent in 2012). The other policy challenge is a high – even if declining – rate of early school leaving, which accounted for 22.6 per cent in 2012 (European Commission, 2013, p. 106). The recently adopted the framework for the education strategy for Malta 2014–24 (Maltese Ministry of Education and Employment, 2014) addresses policy challenges and reinforces the intention to adopt a learning-outcomes approach in all sectors of education and training, linked to the MQF.

Stakeholder involvement

A wide range of stakeholders has been involved in the MQF development and subsequent implementation. The MQC initiated the work, following Legal Notice 347 of 2005,[117] in cooperation with all stakeholders, including ministries and the NCHE.

Framework implementation

The MQF is operational. Key documents and responsibilities for implementation have been agreed among stakeholders and published.[118] The main body in charge of MQF implementation is the NCFHE (the former MQC and the NCHE merged in 2012) which decides on the inclusion of qualifications in the framework. This agency provides strategic policies for further and higher education, promotes and maintains the MQF, accredits and licenses all further (post-secondary) and higher education institutions and programmes, and assists training providers in designing qualifications, assessment and certification.

117 See http://bit.ly/1GjNBtB [accessed 6.11.2014].

118 See three legal notices: on quality assurance and licensing of further and higher education institutions and programmes; on validation of informal and non-formal learning; and on the legal basis of the MQF for lifelong learning.

The Directorate for Quality and Standards in Education (based at the Ministry of Education and Employment) is responsible for quality and standards in compulsory education.

Qualifications included in the MQF should be:

- issued by nationally accredited institutions;
- based on learning outcomes;
- internally and externally quality-assured;
- based on workload composed of identified credit value;
- awarded on successful completion of formal assessment procedures (Maltese Ministry of Education and Employment, 2012*a*).

The MQF register of regulated qualifications was launched in September 2012 and is steadily being constructed.[119] A common quality-assurance framework for further and higher education was launched for public consultation in July 2014 (NCFHE, 2014).

Level descriptors and the use of learning outcomes

The MQF has eight qualification levels based on learning outcomes. Each level descriptor is defined in terms of knowledge, skills and competence. The descriptors highlight specific attributes such as communications skills, judgemental skills and learning skills. The level descriptors reflect complexity, volume and the level of learning expected for the particular qualification.

Progression within the MQF is recorded in terms of:

- knowledge and understanding;
- applying knowledge and understanding;
- communication skills;
- judgemental skills;
- learning skills;
- autonomy and responsibility.

Strengthening the learning-outcomes approach has become fundamental to education and training reform in Malta and has been applied across qualifications and levels in recent years. One of the tasks of the NCFHE is to introduce national standards of knowledge, skills and competences, and to ensure that these are systematically implemented, used and revised. Malta recently adopted the *Framework for education strategy for Malta 2014–24: Sustaining foundations, creating alternatives, increasing employability* (Ministry of Education and Employment, 2014), which reinforces the focus on learning outcomes and the intention to update existing learning programmes and assessment modes. There is a clear commitment and focus on a learning- outcomes approach at policy level, driven by the MQF. Information on practical implementation of learning outcomes in different parts of education is less clear, as reported in the Cedefop study on learning outcomes (Cedefop, forthcoming).

The *National Curriculum Framework for All* (December 2012)[120] is the main document for general education in Malta. It presents a national curriculum framework on which is based the learning-outcomes framework, as well as the learning and assessment programmes at all levels of pre-school and compulsory education. Curriculum rewriting in terms of learning outcomes has started. The school-leaving certificate was redesigned and renamed the secondary school certificate (SEC), following a series of consultation meetings between the Directorate of Quality and Standards in Education and the MQC, leading to the inclusion of informal and non-formal learning as well as the individual's personal qualities. Covering the first two levels of the MQF, this initiative is intended to instil a culture of acknowledging learning achievements irrespective of the context within which the learning process occurs, from the early stages of education.

The MQF is intended to ensure that the contents of VET curricula are led by key competences and learning outcomes based on feedback from industry. Development of occupational standards and sector skills units is work in progress.

Validation of non-formal and informal learning and links to the NQF[121]

Malta is developing its national strategy on validation of non-formal and informal learning. The NCFHE, established in 2012, has been charged with introducing a national system for validation, including drafting national guidelines aligned with the MQF. One of its tasks is to introduce the learning-outcomes approach and to ensure that this is systematically implemented and used. The bases for validation are in Legal Notice 295/2012 (Maltese Ministry of Education and Employment, 2012*b*), part of a series of amendments to the Education Act which came

119 The register has been placed online at http://bit.ly/1O9M3KO [accessed 29.10.2014].

120 See http://bit.ly/1O9LW1Z [accessed 29.10.2014].

121 This section draws mainly on input from European Commission et al., 2014.

into force in 2012. The legal regulations provide a framework for validation and for granting awards within the MQF. The Legal Notice establishes that obtaining qualifications through validation should be possible for levels up to 4. The Ministry of Education and Employment is working on an amendment to include levels 5 and 6.

The NCFHE is also in charge of leading the development and implementation of occupational standards which initially will cover identified sectors such as hair and beauty, cultural heritage, construction, hospitality, and information technology. This will be done for other sectors as the national system develops. It is supported by the establishment of sector skills units (overseen by the sector skills committee). A key function of the units is to develop and propose to this committee guidelines and mechanisms for the validation of non-formal and informal learning for all skills within their respective sector. They also ensure that validation institutions are meeting the required standards set out for the validation of non-formal and informal learning. These sector skills units will identify the different jobs in their particular sector, outline the knowledge, skills and competences required to perform these jobs, and map them against the NQF. Occupational standards supporting a validation framework have been established for childcare, printing and motor damage assessors.

Referencing to the EQF

In 2009, Malta was the first EU member state to prepare a single, joint report which references the MQF simultaneously to both the EQF and the qualifications framework in the European Higher Education Area (QF-EHEA) (MQC and Ministry of Education, Culture, Youth and Sport, 2009). This approach is 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 modernization efforts. In May 2012, an updated version of the report was presented to the EQF advisory group.

Important lessons and future plans

Development of the MQF has served as a catalyst for education reform, addressing key challenges in education, training and the labour market.

Table 38 Level correspondences between the MQF and the EQF

MQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: MQC and Ministry of Education and Employment, 2012.

Consultation on the development of the MQF and preparation for referencing to the EQF and the QF-EHEA were interrelated processes that led to bridging between stakeholders from different subsystems of education and employment.

The referencing process stimulated further developments including, in 2010, the design of an awards policy through the setting up of a new national awards system, and introducing validation of informal and non-formal learning into compulsory secondary education.[122] A common quality-assurance framework for further and higher education – currently under consultation – is an important further step to align quality-assurance arrangements and the NQF. The draft policy draws on the overarching principles of the European Association for Quality Assurance in Higher Education and the European Quality Assurance in VET frameworks in a common comprehensive structure.

Main sources of information

The NCFHE is the designated national coordination point: http://www.ncfhe.org.mt [accessed 29.10.2014].

122 The new school-leaving certificate gives, for the first time, value to all formal, non-formal and informal learning activities in accordance with the guidelines, prepared by the Directorate for Quality and Standards in Education (Ministry of Education).

List of abbreviations

EQF	European Qualifications Framework
MQC	Malta Qualifications Council
MQF	Malta Qualifications Framework
NCHE	National Commission for Higher Education
NCFHE	National Commission for Further and Higher Education
NQF	national qualifications framework
QF-EHEA	qualifications framework in the European Higher Education Area
SEC	secondary school certificate
VET	vocational education and training

References

[URLs accessed 22.10.2014]

Cedefop (forthcoming). *The application of learning outcomes approaches across Europe.*

European Commission. 2013. *Education and training monitor 2013: country Malta.* http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=11422&no=3

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Malta.* http://libserver.cedefop.europa.eu/vetelib/2014/87069_MT.pdf

MQC; Ministry of Education, Culture, Youth and Sports. 2009. *Referencing of the Malta qualifications framework (MQF) to the European qualifications framework (EQF) and the qualifications framework of the European Higher Education Area (QF/EHEA).* http://www.ncfhe.org.mt/uploads/filebrowser/Malta_Referencing_Report_2012_.pdf

MQC; Ministry of Education and Employment. 2012. *Referencing of the Malta qualifications framework (MQF) to the European qualifications framework (EQF) and the qualifications framework of the European Higher Education Area (QF/EHEA).* http://www.ncfhe.org.mt/uploads/filebrowser/Malta_Referencing_Report_2012_.pdf

Maltese Ministry of Education and Employment. 2012*a*. *Education Act (CAP. 327): Malta qualifications framework for lifelong learning.* Legal Notice 294. http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=23719&l=1

Maltese Ministry of Education and Employment. 2012*b*. *Education Act (CAP. 327): validation of non-formal and informal learning*. Legal Notice 295. http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=23720&l=1

Maltese Ministry of Education and Employmen. 2014. *Framework for the education strategy for Malta 2014-24: sustaining foundations, creating alternatives, increasing employability.* http://bit.ly/1P70CxT

NCFHE. 2014. *National quality assurance framework for further and higher education.* http://www.ncfhe.org.mt/uploads/filebrowser/Publication_1.pdf

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

MAURITIUS

Introduction

Developed following the enactment of the Mauritius Qualifications Authority Act of 2001, the Mauritius Qualifications Framework (MQF) aims to give new impetus to the education and training landscape in Mauritius. The MQF belongs to the second generation of qualifications frameworks, together with countries such as Singapore, Mexico, Namibia and Malaysia (among the first-generation countries are England, Scotland, New Zealand, Australia, South Africa and Ireland). While forged within the Mauritian context, the MQF was significantly influenced by the Scottish Credit and Qualifications Framework, the New Zealand National Qualifications Framework, and the South African National Qualifications Framework (Allgoo, 2011, p. 58).

One of the most significant challenges currently facing Mauritius is the need to make education and qualifications more relevant to the world of work. In order to do this, it is necessary to raise the status of vocational training. According to Dr Kaylash Allgoo, Director of the Mauritius Qualifications Authority, if problems like the skills crisis, unemployment and lack of social mobility in Mauritius are to be solved, it is vital to change the perception that vocational qualifications are for people of lesser intelligence (Allgoo, 2013).

A further problem concerns the certification system in Mauritius, which until now has been disorganized and fragmented. Prior to the introduction of the MQF, there were a large number of education and training providers offering a huge variety of courses. There was no standardization as to subject area, level, duration, or quality. The certificates offered by these providers often contained no information about the outcomes of learning achieved as a result of course attendance. As a result, the career pathways available to qualification holders were limited, many being hampered in addition by historic regulations and bureaucracy. The system was widely seen as elitist, since only a fortunate few were able to gain entry into reputable institutions. Moreover, the certification system did not recognize learning, skills and knowledge acquired in informal or non-formal settings (Keevy, Charraud and Allgoo, 2011, p. 57).

Lacking natural resources, Mauritius' s only resource is its human capital. As in all parts of the world, rapid technological change in recent years has created a powerful demand for new skills and left the unskilled less employable. In this unforgiving labour market, the gap is widening between those who are sufficiently qualified to stay afloat and those who are not. It is therefore essential that Mauritius gives its citizens the opportunity to gain the skills and qualifications they need to sustain themselves throughout their lives.

Main policy objectives

With these challenges in mind, the MQF was established to:

- raise the value of vocational qualifications;
- integrate education and training;
- improve the quality of training provision and provide quality assurance;
- promote the mutual recognition of Mauritian and foreign qualifications;
- give learners a clear indication of the level of their learning and the possibilities for further progression;
- recognize and formally certify competences obtained outside the formal education and training system.

Stakeholder involvement

Following a study conducted by the Scottish Qualifications Authority in 1998, the Government of Mauritius was advised to set up an NQF to bring order to the existing 'jungle of qualifications' (Keevy, Charraud and Allgoo, 2011, p. 57). The MQF was eventually developed by the Mauritius Qualifications Authority (MQA), which was established in 2002 following the MQA Act of 2001. At its outset, the MQA performed the dual role of regulator of the TVET sector and guardian of the MQF. The MQA Act was amended

in 2005, giving the MQA the new function of evaluating and establishing equivalences between qualifications obtained in the primary, secondary or post-secondary sectors and those obtained in non-formal and informal settings, for example through workplace learning. The MQA also establishes equivalences between foreign and local qualifications.

The MQA has set up twenty Industrial Training Advisory Committees (ITACs) comprising experts from both the public and private sectors. In the course of this work, a number of fruitful collaborations have been set up to develop qualifications in particular areas. For example, the MQA has worked together with the Mauritius Institute of Health to develop qualifications in the health and social care sector. Such collaborations have been consolidated over the years and sustainable relationships have been built with the stakeholders involved.

Qualifications are included in the MQF based on their potential to equip learners with the skills required to meet the demands of the economy. ITACs oversee the quality, relevance and international comparability of MQF qualifications, making sure that they are 'fit for purpose' and accord with industry expectations. So far, the MQA has generated some 143 qualifications together with 3,710 unit standards in the following sectors: agriculture, automobiles, adult literacy, beauty and hairdressing, building construction and civil works, early childhood education and care, electrical and electronics engineering, furniture-making, handicrafts, health and social care, ICT, jewellery making, language, management, mechanical engineering, printing, seafood and marine industry, textiles and apparel, tourism and hospitality, and transport and logistics. MQF qualifications are offered by both public and private providers.

Only nationally recognized qualifications from accredited awarding bodies are included in the MQF. At present there are four awarding bodies: the Mauritius Institute of Training and Development, the Mauritius Institute of Health, the University of Mauritius and the University of Technology, Mauritius. International awarding bodies include City and Guilds, and the Association of Business Executives.

One of the functions of the MQA is to register and accredit training institutions in Mauritius. Currently, around 525 training providers are registered with the MQA, offering TVET programmes both with and without awards. Training institutions have to meet strict requirements regarding safety, security, finances, equipment, resources and infrastructure.

The MQA has formulated a set of quality-assurance standards in accordance with the MQA Act 2001, starting with the registration of training institutions and staff, and the accreditation of programmes. Institutions are registered for up to three years subject to continued compliance with conditions and regulations in order to safeguard the interests of learners. The MQA accredits courses through a three-stage process, as follows:

1. A self-evaluation report is prepared by the training institution based on criteria defined by the MQA;
2. The report is validated following an on-site visit by a team appointed by the MQA;
3. Accreditation is recommended by the accreditation committee and approved by the director of the MQA.

The MQA also approves non-award courses intended to upgrade the skills and employability of Mauritians. Approval of non-award courses not only ensures the quality of education and training offered, but also encourages lifelong learning. However, non-award courses are not registered on the MQF.

Level descriptors and the use of learning outcomes

The MQF is a ten-level framework ranging from the certificate of primary education at Level 1 up to the doctorate at Level 10. It covers all three education sectors: primary and secondary education, technical and vocational education and training (TVET), and tertiary education. This tripartite structure allows for the integration of academic and vocational awards. Each level of the MQF is accompanied by a level descriptor which states expected learning outcomes. The focus on learning outcomes represents an important shift in attitude.

Recognition and validation of non-formal and informal learning and links to the NQF

A significant proportion of the Mauritian labour force built their careers through apprenticeships without having undergone any academic or formal training. Such people, who were previously shut out of the education and training system, are catered for under the MQF through mechanisms for the recognition of prior learning (RPL). Under the new system, informal and non-formal learning have the same status and value as formal education. This constitutes a major reform of the TVET sector in Mauritius.

Table 39 Mauritian National Qualifications Framework

LEVEL	PRIMARY/SECONDARY EDUCATION	TVET/ WORKPLACE	TERTIARY EDUCATION	LEVEL
10			Doctorate	10
9			Master's degrees, e.g. M.A., M.Sc., M.Phil. Postgraduate certificates, Postgraduate diplomas	9
8			Bachelor with honours, conversion programmes	8
7			Bachelor (ordinary degree)	7
6		Diploma	Diploma	6
5	HSC/GCE 'A' Level/BAC/IBAC	Certificate	Certificate	5
4				4
3	SC/GCE 'O' Level			3
2				2
1	Certificate of primary education			1

Source: Allgoo, 2010.

The MQA introduced the concept of RPL into the Mauritian education system with the aim to 'recognize and validate competences for the purpose of certification obtained outside the formal education and training systems'. RPL renders visible and rewards knowledge and skills no matter what learning environment they were acquired in, allowing individuals greater mobility within the labour market. People who have dropped out of the education and training system can now re-enter it without starting again at the lowest level. Through validation of their prior learning, they can acquire qualifications at levels 2 to 4 of the MQF. This boosts their self-esteem and promotes lifelong learning.

The RPL model has been widely accepted by all stakeholders. Employers have welcomed RPL since it provides them with qualified and well-motivated personnel. Since the pathways for further learning have been clearly defined, some trade unions have shown greater interest in the system.

RPL candidates' knowledge and skills are assessed under the MQF by matching them against a fixed set of unit standards, which are the building blocks of qualifications. An MQF qualification comprises an average of 25 unit standards. Each unit standard is developed for a specified level and defines the depth and breadth of the subject matter at that level. If an applicant's knowledge and skills satisfy the outcome requirements of a qualification, s/he can acquire either a full formal qualification or a record of learning through RPL.

Pilot RPL projects have been funded by the National Empowerment Foundation. Training of RPL facilitators and assessors is an ongoing process with the ultimate aim of implementing RPL in all sectors. Awareness campaigns have been organized throughout the island to inform the public about the development and benefits of the MQF and RPL.

The RPL reform in Mauritius would not have been possible without the vital support of the Ministry of Education and Human Resources.

Referencing to regional frameworks

Mutual recognition and harmonization of qualifications frameworks across the globe is rapidly becoming a necessity. In pursuit of this goal, the MQA has signed memorandums of technical cooperation with Botswana, Namibia, Seychelles, Ghana, Gambia, Tanzania, Zambia, Réunion and Barbados. The MQA is working in close collaboration with countries in the African region through the Virtual University for Small States of the Commonwealth (VUSSC), an initiative of ministers of education of small states, which aims to build human-resource capacity in small commonwealth countries to stimulate an increase in the courses offered in these countries, and to facilitate the transfer of credits and qualified people across borders.

The Southern African Development Community Regional Qualifications Framework (SADC RQF) was developed with the purpose of simplifying, structuring, classifying and valuing the many existing qualifications within member states and across the sub-region. It is hoped that the work of the SADC RQF will facilitate the mobility of learners and skilled workers in the region. However, the RQF is still a long way from being operational.

Important lessons and future plans

The process of designing and implementing the MQF has led to an enhanced synergy between academia and the TVET sector, as well as between education and training, and the world of work. This is partly due to the improved visibility of the outcomes of non-formal and informal learning as a result of the MQF.

Cooperation and capacity building are at the forefront of the Mauritian Government's plans for the future of the MQF. A significant number of international students are expected to enroll in TVET programmes in Mauritius in the near future. In preparation for this influx, the government plans to set up a control cell at the level of the MQA and a software application for student tracking. Such a system would serve as a reporting tool which would help to further Mauritius' ambition to become a knowledge hub and a centre for educational excellence.

In the next phase of consolidation, the MQA plans to intensify its efforts to increase public awareness of the benefits of NQF. This will entail holding seminars and conferences across Mauritius and Rodrigues, as well publishing press advertisements, pamphlets and brochures. The maintenance of the MQF itself, however, remains the core priority of the MQA.

References

Allgoo, K. 2007. *The National Qualifications Framework in Context: The Mauritian Experience.* (Paper delivered at the IVETA Conference Mauritius). Port Luis, MQA.

Allgoo, K. 2010 .*The Introduction of Recognition of Prior Learning in TVET Mauritius – The Mauritian RPL Model. Mauritius Qualifications Authority Report.* Port Luis, MQA.

Allgoo, K. 2013. Mauritius: The Mauritian model of Recognition of Prior Learning (RPL). M. Singh and R. Duvekot (eds), *Linking Recognition Practices and National Qualifications Framework. International benchmarking of experiences and strategies for the recognition, validation and accreditation of non-formal and informal learning.* Hamburg, UIL.

Keevy, J., Charraud, M. and Allgoo, K. 2011. *National Qualifications Frameworks developed in Anglo-Saxon and French Traditions: Considerations for sustainable development in Africa.* (Triennale on Education and Training Africa, Ouagadougou, Burkina Faso, November 27-December 2, 2011). Tunis, ADEA.

Steenekamp, S. and Singh, M. 2011. *Recognition and Validation of Non-formal and Informal Learning, and NQFs: Critical levers for lifelong learning and sustainable skills development. Comparative analysis of six African countries.* (Triennale on Education and Training Africa, Ouagadougou, Burkina Faso, 27 November - 2 December 2011). Tunis, ADEA.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

MEXICO

Introduction

The Mexican Qualifications Framework (*Marco Mexicano de Cualificaciones*) (MMC) is a comprehensive framework developed by the General Directorate of Accreditation, Authorization and Recognition (*Direción General de Acreditación, Incorporación y Revalidación*) (DGAIR), within the Secretariat of Public Education (SEP) (DGAIR, 2011*a*)

While Mexico's economic productivity has grown over the last two decades, the pace of growth today is slower than in other emerging economies. This is largely attributable to deficiencies in human capital, workforce training and education. Data from the World Economic Forum's Global Competitiveness Report 2012–2013 suggest that Mexico's innovative potential is hampered by the low quality of its education system. The country was ranked 100th overall out of 148 countries, 124th in mathematics and science, 81st in information and communications technology, and 75th in the uptake of new technology in business.

Due to demographic changes and migration of many young people to the USA, a gradual aging of the population has taken place. At the same time, the proportion of people who never entered school or who left school early is higher than those who are registered in initial education. Despite these features, Mexican society places high importance on qualification levels and is a strongly credentialist society. Raising levels of education, skills development and social engagement are seen as crucial for the continued development of a strong social and economic democracy in Mexico.

Over the last decade, capacity building in higher education has been the main concern of the Mexican higher education policy. The gross enrolment rate was only 13 per cent of the age group 19–23 in 1991–1992 and reached 32.4 twenty years later. Yet, in 2008, Mexico's coverage rate was still the lowest among the big countries (Brazil, Argentina and Chile) in Latin America. It was also the lowest in the OECD, where most countries are well above 50 per cent – or even over 70 per cent in, for example, the Nordic region.

Most of the growth in Mexican higher education has been concentrated at the *licenciatura* level (first degree requiring 4.5 to 5 years of study) while shorter vocational higher education grew at a much slower pace (it represents only 1 per cent of graduates in Mexico, compared to an OECD average of 9 per cent. In recent years, Mexico's attention has, therefore, focused more on the postgraduate studies.

A major priority of the SEP is to increase the contribution of higher education to the development of the country and its transition to a knowledge society. For graduates, the current situation is rather satisfactory, with a higher-than-average private return on higher education studies and a smoother access to the labour market than elsewhere in Latin America, as well as in Europe. Against this mixed picture, the SEP's main priorities are to articulate educational programmes at all levels of the national qualifications framework with skills demanded in the labour market.

Main policy objectives

The main objectives of the MMC are to:

- serve as a reference for the process of certification, which is the responsibility of DGAIR;
- recognize partial qualifications through the accumulation and transfer of credits;
- recognize existing qualifications in the national education system in cooperation with other national bodies and institutions;
- recognize learning outcomes from formal, non-formal and informal learning;
- facilitate the readability and coherence of each qualification in the national system of education;
- improve the quality, accessibility and comparability of qualifications as well as of labour certification by explicitly classifying qualifications according to complexity of level descriptors;
- cover all sectors: general education, higher education, vocational and technical education, and labour competences; learning in formal,

non-formal and informal learning settings; as well as knowledge, skills and broader social and personal competences, aptitudes and values;
- improve comparability between: different sub-systems of the education system; between formal, non-formal and informal; and between vocational education and training and labour competences.

The National System of Competence Standards (NSCS) is a framework for the recognition and accreditation of labour competences. It is based on six strategic principles:

- Helping employers, workers, educators and the government to work together to improve economic competitiveness and growth;
- Involving all sector leaders in setting agendas and making decisions;
- Encouraging employers and workers to play an active role in designing the NSCS, thus fostering demand for competent workers;
- Offering recognition and certification to all who require it, including private-sector and self-employed workers, government workers, teachers and students;
- Developing educational curricula aligned to the NSCS;
- Promoting new paradigms for assessment based on demonstration of competences in addition to traditional knowledge tests.

Stakeholder involvement

DGAIR has been responsible for the development of the Mexican Qualifications Framework. Among the other relevant responsibilities of DGAIR effecting directly the present and futue eduction and training system are: regulating and assessing the national system of accreditation and certification of studies; promoting the national and international mobility of students; regulating the operation of private providers of education and allocating scholarships.

Stakeholders from all sectors (industry, education and civil society) have participated in the development of the MMC. The National Council for Standardization and Certification of Labour Competences (CONOCER) has been active specifically on issues related to the NSCS and on equivalencies with formal educational degrees. The NSCS was created CONOCER for the purpose of organizing, implementing and regulating mechanisms for the recognition and accreditation of all learning – formal, non-formal and informal. A government organization with a three-party governance model, CONOCER provides a platform for linking education and the world of work in order to make the Mexican labour force more competitive. NSCS recognition practices are agreed by all stakeholders: employers, workers, educators and the government. They are designed to ensure that Mexican society has competent workers in every area, thus promoting economic growth, educational development and social progress. Mexico's NSCS is sustained by three institutional pillars. These are:

1. sector committees;
2. mechanisms for alignment between educational curricula and 'on-the-job' training; and
3. a national structure for evaluation and certification.

Sector committees of employers and workers develop competence standards for the economic sector they represent. They may adjust educational curricula and recommend the creation of ad-hoc programmes. Members are high-level executives and experts from key areas (e.g. production, logistics, sales, purchasing, human resources, research and development), as well as representatives of employers' organizations, social organizations and government institutions.

Mechanisms for alignment between educational curricula and 'on-the-job' training depend on the competence standards developed by the sector committees. These are formally enshrined in the National Register of Competence Standards, which functions as a national reference for everyone certifiable by CONOCER.

The national structure for evaluation and certification is a network of training, evaluation and certification providers which assures credibility to users, both within the country and internationally.

All formal basic education and most upper-medium (baccalaureate and technological) education is coordinated by the SEP. However, some institutions for upper-medium education are run or recognized by autonomous universities or by the National Polytechnic Institute (IPN).[123] The SEP issues nationally valid formal certificates at the end of primary, secondary, upper-medium and higher education, and confers technical titles upon completion of a specialization in upper-medium technological education. On behalf of the SEP, the General Directorate of (Liberal) Professions registers and confers titles (*titulos*) upon completion of bachelor's degrees, master's degrees and doctorates.

123 Instituto Polotécnico Nacional (IPN).

In addition to this, the secretariats of education, labour and economy, which belong to the governing board of CONOCER, have been working together for some time on improving training, evaluation and certification in the workplace. This involves identifying the sectors of the economy which are most in need of greater human capital and using competence standards to make educational curricula more relevant to the needs of these sectors.

By June 2013 the NSCS had 127 sector committees, of which ninety belonged to the private sector. Of the remainder, fifteen were government sector committees providing standards and qualifications for public servants; twelve concerned culture, the arts, education and sport; and ten covered the voluntary sector (e.g. Red Cross, women's and children's protection, etc.).

Level descriptors and learning outcomes

The MMC has eight levels and is similar in design to the European Qualifications Framework. Competences are evaluated through the NSCS, which, in addition to providing for technical and professional education, includes five levels dedicated to vocational qualifications.

Table 40 Mexican Qualifications Framework

MQF levels	Formal education	Level	NSCS	Competences demonstrated
8	Higher education	Doctorate		- Corresponds to Level 6 of UNESCO's ISCED.[124] Includes advanced and specialized knowledge. Ability to synthesize, evaluate and resolve critical problems in research and/or innovations.
7		Master	Diploma of higher spezialisation	- Corresponds to Level 6 of UNESCO's ISCED. Includes responsibilities dealing with the development of knowledge and professional abilities of the team.
6		Professional licence	Specialized diploma	- Corresponds to Level 5 of UNESCO's ISCED. Ability to integrate academic knowledge with the world of work; ability to understand principles and theories; ability to solve complex problems related to work or studies.
5		Superior technician	Advanced diploma Diploma	- Manages complex technical and professional activities, whether programmed or unpredictable. - Gives general guidelines and specific instructions to subordinate workers. - Takes responsibility for the results obtained from own work and the work of others. - Responsible for planning the activities of a working group. - Responsible for the professional development of individuals and groups of workers.
4	Upper medium	Professional technician	Certificate IV	- Various programmed and/or routinized activities. Some unpredictable activities requiring application of learned techniques and principles. - Receives general guidelines from supervisor. - Gives specific instructions to subordinate workers. - Takes responsibility for the results obtained from own work and the work of others.
3		Bachelor	Certificate III	- Routinized as well as some unpredictable activities. - Receives general orientation or specific instruction from supervisor. - Supervises and guides subordinate workers.
2	Basic education	Secondary	Certificate II	- Programmed activities which are largely routinized and predictable. - Works under instruction of supervisor. - Works effectively in peer group.
1		Primary	Certificate I	- Highly routinized and predictable activities. - Works under instruction of supervisor.
0		Pre-school		

Source: DGAIR, 2012.

124 International Standard Classification of Education

The five labour competence level descriptors developed by CONOCER are aligned with the first five levels in the MMC. CONOCER adopts a holistic approach to competences. 'Competence' may refer to any combination of the following:

- The knowledge and abilities required to execute a particular function in any service or manufacturing sector;
- Social skills, including the ability to work in teams and build social networks based on relationships of trust with others;
- Attitudes, including self-reliance and resilience, motivation to achieve projected goals, and the strength to fight for one's beliefs;
- Intellectual competences, including the ability to generate new ideas;
- Ethical competences, including core values and a sense of right and wrong.

Recognition and validation of non-formal and informal learning

Since the 1990s, lifelong learning has played an increasingly important role in the thinking of Mexican policymakers, and a number of measures have been introduced accordingly. The conception and development of Agreement 286 (and the associated agreements) is a key policy response to the above challenges. It is designed to give learners access to all levels of the education system by offering an alternative pathway to that provided by the formal system. This act also allows equivalences of competence certificates with credits of formal education programmes at vocational and professional levels. The Mexican approach distinguishes between separate pathways to the same educational or qualification outcome. The informal and non-formal pathways, though outside the traditional institutional structures, are nevertheless considered significant enough to be deemed equivalent pathways to a qualification (Campero Cuenca et al., 2008).

Mexico displays a sub-sectoral approach to the recognition of non-formal and informal learning, with different approaches in primary and secondary education, higher education and the employment sector.

The Mexican national education system covers all schools in the country, public (federal and state) and private. It consists of four main levels: basic education, upper-middle (baccalaureate and technological) education which can be either terminal or a preparation for further study, bachelor's degrees, and postgraduate degrees (including specializations, master's degrees and doctoral degrees). The system also includes training for work via technical diplomas. In Mexico, alternative pathways for basic education for youth and adults, and certification, are the main responsibilities of the National Institute for Adult Education (INEA).

Curricula in recognized national educational institutions are set by DGAIR and certificates awarded by the SEP (De Anda, 2010, pp. 5–8). Outside the national education system, diplomas (called *constancias*) are awarded for certain courses and for non-formal education. Following completion of certain legally required procedures, these diplomas can be recognized by the SEP as equivalent to qualifications in the national system.

The recognition of labour competences for workforce development and employability is closely associated with the National System of Competency Standards (NSCS), which has been developed by CONOCER and under which the recognition of non-formal and informal learning is organized, regulated and implemented (García-Bullé, 2013). In accordance with Agreement 286 of the Ministry of Education (*Acuerdo 286 de la SEP*, issued on 30 October 2000) CONOCER promotes the development of certifiable standards for recognizing the competences of employers and workers, accredits the assessment and certifications unit standards, and issues official 'labour competence certificates'.

Companies, whatever their focus, are now legally obliged to provide their employees with training and skills development based on the standards of competence set out in the NSCS. Assessment is based on portfolios of evidence, observation of work performance, interviews and demonstration of knowledge. Where necessary, attitudes, behaviour and personal values may also be assessed. Tools for assessment are designed to have a positive impact on the career development of both employers and employees, thus contributing to the success of the organization. Trainees in some international companies in Mexico are even involved in designing their own learning processes and in recognizing and validating the competences gained from them. In most companies, however, models for assessment are still in the process of being developed.

To promote mobility within the country and in the region, CONOCER relates the NSCS with formal educational degrees and the Mexican Qualifications Framework.

Policies for the recognition of prior learning (RPL) are designed to provide value and credibility for

employers, workers, educators and society in general. This involves:

1. recognizing competences that are relevant to a particular sector;
2. conducting recognition and accreditation in a way that is credible for employers;
3. providing mobility for workers and better working conditions, including higher salaries;
4. generating information to help align educational curricula with the requirements of industrial sectors.

Certification of competences under the NSCS is largely driven by the need to make certain industries more economically competitive. Certification often occurs as a result of a personal decision by employers, trade unions, academic institutions or individuals within the industry concerned. In the case of voluntary work, certification is often mandatory in order to comply with the legal requirements of government institutions, government-funded civil organizations, or international institutions. Specific programmes for certification of competences exist for disabled people, non-Spanish-speaking indigenous people and social workers serving these sectors, as well as in the areas of childcare and women's protection. Low-skilled workers who lack formal education can have their labour competences evaluated and certified by a national programme managed by the National Institute for Adult Education (INEA) and credited by CONOCER. The SEP is continually engaged in identifying targets for RPL, in particular industries and areas of the country. Employers and trade unions play a significant role in this process, both in the design of training programmes and in the evaluation and certification of workers' competences according to the NSCS framework.

In October 2012, the Secretariat of Public Education announced the Mexican Bank of Academic Credits.[125] This allows certificates of accredited certification centres, including those from CONOCER, to count towards formal educational programmes at upper-middle and higher levels.

Referencing to regional frameworks

Both the MQF and the NSCS aspire to create links with international qualifications frameworks in order to facilitate labour mobility within the country, the region and, eventually, the wider world (García-Bullé, 2013).

In light of the internationalization of higher education, Mexico is developing transparency tools to facilitate mobility and academic cooperation

125 Article 8 of the Announcement published by DGAIR on the official Mexican Government Diary of 4 October 2012.

Table 41 The Mexican Bank of Academic Credits

MQF Levels	Level	Document of certification (NSCS)	Credits
8	Doctorate		300 credits (3 years)
7	Master	Diploma of higher specialization	60–120 credits (1–2 years)
6	Professional licence	Specialized diploma	240–300 (4–5 years)
5	Superior technician	Advanced diploma	120–180 (2–3.5 years)
4	Professional technician	Certificate IV	136–180 (2–3 years)
3	Bachelor	Certificate III	91–135 (1–2 years)
2	Secondary	Certificate II	46–90 (3 years)
1	Primary	Certificate I	1–45 (6 years)
0	Pre-school	Certificate of pre-school	(3 years)

Source: DGAIR, 2011*b*

across regions, particularly with the European Union. Historically, the main emphasis of 'good quality' higher education (making up the higher education network, ANUIES) has been cooperation and mobility with the United States. Proximity and the NAFTA agreements play a big role in US-Mexico trade and migration relations. ANUIES members organize their internationalization mainly (up to 92 per cent) on the basis of inter-institutional agreements.

Important lessons and future plans

Further implementation of the MMC would benefit cross-regional mobility and cooperation, but, above all, it would produce lasting benefits for Mexico and Mexicans, in particular if it linked to a solid credit system at national level and a comprehensive system of quality assurance.

While several of the reforms in qualifications and credit systems have been initiated by DGAIR, they can only be successfully implemented with the full support of the federal government as whole.

The MMC has facilitated the work of CONOCER by setting out equivalencies between labour certificates and formal educational degrees.

With regard to the CONOCER model for RPL, from the national reform of 2009 until now (June 2013), more than 400,000 certificates were issued in the last five years. This success is attributable to the fact that the model enjoys official recognition and national validity, as well as to fruitful collaboration between the ministries of education, labour and economic affairs. Even more important, however, is the active role played by stakeholders from the grassroots up.

Although RPL of labour competences is promoted, regulated and financed by the federal government through CONOCER, it is driven by employers, workers' association and academic institutions.

At a deeper level, the success of the Mexican initiative is perhaps also explained by the fact that it is fundamentally motivated by a desire to increase competitiveness in order to promote progress and prosperity. Operational issues of training, evaluation and certification, although critical, are seen as instruments for the pursuit of this aim and not as ends in themselves.

References

Acuerdo 286 publicade por la Secretaria de Educación Pública de Mexico (Agreement 286). Mexico Secretariat of Public Education.

De Anda, M. L. 2010. *Qualifications Frameworks: Implementation and Impact. Background case study on Mexico.* Geneva, Skills and Employability Department, International Labour Organization.

CONOCER. Information Brochures of CONOCER. www.conocer.gob.mx

CONOCER. *National Registry of Standards of Competences*. www.conocer.gob.mx

DGAIR. 2011*a*. *Normas específicas por las que se establece el Marco Mexicano de Cualificaciones Official Circular No. DGAIR/0014/2011.* Mexico City, Directorate General of Accreditation, Authorisation and Recognition, Secretariat of Public Education. www.mmc.sep.gob.mx/

DGAIR. 2011*b*. *Normas Aplicables a La Asignación, Acumulación, Incorporación y Revalidación Official Circular No. DGAIR/0016/2011.* Mexico City, Directorate General of Accreditation, Authorisation and Recognition, Secretariat of Public Education. www.mmc.sep.gob.mx/.

García-Bullé, S. 2013. Mexico's National Competence Standard System (NCSS). M. Singh and R. Duvekot (eds), *Linking recognition practices to national qualifications frameworks. International benchmarking of experiences and strategies on the recognition, validation and accreditation of non-formal and informal learning.* Hamburg, UNESCO Institute for Lifelong Learning.

World Bank. 2012. http://bit.ly/1O9Mvss (Accessed 13 February 2013).

World Economic Forum *The Global Competitiveness Report 2010–2011.* http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf (Accessed 31st July 2013.)

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

MONTENEGRO

Introduction

Montenegro is a candidate for entry to the European Union. It is a small, mountainous country, with a Mediterranean coastline. Its population is around 620,000. Fifty-two per cent of the population have completed secondary school, and 17 per cent have completed upper-secondary or higher education. Seventy per cent of young people are attending two- three- or four-year VET programmes. Montenegro is struggling with structural employment problems. Labour-market participation is below 60 per cent of the working-age population and has declined over the past four years as a result of the crisis. Unemployment is just below 20 per cent, and youth unemployment just below 40 per cent. There are strong seasonal differences as tourism, agriculture and construction provide the biggest share of jobs between them. Labour- market demands undergo changes much faster than educational cycles, and systems to anticipate the changing skills needs are underdeveloped.

Montenegro participates in the same EU Education and Training 2020 process as the twenty-seven EU member states. It began participating in meetings of the EQF advisory group (the European Commission-chaired body which oversees implementation of the EQF) in 2014.

As a member of EU 2020, it seeks to meet the same strategic objectives set by the EU framework. These objectives are supported by a series of reference levels of European average performance, the five 'European benchmarks', which set goals to be achieved by 2020.

Latest figures show that compared to the EU 2020 benchmarks in education and training, Montenegro records an early school-leaving rate of 15.5 per cent against the EU target of 10 per cent; it has a participation rate of 0.1 per cent in lifelong learning against the EU benchmark of 15 per cent; in participation of four-year olds in education, it records 30.9 per cent against the EU benchmark of 95 per cent; in performance against PISA targets in maths, science and reading, the country is significantly behind the EU benchmark of 15 per cent of pupils with low achievement in each of these subdivisions, recording figures of 58, per cent, 54 per cent and 49 per cent respectively.

The NQF is part of a wider set of economic, labour- market and education policies to support human capital developments as a driving factor for the integration with the European Union. The NQF is a tool to promote a stronger involvement of social partners, to develop more relevant (vocational) qualifications, to improve progression in lifelong learning and mobility in the labour market, to support adult learning and the recognition of non-formal and informal learning, to make the provision of vocational education and training more flexible, and to move from narrow outdated vocational specializations, to more open and broader profiles, built around key competences including entrepreneurship. Currently there is special attention to qualifications in tourism and agriculture to strengthen and sustain economic development in these key sectors. The NQF is accompanied by wider education reforms, which include the introduction of an external VET *matura*, the diversification of pathways, the promotion of adult learning and better cooperation between providers, local communities and employers, etc.

The main challenges for Montenegro's NQF include:

- To better connect the world of education and the world of work;
- To develop qualifications relevant in content and quality to the labour market;
- To achieve a shift from input approaches to learning outcomes approaches with recognition of all types of learning.

Main policy objectives

The Ministry of Education established an inter-sectoral working group in 2006, which developed a concept paper for a Montenegrin Qualifications Framework, encompassing all types and

qualification levels for general, vocational and higher education, based on eight levels. In October 2008, the Government of Montenegro adopted a strategy for the establishment of the NQF, and with the support of the EU's Instrument for Pre-Accession, preparatory measures were developed, including a Law on the NQF, which was adopted in December 2010. Montenegro's qualifications framework has eight levels, and sub-levels at levels 1, 4 and 7, which accommodate older, pre-outcomes qualifications. It has been heavily influenced by the EQF, and indeed, its eight levels are designed to link to the EQF's eight levels. Level 1 of the MQF links to Level 1 of the EQF, and so on, up to Level 8.

The main goals of establishing the national qualifications framework are to:

- link the various sub-systems of education;
- connect education to the labour market, and support cooperation between social partners in education and employment;
- strengthen orientation towards learning outcomes;
- facilitate recognition of a wider scope of learning outcomes (including non-formal and informal learning);
- improve transparency of qualifications system, and their comparability;
- develop qualifications which meet labour market needs.

Stakeholder involvement

In accordance with the NQF Law, the framework is overseen by the Montenegrin Qualifications Council (MQC). It operates as a board, rather than as an executive agency. Within the Ministry of Education, a qualifications division coordinates the policy and operational work on the NQF. MQC comprises representatives of the Ministry of Education, public administrations, universities, the Bureau for Employment of Montenegro, the Chamber of Commerce, business alliances, trades unions, the Centre for Vocational Education, the Bureau for Education and the Examination Centre. MQC's main functions are:

- deciding placement of qualifications in the framework;
- developing and adapting methodologies for placement of qualifications;
- proposing new qualifications;
- monitoring development of the framework;
- defining criteria for nomination of members of sectoral commissions;
- guiding sectoral commissions' work
- establishing new sectoral commissions;
- deciding new sub-sectors and fields within a qualifications sector on proposal of sectoral commissions
- adopting the sectoral commissions' reports;
- reporting to central government.

The council forms sectoral commissions which, on the basis of comprehensive sectoral analyses, identify missing qualifications and their content and propose their development to the council. Sectoral commissions:

- analyse range and suitability of existing qualifications;
- define needs for all types of qualifications according to the needs of labour market and society;
- propose occupational standards;
- propose qualifications for a sector from the first to the eighth level of education;
- propose priorities in development of new, and updating of existing, qualifications.

The Law on National Vocational Qualifications identifies fifteen sectors. Several sectoral commissions have already defined sub-sectors of sectoral qualifications: tourism, trade and hospitality; agriculture, food and veterinary; construction and spatial development; transport and communications; mining, metallurgy and chemical industry; engineering and manufacturing industry.

Montenegro has one public and two private universities. Changes and amendments of the Law on Higher Education were adopted in parliament on 27 July 2010. The major changes were: the formalization of the three-cycle system; introduction of the European Credit Transfer and Accumulation System (ECTY); introduction of the diploma supplement; a Council of Higher Education; and arrangements for quality assurance (internal and external).

Level descriptors and learning outcomes

Montenegro's NQF has eight levels, plus three sub-levels at levels 1, 4 and 7. These sub-levels mainly accommodate older qualifications. The levels cover all types of qualifications – general, vocational and higher. Levels 1 to 4 cover qualifications acquired in initial vocational/ general education and training institutions, awarded after completion of elementary school and during secondary school education. Level 5 is the intermediate level between vocational qualifications and higher education qualifications.

Levels 6 to 8 encompass qualifications acquired in higher education institutions.

As of summer 2014, sixteen qualifications had been placed in the MQF, from five sectors, namely: tourism and hospitality; agriculture, food and veterinary; economics and law; mining, metallurgy and chemical industries; and traffic and communication. Most are at levels 3 and 4. Latest information can be found at MQC's website: http://www.cko.edu.me/.

Under Article 19 of the 2010 Law on the NQF, the Montenegrin Qualifications Council developed a specific methodology to place qualifications in the NQF's levels. This methodology sets steps to compare the specifications of qualifications such as their educational level, related occupational standard, field, related programme duration, against the NQF descriptors.

Montenegro currently classifies qualifications by three types. These are: formal 'education qualifications', 'vocational qualifications'; and 'additional qualifications' (the latter are, for example, licences to practice, e.g. a teaching diploma following a BA or MA in the teacher's discipline). However, no additional qualifications are yet placed in the NQF. Montenegro does not classify types of qualification in the sense of purpose or target group, e.g. young or adult learners.

Currently, there are no unitized qualifications. However, the Ministry of Education and the Montenegrin Qualifications Council plan to develop some units so learners can combine units to achieve a range of qualifications.

Although the principles of learning outcomes have been adopted, there is much work to do to define qualifications and curricula which are based on learning outcomes.

Validation of non-formal learning and links to the NQF

The Law on National Vocational Qualifications allows for validation of non-formal and informal learning leading to vocational qualifications at levels 1 to 5. Some qualifications can be obtained either wholly or partially via validation. Such qualifications can be assigned a level in the NQF. Candidates can now apply to be assessed for qualifications for agriculture technician, tourism technician and some qualifications in the transport sector. Currently, of the three types of qualification, only vocational qualifications are obtainable via validation. Qualifications obtainable by validation must be based on occupational standards.

Assessment under validation procedures is carried out by the examination centre for qualifications from levels 1 to 5. The examination centre is the national body responsible for national examinations. An individual can apply directly to the examination centre for validation of his/her skills. His/her provider institution may also apply on his/her behalf.

Examination catalogues are based on occupational standards. Qualifications acquired in this way can be taken into account during further education and in acquiring education-level qualifications. In addition to recognition of prior knowledge, the law enables pupils who left school early to acquire vocational qualifications for the parts of the programme that they have passed.

The following institutions are responsible for qualifications from levels 1 to 8:

- The Centre for Vocational Education for vocational qualifications from levels 1 to 5;
- Universities and independent colleges offering higher education qualifications leading to diplomas and qualifications which lead to the award of certificates.

The website of the Montenegrin Qualifications Framework provides information on:

- licensed institutions;
- licensed examiners (only available to registered institutions);
- dates of deadlines for testing (exam dates, etc.);
- details of the complaints procedure.

Preparations for this new system have advanced, but the system is still in an early phase. A number of examination catalogues have been developed, and assessors have been trained by the examination centre and certified by the Ministry of Education. There is no information yet about the number of candidates who have been assessed and how many have obtained certificates.

Referencing to regional frameworks

Montenegro referenced its NQF to the EQF in autumn 2014, following discussions and agreement at EQF advisory group meetings. Its report also constituted self-certification against the Bologna framework in higher education.

Important lessons and future plans

Montenegro already has qualifications in its NQF and so is more advanced than most countries in the region. But it needs to accelerate population of the framework.

Sectoral commissions are currently busy in developing qualifications for vocational education and training. Their number is growing steadily. The universities are also working on their qualifications and curricula. The involvement of representatives of the world of work has increased at national and sectoral levels, but still needs strengthening in implementation, in particular at the level of providers. The procedures for the recognition of non-formal and informal learning have also been clarified. It is important that all these processes advance so that individuals and enterprises can see the benefits of these developments.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

MOROCCO

Introduction

Morocco ranks 129th (out of 187 countries) in the Human Development Index 2014. In 2013 Morocco had 32.9 million inhabitants. Its ongoing demographic transition features a gradual deceleration of the population growth. This transition leads to a gradual decrease in numbers among younger age groups, to a shrinking school-age population, and, in the future, to lower pressure on the capacity of the school system. On the other hand, this transition is leading exacerbate the pressure on the labour market, as a consequence of high growth of the working age population (15–259 years). Over the last 30 years the working-age population more than doubled and reached 20.3 million in 2013. In general terms, the working-age population is predominantly urban (60%), and young (45.2% in the age group 15–229 years).

Educational attainment of the population, employment and labour market indicators

The share of the adult population with low educational attainment remains massive, despite progress in recent years. According to official statistics, 35 per cent of the population falls into the category 'without educational level', where women are over-represented. Twelve per cent of the population over fifteen years has secondary education and 7 per cent has higher education. But the largest group (42 per cent) has only pre-school and primary education. This situation is challenging for growth of skill-intensive sectors and occupations.

The structure of employment by level of education corroborates this challenge. Official statistical data (2013)[1] show that 59.8 per cent of the employed have no diploma (qualification); 27.4 per cent hold medium-level qualifications; and 12.8 per cent a higher education qualification. Moreover, the workforce with higher-level qualifications is concentrated in the public sector (administration, services and enterprises), while construction, trade, and manufacturing have smaller shares of workers with higher-level qualifications.

In 2013 the economy grew by 4.4% and reached the average growth rate registered in the first decade of this century. The surge of economic growth was driven by agriculture and had limited impact on industry and services, job creation, or labour market indicators. The activity rate continues to decline (to 48.3 per cent in 2013), and reflects a serious disadvantage endured by women (activity rate: 25.1 per cent) and youth. The unemployment rate increased in 2014 (9.6 per cent, third quarter), and was 16.8 per cent for holders of higher education diplomas, and 20.6 per cent for youth (15–24). The employment rate also decreased between 2012 and 2013, reaching 43.8 per cent, but the female employment rate is extremely low (less than a third of the indicator for men). Holders of higher education qualifications have the highest employment rates (50.1 per cent). The number of young people not in employment, education or training (NEET) is high: according to an estimate by ETF (Torino Process, 2014), this indicator was 30.6 per cent for the age group 15–24 (2013).

Policies addressing challenges in human capital

Public policies recognize the immense challenges of human capital development and have addressed them through education and training strategies and emergence plans, active labour market policies, programmes for retraining young unemployed graduates, literacy programmes, increased public spending for education and training, and enhanced international cooperation. The 2014 evaluation of the education strategy (*Charte nationale de d'education et de la formation*, launched in 2000) highlights the achievements, and the failures and inefficiencies of implementation of the *Charte* over a decade: visible progress was registered in access and participation in education, but substantial deficiencies persist, notably in terms of high dropout rates, quality of competences acquired at school, and the mix of inequalities (rural-urban; gender; private school-public school).

Both the new strategy for VET (2015–2021) and the new employment strategy are in the final stage of official adoption. They address many of the above challenges and share a number of

commonalities, such as: increased participation of the vulnerable groups and reintegration of out-of-school youth in varied types of education and training; reform of CVET governance and increased access to continuing training by all types of enterprises, including the smaller sized; strengthening of key competences, soft skills, employability skills in all VET programmes; focus on quality; enhancement of the role and place of the enterprise in VET; and support to better-quality apprenticeships.

In 2014, the country launched the *Baccalauréat Proféssionnel* in four pilot branches within industry and agriculture, with the aim to link this stream of education to the realities of work in enterprises. Other initiatives in the same direction include development of public-private partnerships in VET – with the establishment of modern training institutes managed by leading enterprises in a number of emerging sectors (such as automobile, aeronautics, fashion and energy).

The capacity of the education and training sector to efficiently adjust and respond to economic/ market demand for skills has been at the centre of attention of debates and strategies. Despite the many structural initiatives in place (anticipatory sector studies, repertories of occupations, referentials of competences and the competence-based approach for VET curriculum and teaching), most stakeholders express concern about the gap (mismatch) between actual skills and competences acquired in VET and higher education and the requirements of employers and enterprises. All agree on the deficiencies of the soft skills and key competences acquired in education and training, while acknowledging that these skills are increasingly important to a successful transition from school to work and for adaptability and progression afterwards (employability).

The 2011 Constitution of the Kingdom placed vocational training and decent work among the constitutional rights guaranteed to all citizens. Such an objective can be achieved only under several conditions, including that the processes of training, qualification, accreditation of providers and evaluation of providers are based on quality standards adopted by all stakeholders and social and economic partners of the vocational training system.

Despite the growth of VET infrastructure and provision, the current capacity (and organization) of initial VET in its various forms does not satisfy demand of learners. The ratioof candidates to study places was 2:3 in 2012/2013, with large variations between sectors. In 2012/2013, initial VET accounted for almost 381 thousand students, with approximately 60 per cent studying at the two highest levels (technician and higher technician – corresponding in principle to qualifications of NQF levels 3 and 4), and 40 per cent - at the lowest levels. An autonomous quality assurance agency for higher education was established in 2014. An integrated system for evaluation for VET is in construction to ensure a coherent and common approach to performance improvement across the wide variety of VET providers and structures.

Main policy objectives

The reference document on the Moroccan National Qualifications Framework (CNC) was validated by a high-level senior officials' NQF steering committee in February 2013. However, this document has no legal force.

The objectives of the CNC, as formulated in the document, are:

- to contribute to reinforcing the country's position to cope with the economic and social challenges of today and tomorrow;
- to place the individual at the centre of education and training, facilitating continuity and progression throughout personal and professional life;
- to allow a dynamic approximation between supply and demand for training;
- to facilitate sectoral, geographical and learning mobility;
- to ensure better horizontal and vertical mobility;
- to implement a system of quality assurance for qualifications offered to both youth and adults.

In March 2015, the working group of CNC focal points, representing all ministries and the employers, confederation, agreed to a proposal for the institutional setting of the CNC and to the key objectives and milestones for a roadmap for implementation of the CNC. This proposal is based on a three-tier setting: i) decision-making level: National Commission of the CNC (political); ii) organizational level (executive committee) composed of the secretary generals of the relevant ministries and the Confederation Generale des Enterprises du Maroc (CGEM); and iii) a permanent secretariat, under the presidency of the government. The permanent secretariat will be staffed with dedicated personnel. The working group proposed the inclusion of two new institutions in the CNC setting: i) the ministry of Employment and Social Affairs; ii) Trade Unions (confederation/association). Key objectives (in discussion) for 2015/2016: i) adoption of the CNC legal basis; ii) mapping of models of

CNC governance in selected EU countries, and networking; iii) capacity building of the permanent secretariat; iv) piloting the CNC (levelling) in selected sectors and starting a repertoire and database.

Another important policy objective is to establish a comparison (but not referencing) with the European Qualifications Framework as part of wider cooperation with the EU and in particular to facilitate workers' and students' mobility.

Stakeholder involvement

On 4 June 2014 the Prime Minister issued a *Circulaire* establishing the main governing body, the National Commission, composed of three ministers, for national education, higher education and VET. The National Commission includes also president of the Confederation CGEM, and a representative from the Higher Council of Education Training and Research. This Circulaire entrusted the Department for Vocational Training with the role of secretariat of the National Commission, which is placed under the responsibility of the cabinet of the Prime Minister, to ensure transversal coherence.

The National Commission has the mission to:

- Follow-up the CNC implementation, its update, evaluation of the award mechanisms, and validation of levelling decisions;
- Link the various components of the education and training system and employment, in view of implementation of the CNC, and recommend reforms and improvement based on evidence gathered through the implementation of the CNC;
- Ensure cooperation and links with the NQFs of other countries.

Phases of development of the NQF

The foundations of the NQF (structure, descriptors and methodology) have been developed through a long process of dialogue and consultation since 2007, with assistance from ETF. This process was based on a consultation and decision-making setting composed of: i) a steering committee four general secretaries [2] and the CGEM); ii) a technical committee formed by 'focal points' from these institutions; and iii) ad-hoc technical working groups within each of the institutions.

- **Awareness phase:** 2007 and 2008: debate focused on the role of qualifications and the added value of implementing an NQF in Morocco. Discussions included national and international dimensions.
- **Analytical and planning phase:** 2009 to 2010: design of a multi-year work plan for the establishment of an NQF in Morocco; the set-up of working groups through the identification of a 'focal point' in each sub-system; and the development of an analytical tool describing the state of play in the field of qualifications at national level (existing certifications, regulations, defining validation, quality assurance, and so on).
- **Design phase:** September 2011 to October 2012: established four working groups representing the ministries responsible for national education, higher education and vocational training (Department of Vocational Training, and the ministries in charge of tourism, agriculture, fisheries and Maritime craft), and CGEM. The teams worked together with CGEM on sample qualifications, including the relevant occupational standards from the tourism and construction sectors, and reached a consensus on a national grid of eight levels and six categories of descriptors.
- **Testing phase:** October 2012 to 2013: testing of the referencing tool to position qualifications to the eight-level matrix of the NQF.
- **New phase** (from 2014): the focus of work in 2014 was on establishment of the legal basis for the National Commission and the launch of the activities to organize operations towards implementation.

Level descriptors and learning outcomes

The Moroccan NQF is composed of eight levels. The level descriptors are learning outcomes-based, formulated in six categories: i) Knowledge; 2) Skills; 3) Complexity; 4) Autonomy/responsibility; 5) Adaptability; 6) Communication skills.

The level descriptors, as indeed the framework overall, are inspired by the EQF and, in higher education, by the Bologna Process; and more generally, by lessons learned from different countries, particularly in Europe. In 2015 social policy researchers proposed a new level, to certify the learning achievement reached on literacy programmes.

The APC (*approche par competences*) is the officially approved approach for the design of VET programmes, based on the analysis of the work situation and related occupational standards. Thanks to the APC, Morocco is gradually mainstreaming the learning-outcomes approach in VET, a fundamental factor for implementation

of the NQF. Challenges persist, however, as the practical implementation of APC VET programmes is slower than expected, due to capacity limitations of providers, and insufficient preparation of teachers and trainers.

An important foundation for the CNC are the repertories of occupations (REM) and the associated referentials of occupational competences (REC), designed by sectors/branches (textile, tourism, IT, etc.). REM and REC are developed by the VET departments in cooperation with the sectoral federations/professionals and the relevant sector ministries (industry, tourism and others), and other partners. Some REM-REC were designed to support the plans for sector development. They are based on the principle of learning outcomes. REM describe key functions and activities by occupation, as well as key required competences. REC provide a fine and detailed description of all competences by occupation.

Together, REM and REC are management tools of the occupations (by sector) to reinforce coherence between learning outcomes (expressing enterprises' needs) and VET programmes by different providers' categories. As such, REM and REC can contribute to the quality of training and qualification outcomes. Finally, REM and REC are good foundations to establish mechanisms for validation of non-formal and informal learning, and elements of career information and guidance. REM and REC have been developed for thirteen sectors, totalling 246 REM and 288 REC [3].

Validation of non-formal and informal learning and links to the NQF

Validation of experience and of professional experience (VAE and VAEP) is considered an important objective and the CNC is open to systematize it. Two pilot initiatives in the construction sector, supported by the French development organization, GIP International, with the expertise of AFPA (Association Nationale Pour la Formation Professionnelle des Adultes), have been implemented in partnership with the construction federation.

Referencing to regional frameworks

The 'Advanced Status' of cooperation with the EU signed in 2008 opens up prospects for deep and comprehensive approximation. Different chapters of the *Statut Avance* point to approximation in areas related to higher education and the qualifications system and framework: i) strengthening of cooperation in qualifications, in particular to facilitate transparency and recognition; ii) negotiation of mutual recognition of qualifications in order to facilitate the mobility of service providers and investors and iii) negotiation of mutual recognition of *licences professionnelles* (vocational bachelor) in the transport trade, in particular sea and air transport. Chapter 4 (Human dimension) dedicates a whole section to the approximation of Moroccan higher education for VET to the European area and, concretely, to approximation of the qualification system to the EQF.

Although not a member of the Bologna Process, Morocco has reformed its higher education sector by implementing the three-cycle structure; in 2014 it established the national independent quality-assurance body for higher education.

Morocco is also one of the participating countries in the European Training Foundation-chaired regional project on qualifications (seven countries, including three EU member states). The project has, to date, produced common profiles for occupations in the key sectors of construction and tourism, a common methodology for comparing with national qualifications, and established networking and knowledge-sharing to build trust between stakeholders of the named sectors.

Important lessons and future plans

The validation by stakeholders of the reference structure of the Moroccan NQF (levels and descriptors) in February 2013 and the subsequent designation of the National Commission for the NQF in June 2014, are major steps forward in the development of the framework and its institutional setting.

In 2015 the prospects for further implementation have improved, but all stakeholders call for more determination to move forward effectively. Effective follow-up of the recommendations of the 5 March 2015 meeting of CNC focal points will be essential to establish the operational structure (permanent secretary) supporting the National Commission, to successfully launch the first meeting of the National Commission CNC, and to start organizational and technical operations. The legal basis of the NQF should be drafted and adopted and the technical work plan needs to be agreed and financed. The permanent secretary can be established under the remit of the government presidency in 2015, and benefit from funding and support.

Much capacity-building effort will be necessary to support this momentum in 2015 and 2016. The ETF will remain a key partner but larger resources are to be sought within possible EU cooperation mechanisms (such as Twining and Taiex) and bilaterally with interested EU member states.

The CNC implementation should go beyond a classification purpose, and should contribute to quality of qualifications and actual learning outcomes, and to improving matching between qualifications and the needs of the economy expressed by enterprises.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

[1] Niveau supérieur: Baccalauréat, diplômes de cadres moyens et diplômes de l'enseignement supérieur (facultés, grandes écoles et institutes).
[2] Ministry of National Education; Department of Vocational Education and Training; Ministry of Higher Education; and the head of the training commission of CGEM.
[3] REM-REC avant 2009: tourisme/hôtellerie; textile/habillement; TIC; BTP; maintenance industrielle et réparation automobile; industrie du cuir. Les REM-REC de 2009–2012: offshoring; aéronautique; commerce et distribution (plan Rawal); équipements automobiles; énergies renouvelables et éfficacité énergétique; electronique; gardiennage et transport de fonds.

NAMIBIA

Introduction

Introduced in 2006, the Namibian Qualifications Framework (NQF) is a comprehensive and inclusive framework spanning all certification levels from school to university, including all forms of learning; formal, non-formal and informal. The NQF is intended to be a register of all official qualifications in Namibia, as well as being a crucial tool for promoting lifelong learning.

Inequality in the education system, inherited from the colonial regime, was one of many major challenges confronting the new government that came to power in Namibia in 1990. Upon independence, large-scale educational reforms were undertaken with the aim of correcting the imbalances of the past and creating an inclusive, fair and learner-centred education system for the future. A policy directive was adopted entitled: *Towards Education for All: A Development Brief for Education, Culture and Training* (Ministry of Education and Culture, 1992). This directive highlighted the four development goals of access, equality, quality and democracy, and gave special importance to lifelong learning as an organizing principle of Namibia's education sector. Other reforms included the Presidential Commission on Education, Culture and Training of 1999 (Republic of Namibia, 1999) and the Education and Training Sector Improvement Programme (ETSIP) of 2005 (Republic of Namibia, 2005)

A key challenge that continues to confront the Namibian education and training system is the perception that learning attained via the conventional, formal route is superior to that attained in informal or non-formal settings, for example, open and distance learning (ODL), workplace-based learning, and learning acquired through general life experiences. The government and concerned stakeholders are committed to changing this perception, and have developed a national policy on recognition of prior learning (RPL) for this purpose.

Main policy objectives

The NQF aims to:

- introduce unity and consistency to the Namibian qualifications system by bringing all qualifications together under one umbrella;
- facilitate horizontal and vertical mobility throughout the education and training system;
- promote the consistent use of qualification titles;
- provide clear information about the knowledge and skills that can be expected of a qualification holder or an RPL learner, making it easier for both learners and employers to understand the similarities and differences between qualifications;
- harmonize the different education and training sectors and improve their alignment with the world of work;
- provide assurance of the quality of education, training and assessment in Namibia;
- enhance the reputation of Namibia's education and training system in the regional, continental and international communities (Namibia Qualifications Authority, 2011).

Stakeholder involvement

The Namibia Qualifications Authority (NQA) was established as a statutory body through Act 29 of 1996. Its purpose is to oversee the development and implementation of the NQF. The NQA networks with other organizations in order to keep abreast of current trends and developments in education and training at local, regional and international levels. It makes formal agreements with stakeholders for the purposes of setting standards, accrediting education and training institutions and their courses, and facilitating student mobility and credit transfer. One such agreement between the NQA and the Namibia Training Authority (NTA) mandates the latter to coordinate the setting of competency standards and associated national curriculum modules and assessment criteria for vocational trades up to NQF Level 5. These are made available as packages to training providers.

Whilst the NQA has the mandate to accredit vocational training providers, the NTA is responsible for their registration. The NQA has signed an agreement with the National Council for Higher Education (NCHE) mandating the latter to register private higher education institutions. Recognized higher education programmes are those that are accredited by the NQA and other statutory bodies such as the Ministry of Education or examination boards.

The NQA maintains close working relationships with the awarding bodies. These include the Directorate for National Examinations and Assessment (DNEA), the National Institute for Educational Development (NIED), the University of Namibia (UNAM), the Polytechnic of Namibia, and the Namibian College for Open Learning (NAMCOL).

Two statutory bodies, the Namibia Tourism Board (NTB) and the Roads Authority of Namibia, have developed a significant number of unit standards for registration on the NQF.

Level descriptors and learning outcomes

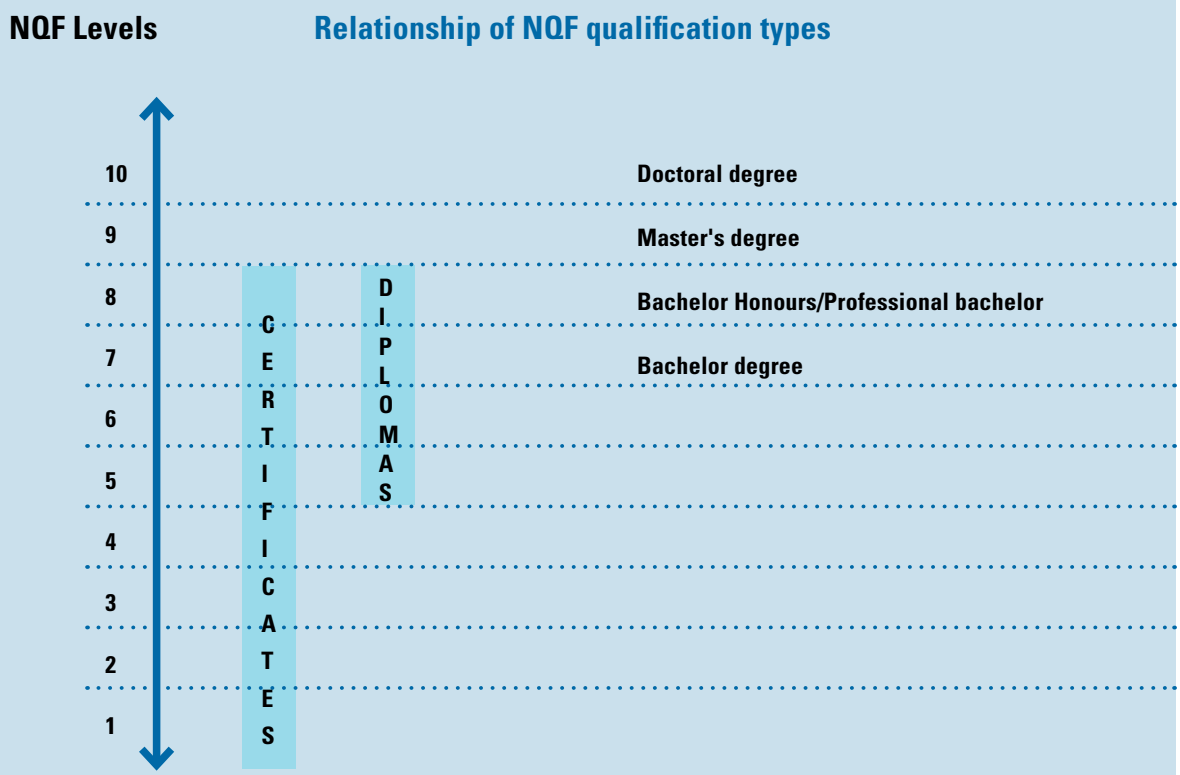
The NQF comprises ten levels, covering secondary, vocational and higher education. Each level is defined by a level descriptor (Ministry of Education, 2006). Accredited institutions register all the qualifications they award on the NQF. In order to qualify for registration, the learning outcomes required for successful completion of a qualification must be clearly stated.

Some learning outcomes are expressed as unit standards which can be awarded independently of the whole qualification. This allows learners to receive recognition for their learning achievements even if these fall short of the requirements for the award of a full qualification.

Recognition and validation of non-formal and informal learning

In 2009, the NQA and NTA were assigned the responsibility of overseeing the development of a national policy on the recognition of prior learning (RPL). An RPL steering committee

Table 42 Namibian Qualifications Framework



Source: Namibian Qualifications Authority, 2011.

with representatives from different sectors was constituted to work on the draft policy. Following a consultation process, approval was granted by the Minister of Education. Full implementation will commence once the policy has been ratified. Registered education and training providers are required to develop institution-specific policies for RPL which must be aligned to the national policy. Once this policy is implemented, RPL candidates will be able to earn credit for unit standards or full NQF qualifications.

Two separate policies on RPL are currently in operation. One was developed by the NTA for VET institutions. The other was developed by NAMCOL. NAMCOL's policy defines RPL as 'the process of identifying, matching, assessing and accrediting the knowledge, skills and experience that candidates have gained through formal, informal or non-formal learning' (NAMCOL, 2008).

At present, NAMCOL's RPL policy is being applied to broaden access to the college's post-secondary programmes at certificate and diploma levels. RPL applicants to NAMCOL enter into an agreement with the college before undergoing a series of assessments designed to allow them to display their competences. The process involves pre- and post-assessment interviews, portfolio development and proficiency tests. At the end of the process, candidates are given written feedback on the outcome of their assessment.

Apart from a few institutional initiatives on RPL, as exemplified by NAMCOL, there is on the whole, very little horizontal or vertical movement of learners between the different education and training sub-systems. One reason for this is that these sub-systems still function in silos, with insufficient coordination leading to duplication of the programmes on offer. Another reason is that the founding acts of publicly funded educational institutions empower the latter to award their own qualifications, weakening the NQF's efforts to unify the system. Training bodies have been slow to register their qualifications on the NQF, creating a further obstacle to mobility. In order to address this problem, the NQA has issued a directive that all qualifications must be registered on the framework by 2015.

Referencing to regional frameworks

The NQA represents Namibia's membership on the Southern African Development Community (SADC) Technical Committee on Certification and Accreditation, which oversees progress towards a regional qualifications framework for the Southern African Development Community.

The NQA is negotiating formal memorandums of understanding with quality-assurance bodies in the region, with the aims of strengthening information-sharing about providers and their courses, building and sharing staff expertise in quality assurance, and facilitating research on matters of shared interest. Formal agreements currently exist with the following bodies: the Botswana Training Authority (BoTA), the Tertiary Education Council of Botswana (TEC), the South African Qualifications Authority (SAQA), the National Council for Higher Education (South Africa), the Ministry of Education and Training in Swaziland, the Roads Authority of Namibia, and the Mauritius Qualifications Authority.

Important lessons and future plans

Namibia has been at the forefront of NQF development in SADC countries. Namibia aims at facilitating assessment, certification and quality assurance as well as learner mobility across education and training systems. This has had implications for the development of post-primary education in Africa. Post-primary education as well as diversified secondary education are increasingly perceived to include skills development and technical and vocational education and training (TVET), thus being elements of a coherent system of education and training, which includes both theoretical and applied learning. However, while the Namibian Qualifications Framework covers the whole spectrum of general education and vocational training activities, there is still work to be done to have a linked system with common structures for transferability between education and training and vice-à-versa.

References

Ministry of Education and Culture. 1993. Toward Education for All: A Development Brief for Education, Culture, and Training. Windhoek, Gamsberg Macmillan, 1993.

Ministry of Education and Culture. 1992. *Towards Education for All: A Development Brief for Education, Culture and Training.* Windhoek, Ministry of Education and Training.

Ministry of Education and Culture. 2009*a. Draft National Policy on Recognition of Prior Learning.* Windhoek, Government Printers.

Ministry of Education and Culture. 2009*b. Draft National Policy on Lifelong Learning.* Windhoek, Government Printers.

Namibian College of Open Learning (NAMCOL). 2008. *Policy on Recognition of Prior Learning.* Wind hoek.NAMCOL.

Namibia Qualifications Authority. 2011. http://www.namqa.org/Home/tabid/158/language/en-GB/Default.aspx (Accessed 21 February 2013.)

Namibian College of Open Learning (NAMCOL). 2000. NAMCOL statistical digest, 1999. Windhoek.

Republic of Namibia. 1999. *Report of the Presidential Commission on Education, Culture and Training.* Windhoek. Capital Press, 1999, reprinted Gamsberg Macmillan, 2001.

Republic of Namibia. 2005. *Education and Training Sector Improvement Programme (ETSIP)* 2006–2020. Windhoek, Government of the Republic of Namibia.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

NEPAL

Introduction

The Nepalese National Vocational Qualifications Framework (NVQF) is in the process of being developed by the Council for Technical and Vocational Education and Training (CTVET) on the basis of the existing National Skills Testing Board (NSTB) certification system.

Nepal's technical and vocational education and training (TVET) system is in urgent need of reform in order to tackle the many challenges the country currently faces. There is a severe lack of employment opportunities for young people, the majority of whom leave school before Grade 10. Opportunities for horizontal mobility between general education and TVET are limited. Despite rapid growth since 1951, there are still not enough institutions for technical higher education (Tulhadar, 2011). This is reflected in the fact that only 3 per cent of young Nepalis are currently receiving formal technical education.

At present, 50 per cent of Nepalese children do not complete primary school. Nepal's tenth five-year plan projected that, by 2007, the net enrolment rates in primary, lower secondary and secondary schools should reach 90 per cent, 65 per cent and 45 per cent, respectively. Even today, however, this goal remains remote: only about 25 per cent of pupils complete lower-secondary education and approximately 8 per cent complete secondary education with a school leaving certificate (SLC).

Employment-oriented skills training in Nepal is equally in need of overhaul. At present, there is no overarching system to govern and fund such training, meaning that what courses there are tend to be short-term and donor-driven, with little return on investment. Moreover, there is no functioning system for the recognition of skills gained in informal and non-formal settings.

A further challenge concerns the recognition of foreign qualifications, which is not currently governed by any legal framework. Nepalis who have studied abroad often encounter difficulties when they return to Nepal and find that the qualifications they have gained are not recognized in their home country.

Overseas migration for employment has become a prominent feature of Nepal's economy and society over the past two decades. Approximately, 1.9 million Nepalese work overseas, excluding India. About 5 per cent of them are women. At least another 800,000 (undocumented) Nepalese employees work in the private sector in India and about 250,000 in India's public sector in 2005. Remittance came from India – 21 per cent, Malaysia – 19 per cent, Saudi Arabia – 15 per cent, Qatar – 14 per cent, UK – 2 per cent, and other countries 29 per cent.

Main policy objectives

In alignment with the TVET reform agenda, the NVQF aims to:

- create a skilled workforce that is recognized both in Nepal and overseas;
- provide a structured system of vocational qualifications that opens up pathways and possibilities for the individual learner.

Stakeholder involvement

The National Skills Testing Board (NSTB) certification system was initiated in Nepal in 1983 by an autonomous body called the Skills Testing Authority (STA). The STA introduced systems for the classification of occupations and the testing and certification of skills in accordance with the guidelines of the Asia Pacific Skill Development Project/International Labour Organization (APSDEP/ILO).

When the CTVET was formed in 1989, the STA was replaced by the NSTB. The NSTB was placed under the jurisdiction of the CTEVT, which is the apex body for TVET in Nepal. The NSTB was given responsibility for developing national occupational skills standards/profiles in 237 different occupations. The NSTB has so far tested 108,000 craftspeople and certified 72,730. Skills tests are performance-based and require candidates to demonstrate mastery of occupational skills standards for their chosen trade in order to obtain

a National Skills Certificate. An occupational skills standard is a written specification of the practical skills, knowledge and experience demonstrated by an individual in a particular occupation.

In 2013, the NSTB and CTEVT signed a memorandum of understanding in which they pledged to work jointly to facilitate the development of sector skill committees (SSC) as well as the NVQF. An SSC is an informal body comprising representatives from government, employers, training institutions and federations in the industrial sector concerned. To date, one SSC has been formed in the construction sector.

Level descriptors and learning outcomes

Skills tests are designed with three target groups in mind:

- Graduates from pre-employment vocational training programmes who need help in making the transition from training to work;
- Experienced workers (employed or unemployed) who lack an official certification;
- Workers who have completed an in-service training programme and are seeking an upgrade or additional certificate.

Skills tests are based on a five-level certification system, from elementary level to levels 1 to 4:

- **Skill level – Elementary**
  - Successful completion of 140 hours vocational training in relevant occupation/trade.

- **Skills test Level 1**
  - Literate with knowledge and skills in the relevant occupation and a minimum of one year's work experience in a related occupation/trade.
  - Or
  - Successful completion of one month (160 hours) of vocational training in a relevant occupation/trade.
  - Or
  - Vocational training with six months' work experience in the relevant occupation/trade.

- **Skills test Level 2**
  - Literate with knowledge and skills in the relevant occupation and a minimum of three years' work experience in a relevant occupation/trade.
  - Or
  - One year's training (minimum 600 hours theory and 800 hours practical) in a relevant occupation/trade.
  - Or
  - One year's work experience after completion of the Level 1 skills test in a relevant occupation/trade.

- **Skills test Level 3**
  - Literate with knowledge and skills in the relevant occupation and a minimum of five years' work experience in a relevant occupation/trade.
  - Or
  - Two years' work experience and one year's training in a relevant occupation/trade.
  - Or
  - One year's work experience after completion of the Level 2 skills test in a relevant occupation/trade.

- **Skills test Level 4 (specifically for ophthalmic assistants)**
  - Three years' experience and one year's training after completion of the Level 3 ophthalmic assistant skills test.
  - Or
  - Certificate in health science (ophthalmology) or equivalent with three years' experience and one year's training.

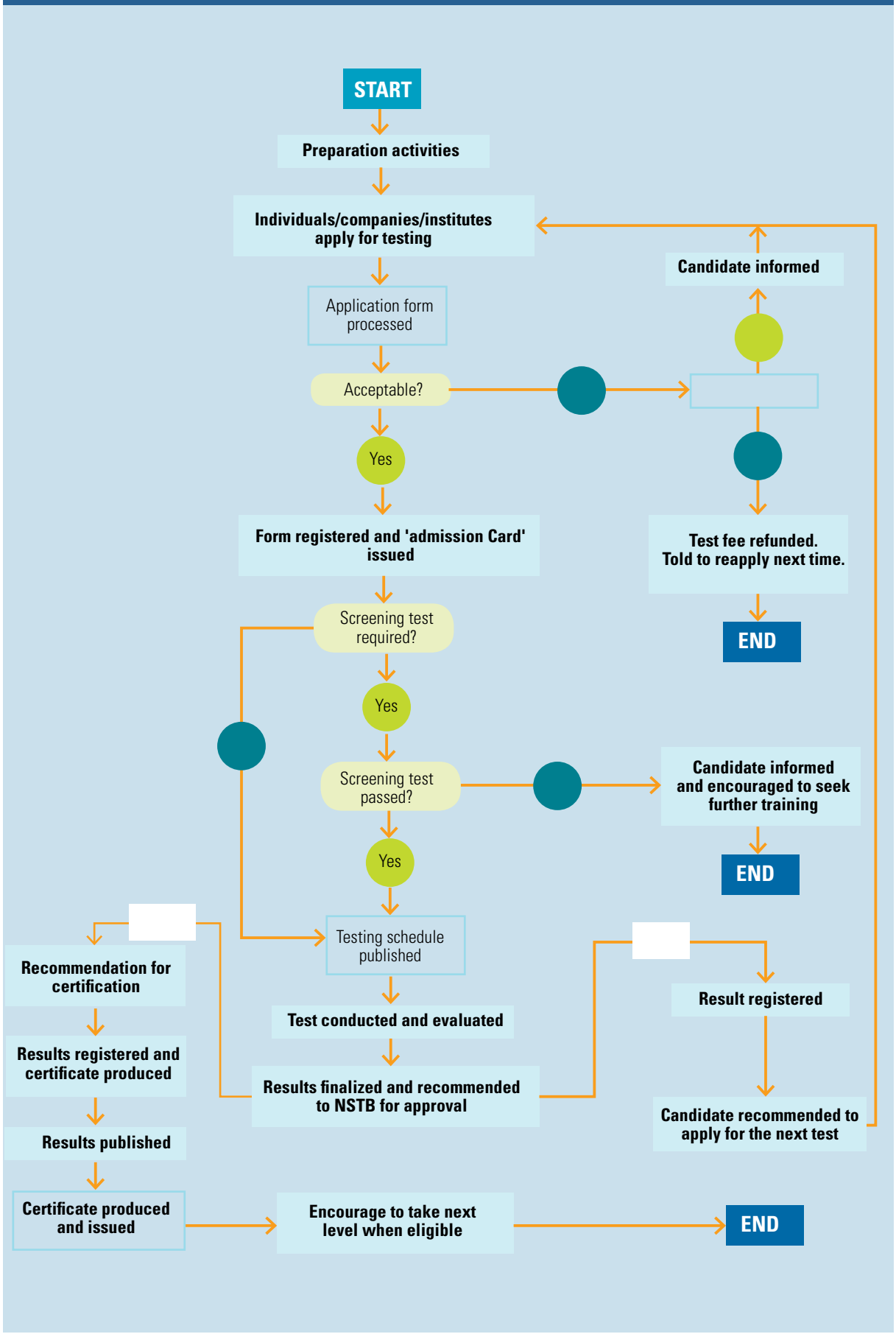
Figure 6 below illustrates the skills testing process.

Recognition and validation of non-formal and informal learning and links to the NQF

One of the NVQF's major goals is to provide educational opportunities for young people who lack access to institution-based TVET provision. At present, TVET leading to diplomas and certificates is available only in institutions (which include technical schools and training centres, affiliated technical colleges and institutes, and the so-called 'annex schools'). However, plans are underway to make the TVET pathway more attractive to young people by embracing all forms of training: formal, non-formal and informal.

There are many good reasons for attempting to attract more young people to TVET. Numerous studies have shown that TVET graduates are more likely than graduates of academic programmes to find employment. Moreover, TVET is an effective pathway to jobs in the international market. Foreign employment surveys have shown that skilled workers such as plumbers, carpenters, civil engineers and mechanics earn higher wages than unskilled workers. A plumber in a Middle Eastern country is likely to earn a monthly salary of

Figure 6 Nepal: Skills testing procedures



Source: CTEVT, 2013

Table 43 Nepal: Entry and exit points from general education to TVET

Educational level	School completion rate of the enrolled	Skills Testing Levels of the Certificate System	Non-formal learning
Tertiary		4	Lifelong learning, Skills training, Livelihood support training
Higher secondary		3	
Secondary	45 per cent	2	
Lower secondary	65 per cent	1	Non-formal education, Adult Literacy
Primary	90 per cent	Basic level	

Source: SDC, 2013

about 40,000 Rupees, whereas the same worker would earn only about 10,000 Rupees per month in Nepal. Countries such as the USA, Canada, Australia, the UK and other European nations offer attractive incentives such as residence and work permits for foreign workers with technical and vocational skills. Promoting international worker mobility is therefore an important priority for the NVQF.

Particular emphasis is placed on facilitating the school-to-work transition for school leavers and the pathway from general education to TVET for early school leavers. The NSTB certification system is intended to help these transitions run smoothly. Figure 2 shows the entry and exit points from the general education system to the TVET system. The two most critical points are after completion of primary education and after completion of lower-secondary education.

This structure allows qualifications at each level to be acquired in either a linear or a modular fashion.[126] Training may be delivered in a variety of ways, including long-term residential courses, modular short courses, flexible morning, evening or weekend classes, etc. Providers may offer any possible combination of centre-based and work-based learning, including on-the-job training, internships and apprenticeships in public and private enterprises, outreach programmes, real-life projects, etc.

The reforms to the TVET system under the NVQF will also cover non-formal education and adult literacy programmes, which play an important role in improving individuals' work performance and employability, and promoting lifelong learning.

Referencing to regional frameworks

As a member of the World Trade Organization, Nepal strives to create a competent and qualified workforce comparable with those of other countries in the region.

Important lessons and future plans

The CTEVT is confident that the NSTB certificates will become increasingly popular and widely recognized in both domestic and foreign labour markets. In the long run, the CTVET plans to link the NVQF to a more comprehensive overarching NQF which will encompass all sectors of education rather than just TVET. This broader NQF will create greater coherence between TVET and general education, further adapting Nepalese qualifications to the changing needs of today's global economy.

126 Candidates may choose either to sit one all-encompassing test or to accumulate credit points by the successful completion of individual modules.

References

CTVET. 2009. *A Glimpse of Technical Education and Vocational Training in Nepal.* Bhaktapur, Council for Technical Education and Vocational Training CTEVT.

CTEVT. 2013. *National Skills Testing Board.* Bhaktapur, Council for Technical Education and Vocational Training (http://nstb.org.np/skilltesting.php?page=Skill%20Test%20flow%20chart)

International Labour Office. 2010. *Labour and Social Trends in Nepal 2010*. Geneva, Universal Copyright Convention.

Nepalese National Planning Commission. 2002. *The Tenth Plan 2002–2007*. Kathmandu, Government of Nepal.

Swiss Agency for Development and Cooperation (SDC). 2013 *Vocational Pathways. Conceptual framework for Education. Vocational Training and Learning for Nepal.* Berne, Swiss Agency for Development and Cooperation.

Tulhadar, G. 2011, *Status of Education in Nepal and Development Plan.* http://web.isc.ehime-u.ac.jp/ice/6-1@Gangalal%20Tuladhar_text%20_8p.pdf (Accessed 11 February 2013.)

Usage, T.; Phyla, K. 2009. *TVET and Secondary School Education in Nepal: A case study of Heated, Makwanpur* http://www2.ipcku.kansai-u.ac.jp/~tkusago/pdf/japdf/reseach/final_nepal_tivet_report_fInal.pdf (Accessed 11 February 2013.)

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

NETHERLANDS

Introduction

The Dutch Government gave its support to setting up a comprehensive qualifications framework for the Netherlands (NLQF) in September 2011. This was referenced to the European Qualifications Framework (EQF) in October 2011. The NLQF builds on and integrates the qualifications framework for higher education which was self-certified to the European Higher Education Area in 2009.

The eight-level framework addresses two main categories of qualification: those regulated by the ministries of education, economic affairs and health/welfare; and those outside public regulation and developed by stakeholders (mainly) in the labour market. During 2012–14 significant progress was made with this latter group and more than ten qualifications were approved for inclusion by mid-2014.

This emphasis on the double character of the national system – where private and public qualifications providers interact and supplement each other – is a defining feature of the NLQF. The NLQF national coordination point plays a key role in taking forward the framework, which is now fully operational. The Ministry of Education has submitted a legal proposal aimed at including national qualifications framework (NQF) and EQF levels in national qualifications and certification documents.

Main policy objectives

The adoption of the framework has been rapid. Initial preparations started as late as January 2009 and moved into an early operational phase in 2012. Qualifications awarded by the private sector often have a strong 'qualifying' power in the labour market and their inclusion in the NLQF is expected to increase their visibility and further strengthen their value. The inclusion and classification of these qualifications will take place at the request of the bodies responsible for awarding diplomas and certificates; this is generally also the body which provides the learning programme leading to the qualification. By bringing ministry-regulated and other qualifications together in one framework, the NLQF will provide a substantially improved insight into the levels of qualifications offered and how these are related.

The NLQF addresses (van der Sanden, 2012) 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, and to find appropriate education and training where they can use their abilities efficiently;
- enabling employers and individuals to understand the levels of existing national qualifications and international qualifications (through the EQF) and how they relate to each other;
- showing how the different qualifications contribute to improving workers' skills in the labour market.

Additional objectives are to:

- 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 among players in the labour market;
- aid communication between all stakeholders in education and employment.

In the Dutch EQF referencing report it is clearly stated that the NLQF has no role in reforming Dutch education and training, in regulating transfer and access, or in entitlements to qualifications and degrees. The framework is understood as a systematic arrangement of existing qualifications aiming at transparency and increased comparability. Whether the NQF will move from being a purely descriptive mechanism to an instrument supporting further development of Dutch education and training remains to be seen. Involving the private sector can be seen as moving beyond a purely descriptive role.

Stakeholder involvement

The Ministry of Education, Culture and Science coordinates development and implementation of the NLQF. Day-to-day running of the framework has been delegated to the NLQF national coordination point, in 2014 employing a staff of four persons.

Framework developments were initiated in spring 2009. A technical working group, coordinated by the three involved ministries, produced a first outline, subsequently reviewed by an official committee (the Leintsje committee), providing the basis for all further work.

Different from many other countries, the initial development of the framework included few stakeholders outside the three ministries directly involved. The Leintsje committee consisted of four professors recruited for their expertise in education and training matters and not for their ability to voice different interests and positions. While consultation has made it possible for all stakeholders to express their position on the developing framework, the original NLQF proposal was only weakly linked to stakeholders outside the main ministries involved in development.
The priority now given to the 'opening up' of the NLQF towards the private sector may have partly responded to this initial weakness. Systematic work has been carried out the last two years, informing potential stakeholders about the potential inherent in the framework. This work is bearing fruit and the first ten 'private qualifications' have now been assessed and included into the NLQF (see Table 42).

The NLQF builds on the qualifications framework for higher education developed (from 2005) in the context of the Bologna Process. This culminated in the NQF for higher education in the Netherlands, which was verified by an independent external committee of peers in February 2009. The accreditation organization for the Netherlands and the Flemish community of Belgium guarantees implementation through the accreditation process, which is obligatory across formally recognised higher education.

Framework implementation

The NLQF can now be described as fully operational. The active role played by the NLQF national coordination point has contributed to this, ensuring active follow-up on a day-to-day basis. While the coordination point operates with limited staff, NLQF's visibility is gradually increasing, also among stakeholders outside formal education and training.

The criteria and procedures detailed in Box 1 illustrate the main principles now developed for the inclusion of 'other qualifications' into the NLQF.

In 2014, the Ministry of Education initiated revision of existing legal texts underpinning Dutch education and training to make sure that the role of the NLQF is reflected. This revision will also address the need to include NLQF and EQF levels in certificates and qualifications. It is not clear at the moment when this revision will be finalized. While this process will not prevent the NQF from carrying out its current work, it will ultimately strengthen the legal position of the framework.

Level descriptors and learning outcomes

The NLQF operates with one entry level (lower than EQF Level 1) and eight qualifications levels. All levels are defined on the basis of learning outcomes. The following key principles are emphasized:

- 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.

The learning-outcomes approach used to describe the nine levels is based on the following considerations.

Table 42 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-domains introduced for skills can be seen as a way of 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 VET (upper secondary vocational education [*middelbaar beroepsonderwijs*] [MBO]) in recent years.

An approach based on learning outcomes or competences is broadly accepted and used in Dutch education and training. The Dutch referencing report to the EQF (2012) details a strong tradition of 'objectives-led' governance of education and training, an approach which has proved conducive to a competence-based approach. Vocational education and training (VET) is probably most advanced in competence

Box 1 Opening up the NLQF: Criteria and procedures

The NLQF – represented by the national coordination point – has, since 2012, actively promoted the potential for qualifications to be included, and allocated a level, in the framework. This is being presented as an opportunity for providers to achieve better overall visibility, to strengthen comparability with other qualifications at national and European level, to be able to apply the learning-outcomes approach, and to strengthen links to the labour market.

If a provider, such as a private company, wants to submit a qualification for inclusion, it has to undergo accreditation (or in Dutch 'validation'). Issues like legal status, property rights, the continuity of the organization and the existence of quality-assurance arrangements will be checked. A list of approved quality-assurance systems is included in the guidance material now developed. If the provider does not use such systems, an on-site visit will be organized.

When an organization has been accredited (for five years) it can submit qualifications for inclusion and levelling. The organization will indicate the level it sees as most appropriate and this will provide the starting point for the assessment on which a final decision will be made. When asking for inclusion, the organization will have to indicate learning outcomes in accordance with the main elements of the NLQF level descriptors (see Table 42), the workload (no qualifications of fewer than 400 hours, nominal workload will be considered), the assessment approaches to be applied, and the link to the relevant occupational profile.

While the national coordination point will be responsible for organizing the process, committees of independent, external experts will assess the applications and give their advice to the board of the national coordination point, which will eventually make the final decision on inclusion. The board includes all the major stakeholders involved in the NLQF, including ministries and social partners.

Organizations will have to pay to use the system. Accreditation will vary between EUR 1,000 and EUR 7,500, depending on whether an approved quality-assurance system is in place. Submitting one qualification for inclusion is set at EUR 2,500.

Table 44 Level descriptors 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 skills.			
Knowledge	Knowledge is the totality of facts, principles, theories and ways of working related to an occupation or a knowledge domain.			
Skills	Cognitive abilities (logical, intuitive and creative thinking) and practical abilities (psychomotor skills in applying methods, materials, tools and instruments) applied within a given context			
Applying knowledge	**Problem-solving skills**	**Learning and development skills**	**Information skills**	**Communication skills**
Reproduce, analyse, integrate, evaluate, combine and apply knowledge in an occupation or a knowledge domain.	Recognize or identify and solve problems.	Personal development, autonomously or under supervision.	Obtain, collect, process, combine, analyse and assess information.	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.			

Source: van der Sanden, 2012.

orientation; following extensive reform, a new VET competence-based structure has been developed and implemented. The same tendencies can be observed in general and higher education, although less systematic. 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. The NLQF will strengthen the role of validation and turn it into an integrated part of the qualifications system. The use of validation as an integrated part of the framework will help to connect with a wider range of learning activities and learning settings, for example in the private sector.

Validation of non-formal and informal learning and links to the NQF[127]

A national system for validation of non-formal and informal learning in the Netherlands commenced in 1998 under the umbrella term 'validation of prior learning' (*erkenning van verworven competenties*) (EVC). It comprises two main formal instruments:

- The *Ervaringscertificaat* is the formal procedure in which a candidate obtains a certificate – the *Ervaringscertificaat* – verifying learning outcomes measured against a national qualification standard. This is a summative approach;
- The *Ervaringscertificaat* sets up a personal portfolio. It is a formative approach aimed at validation of a candidate's competences. It advises on the possible opportunities for certification or personal development steps. This form can be called recognition of prior learning (*herkennen van verworven competenties*).

The *Ervaringsprofiel* and the *Ervaringscertificaat* are formal procedures that can only be awarded if they are carried out by accredited EVC suppliers. Certificates assess and recognize competences in relation to national standards described in terms of learning outcomes. All qualifications in the registries of qualifications, such as the central register of vocational courses for VET (Centraal Register Opleidingen Hoger Onderwij) indicate if there are possibilities of acquiring qualifications through validation. The NLQF also offers providers the possibility of including qualifications not regulated by the government in the framework (as described above in Box 1).

The *Ervaringscertificaat* can be used by the candidate to request exemptions from the exam committee of a body awarding a qualification; final responsibility for granting exemptions lies with the awarding bodies. In theory, a full diploma can be granted on the basis of EVC if the applicant can prove his or her learning outcomes are in line with the expected learning outcomes of a diploma. In practice, this is very difficult for schools and universities to implement.

There has been a change of strategy for validation since 2013, accompanying the government's drive towards 'a participation society' in which all stakeholders take responsibility for their own role in (lifelong) learning. In this sense, focus will be on expanding EVC formal procedures to provide certificates not only linked to national qualifications, but also to sector standards (sector-level training or, in the context of the Netherlands, post-initial or non-formal learning). Another objective is to share ownership of the method and its instruments, such as the use of portfolio, assessment and validation.

Referencing to regional frameworks

The Netherlands referenced its NQF to the EQF in October 2011. The process drew attention to the proposal for referencing academically oriented secondary education (pre-university secondary education (*vvoorbereidend wetenschappelijk onderwijs*) (VWO) to Level 5 of the EQF. Following the feedback from the EQF advisory group, it was accepted that this particular qualification should be referenced to Level 4 of the EQF, but introduced a differentiation within the NQF, designating the VWO qualification as 4+ (in reality introducing a sub-level).

Important lessons and future plans

The Dutch NQF is now in operation, opening up to 'other qualifications' in the private sector. Future success will largely depend on whether the framework will be seen as relevant to stakeholders outside the limited circle of formal, public education and training. Stakeholders close to the process see the need to develop a comprehensive communication strategy in the coming period to ensure that as many stakeholder as possible are involved in development and implementation of the framework. The responsible ministry must

127 This section draws mainly on input from European Commission et al., 2014.

Table 45 Level correspondence between the Dutch qualifications framework (NLQF) and the EQF

NLQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4 and 4+	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1
Entry Level	

Source: van der Sanden et al., 2012.

ensure that the role of the NLQF is clearly defined in planned revision of the existing legal basis.

Main sources of information

The national coordination point is hosted by the (umbrella) organization CINOP/Knowledge Centre for Recognition of Prior Learning: http://www.ncpnlqf.nl [accessed 17.10.2014].

List of abbreviations

EQF European Qualifications Framework
EVC Erkenning van Verworven Competenties [validation of prior learning]
Havo Hoger algemeen voortgezet onderwijs [higher general secondary education]
HBO Hoger beroepsonderwijs [higher professional education]
MBO middelbaar beroepsonderwijs [upper secondary vocational education]
NLQF qualifications framework for the Netherlands
NQF national qualifications framework
Vavo Voortgezet algemeen volwassenenonderwijs [general secondary education for adults]
Vmbo Voorbereidend middelbaar beroepsonderwijs [lower secondary general and pre-vocational education]
VET vocational education and training
VWO Voorbereidend wetenschappelijk onderwijs [pre-university secondary education]

References

[URLs accessed 17.10.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Netherlands.* http://libserver.cedefop.europa.eu/vetelib/2014/87070_NL.pdf

van der Sanden, K.; Smit, W.; Dashorst, M. 2012. *The referencing document of the Dutch national qualification framework to the European qualifications framework.* https://ec.europa.eu/ploteus/sites/eac-eqf/files/EQF_Referencing_Netherlands_022012.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

NEW ZEALAND

Introduction

In keeping with New Zealand's long-standing commitment to lifelong learning, the New Zealand Qualifications Framework (NZQF) was established in July 2010. The NZQF is a unified and outcomes-based framework which provides quality assurance for all New Zealand qualifications. The structure of the NZQF is consistent with that of other mature national qualifications frameworks around the world.

The NZQF replaced the dual qualifications system which was in place until 2010, consisting of the National Qualifications Framework (NQF), developed in 1992, and the New Zealand Register of Quality Assured Qualifications (the Register), developed in 2001. NQF qualifications were based on unit standards and achievement standards, mainly at levels 1–6. The Register was more comprehensive, covering all qualifications, including degrees.

The establishment of the NZQF followed a targeted review of New Zealand's qualifications system in 2008 and 2009. The purpose of the review was to identify ways to better adapt New Zealand's qualifications to the current and future requirements of learners, industry and other stakeholders. At the end of 2008, there were almost 6,000 qualifications on the Register.

Approximately 76 per cent of these were certificates and diplomas at levels 1 to 6. Focusing on these qualifications, the review found that there was a good deal of duplication and overlap, making the qualifications difficult for employers to understand. A series of changes were therefore made to improve the way qualifications are described, developed, and quality-assured:

- Firstly, with the establishment of the NZQF, all qualification type definitions and level descriptors were reviewed and redeveloped with a stronger outcomes focus (using domains of knowledge, skill and application). Qualification outcome statements were strengthened to include a graduate profile describing the knowledge, skills and application of graduates of that particular qualification.
- Secondly, it was stipulated that proposed new qualifications must fulfil a demonstrated need identified by relevant stakeholders, such as industry, employers and/or communities.
- Thirdly, more flexible rules were recommended to allow qualifications at levels 1–6 to be achieved in different ways.
- Finally, it was decided that all qualifications at levels 1 to 6 would be reviewed over a three-year period in order to ensure that they continue to be fit for purpose and to meet the needs of industry.

Qualification reviews will be completed during 2015 resulting in a reduction in the number of qualifications at levels 1 to 6 to around 1,300 on the NZQF.

Relationship between the NZQF and other tertiary education policy

The NZQF is fundamental to an integrated tertiary education system. Government tertiary funding subsidies and student loans and allowances are only for qualifications that are quality-assured and on the NZQF. Student and graduate visas for international students are also only granted on the basis of study towards and achievement of qualifications on the NZQF.

Ongoing development of the NZQF

Since the NZQF was introduced in 1991, it has evolved. It will continue to change to provide an effective and usable qualifications framework.

One of the most important challenges the qualifications framework addresses is the need to recognize and compare qualifications both within and across nations, on the basis of common learning outcomes, irrespective of how, when or where the learning was achieved. The NZQF works towards this goal by applying the language of learning outcomes across all levels of the framework and making explicit the relationships and links between levels. Increased global labour mobility has made this more important still.

Main policy objectives

The NZQF is designed to optimize the recognition of educational achievement and its contribution to New Zealand's economic, social and cultural success.

Specifically, the NZQF:

- conveys the skills, knowledge and attributes a graduate has gained through completing a qualification;
- requires the development of integrated and coherent qualifications that meet the needs of individuals, groups, industry and the community;
- enables and supports the provision of high-quality education pathways;
- enhances confidence in the quality and international comparability of New Zealand qualifications;
- contributes to Māori[128] success in education by recognising and advancing matauranga Māori;[129]
- represents value for money and is sustainable and robust.

Stakeholder involvement and framework implementation

A key function of NZQA is to set the overarching statutory rules for the quality assurance of qualifications and the tertiary education organizations (TEOs) that provide them (section 253 of the Education Act 1989). To implement these rules, New Zealand has two quality-assurance agencies with responsibilities for separate parts of the tertiary education sector (section 159AD of the Education Act 1989):

- NZQA maintains and quality-assures New Zealand's qualifications system for the non-university tertiary education sector;
- Universities New Zealand fulfils this function for the university sector.

128 Indigenous New Zealander.

129 Māori knowledge – distinctive knowledge created by the Māori (usually) in history and arising from their living circumstances, their worldview and their experiences.

Non-university TEOs

NZQA is responsible for quality-assuring all non-university TEOs, and approves qualifications developed by these organizations.

An evaluative approach is used to provide a transparent and robust process for making these decisions. The evaluative approach seeks answers to high-level questions about the need for the qualification in New Zealand, the design of the qualification and the match to stakeholder needs, the adequacy of the qualification for meeting its strategic purpose, graduate profiles and outcomes, and its readiness for publishing. It guides the evaluation of both the big-picture purpose of the qualification and the more specific requirements of the defined criteria.

TEOs are responsible for using self-assessment to maintain and improve their own quality and the outcomes they achieve for their learners and wider stakeholders, especially employers. Self-assessment focuses on identifying, responding to and meeting learner and stakeholder needs, evaluating the effectiveness of organizational processes and practices, and using the understanding gained to make real, worthwhile improvements to outcomes and learner achievement.

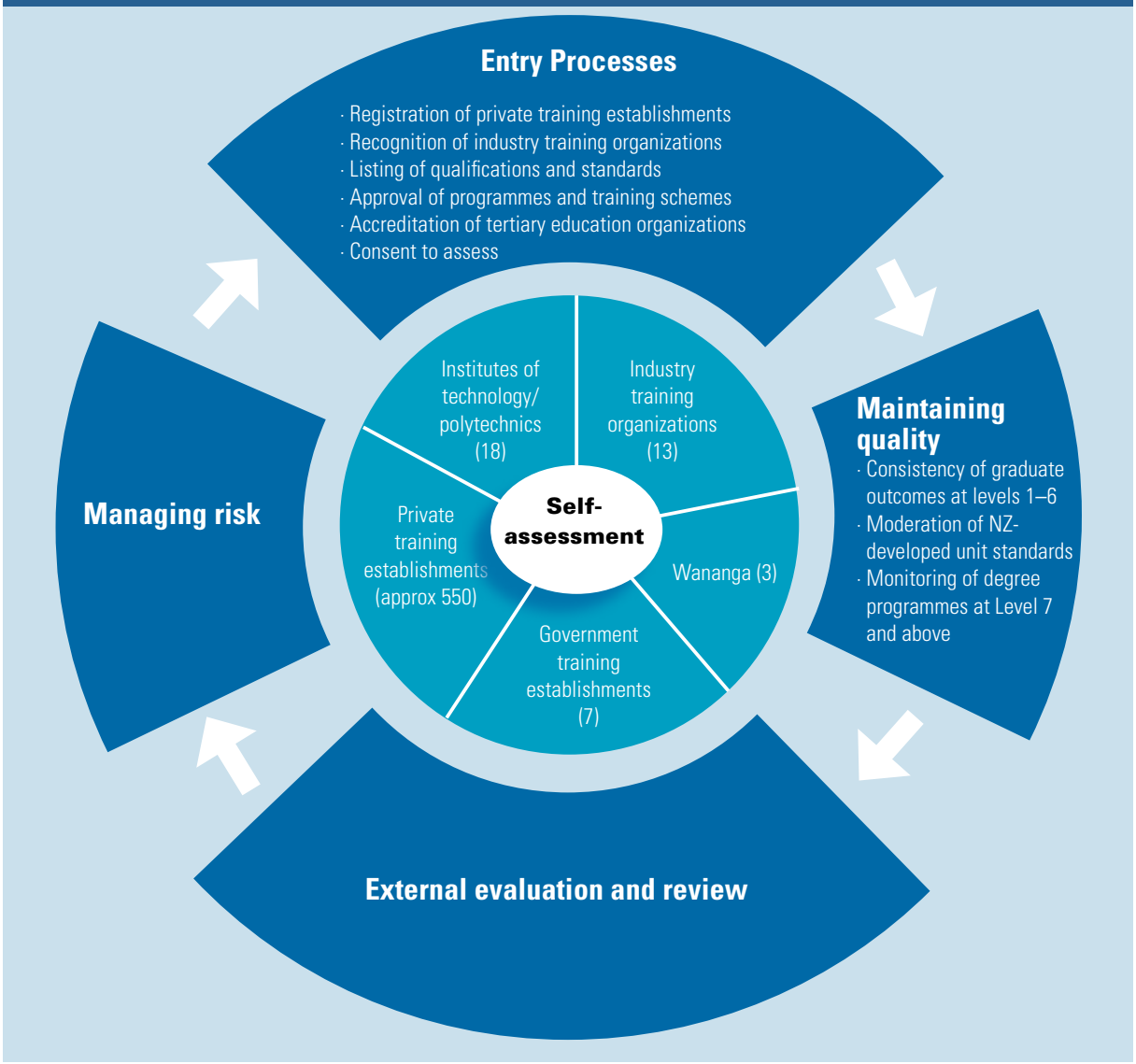
NZQA does not prescribe how tertiary organizations do this, as every organization is different, but has published evaluation indicators as a common guide for TEOs and NZQA to reach consistent evidence-based judgements. TEO self-assessment information provides the evidence base for all the quality-assurance processes.

Entry processes

A private training establishment (PTE) must be registered with NZQA if it wants to develop, deliver or use qualifications listed on the New Zealand Qualifications Framework and standards listed on the Directory of Assessment Standards. The registration process ensures that the PTE meets all legislative requirements for an educational organization, including NZQA rules. The PTE must have governing members who are suitable for delivering education with adequate staff, and equipment and facilities for the education delivered. Furthermore, the PTE must be financially stable with sound quality-management systems and practices.

NZQA also provides advice to ministers and the Tertiary Education Commission on the recognition and re-recognition of industry training organizations (ITOs).

Figure 7 New Zealand: The quality-assurance system for non-university TEOs



To be listed, a New Zealand qualification at levels 1–6 on the NZQF must have defined outcomes that provide a profile of what graduates can do, be and know. Programmes developed by TEOs lead to the award of these New Zealand certificates or diplomas.

For a programme[130] at levels 1–6 on the NZQF to be approved, it must lead to a listed NZQF qualification and have a structure and components that allow learners to achieve the associated graduate profile. It must also have an appropriate NZQF level, credit value and amount of learning, and be designed to meet the specific identified needs of learners. It must show a progression of knowledge and skills and how the learning outcomes will be assessed.

Degree programmes[131] (at levels 7–10 on the NZQF) are approved if they have appropriate learning outcomes and content, delivery methods, equipment, facilities, staff, regulations, assessment and moderation. Degree programmes must also be taught mainly by staff engaged in research. Degree programme applications are evaluated by a panel with the necessary skills and knowledge who advise the TEO and NZQA about the quality of the application.

Training schemes are smaller than programmes and are approved if they are genuinely needed by learners and stakeholders. Training schemes must have a coherent structure that allows learners to achieve the learning outcomes. They must also have an appropriate NZQF level and incorporate sufficient learning to demonstrate a progression of knowledge.

130 Programmes delivered by ITPs Wānanga and PTEs or organized by ITOs

131 Delivered by ITPs, Wānanga and PTEs.

In order to be accredited to deliver a programme or training scheme, the applicant must show that the TEO has adequate staff, equipment and facilities to deliver it as approved. Sometimes NZQA visits the TEO as part of this process.

Consent to assess against assessment standards on the Directory of Assessment Standards is granted when the applicant has support from the standard-setting body and meets the requirements associated with the standards. Sometimes the standard-setting body visits the TEO as part of this process.

Maintaining quality

Consistency reviews are a recently introduced requirement to assure consistency with outcomes prescribed by New Zealand qualifications, certificates and Diplomas at levels 1–6 on the NZQF. All TEOs awarding NZ qualifications at levels 1–6 must participate. The reviews, facilitated by an independent reviewer, consider the quality of the evidence presented by each TEO to decide if it is sufficient and if national consistency of the qualification can be confirmed. The consistency reviews and any follow up are managed by NZQA.

National external moderation ensures that organizations using NZQA-managed assessment standards are making assessor judgements consistent with the national standard. NZQA selects standards for moderation based on TEO history, risk, high use and issues that have been identified with the standards. Moderators look at samples of learner work sent in by TEOs and assess if the judgements are consistent with the national standard. NZQA recommends changes to assessment materials or moderation practice when assessor judgements are not verified. NZQA follows up with TEOs to make sure they address the issues.

After a degree programme at NZQF Level 7 and above is approved, NZQA appoints an independent monitor for the degree. The monitor visits the TEO annually to check if the degree is being delivered as approved and reports back to NZQA. NZQA follows up any recommendations from the report with the TEO. After a suitable amount of time, NZQA can give the TEO permission to self-monitor.

External evaluation and review (EER)

EER uses key questions directly addressing achievement, outcomes and key contributing processes to judge the quality of a TEO. It comes to evidence-based conclusions about the quality and performance of the TEO and publishes a public report. When NZQA detects issues, the evaluation finds the source and size of the problem. Immediately prior to an EER, NZQA requires compliance declarations and gathers information on the TEO from other parts of the quality-assurance system and from elsewhere. The scope of an EER is designed to cover the strengths and weaknesses of the TEO. NZQA evaluates the TEO's educational performance and capability in self-assessment on-site and reports a level of confidence in each of these aspects. The EER is published on the NZQA website.

The TEO is also placed in one of four categories of capability:

Category 1: Highly confident in educational performance and highly confident or confident in self-assessment.

Category 2: Confident in educational performance and confident or highly confident in self-assessment.

Category 3: Not yet confident in either educational performance or self-assessment.

Category 4: Not confident in either educational performance or self-assessment.

Mātauranga Māori evaluative quality assurance (MM EQA) provides quality assurance for TEOs that deliver qualifications or programmes based on Mātauranga Māori or where the whole organizational approach is based on Mātauranga Māori. MMEQA is integrated into all parts of the quality-assurance framework and uses evaluative approaches developed collectively with the sector.

Managing risk

NZQA has rigorous processes to investigate and manage risk. NZQA collects information on organizations from NZQA's quality-assurance processes (i.e. EER, applications, visits), complaints received and concerns raised by government organizations such as Immigration New Zealand. In its investigations, NZQA gathers information on whether there is a risk to students or a breach of NZQA's rules or legislative requirements and takes action, including statutory action, to address these. This can include:

- issuing compliance notices to and imposing conditions on organizations;
- withdrawing quality-assurance status granted by NZQA (i.e. registration, consent to assess, approvals, accreditation);
- legal action for breaches of the Education Act 1989.

Universities

The New Zealand Vice-Chancellors' Committee (now operating as Universities New Zealand – *Te Pōkai Tara*) is the statutory body with primary responsibility for quality-assurance matters in the university sector. It has delegated authority for university programme approval, accreditation, listing of university qualifications on the NZQF, training scheme approval, and ancillary powers under Section 253A of the Act.

Quality assurance in the university sector ensures that academic processes are of an internationally respected standard. The quality-assurance processes use evidence to check that goals are being achieved and that policies and practices are under ongoing review as part of an overall quality-enhancement system.

There are two bodies overseeing the quality assurance of universities - Universities NZ's Committee on University Academic Programmes (CUAP) and the Academic Quality Agency for New Zealand Universities (AQA).

Relationship with NZQA

Under New Zealand legislation, the New Zealand Vice-Chancellors' Committee (Universities NZ) exercises the powers of programme approval and accreditation that are held by the New Zealand Qualifications Authority for the rest of the tertiary education sector. Universities NZ has delegated its powers to CUAP.

Representatives of CUAP, AQA and NZQA meet four times each year to discuss matters of mutual interest, and CUAP nominates university representatives to working groups convened by NZQA to consider a range of academic matters when invited to do so.

The Committee on University Academic Programmes

CUAP is responsible for setting up and applying qualification and regulation approval, accreditation and programme moderation procedures across the university system. This includes running programme approval and moderation procedures, advice and comment on academic developments, and encouraging the universities to develop courses of study that will allow the transfer of learners between programmes and institutions. Universities must submit any proposals to offer new qualifications or to make substantial changes to existing qualifications to CUAP. Proposals must meet official criteria which are set by NZQA. These criteria apply to all qualifications offered by TEOs and are set after consulting with Universities NZ and others in the tertiary sector.

CUAP has a representative from each of the universities, a chair and deputy chair appointed by Universities NZ, and a student representative.

CUAP meets twice a year (usually July and November) to consider proposals made by the universities for new qualifications or major changes to existing ones.

Figure 8 The Committee on University Academic Programmes proposal processes

The Academic Quality Agency for New Zealand

AQA operates independently from the universities and has a governing board of eight people, including academic staff, students, the professions, industry, and quality-assurance experts. AQA has an independent external review every five years.

AQA monitors national and international requirements and good practice in higher education quality assurance. It meets the Guidelines for Good Practice of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE).

AQA supports universities to achieve excellence in research and teaching through a regular audit of the institution and by promoting quality-enhancement practices across the sector. AQA analyses trends from audits and consults stakeholders before finalizing the focus(es) of the next audit cycle framework.

AQA uses suitably experienced and qualified people to make up audit panels. All audit panels include at least one international member.

*A wānanga is a publicly-owned tertiary institution that provides education in a Māori cultural and traditional context.

Legislation is also in place to regulate international students pursuing education and training in New Zealand. In particular, there is a Code of Practice for the Pastoral Care of International Students. This sets out the minimum standards of advice and service that an international student can expect from an education provider or the agent of a provider, as well as the grievance process available to international students. The NZQA has rules for the protection of student fees that cover all payments made to a private training establishment by or on behalf of a student.

As for the development of qualifications, qualifications exist to meet the needs of learners and of New Zealand's society and economy. NZQF qualifications may be developed by a tertiary educational organization that meets the NZQA's listing requirements. NZQA periodically reviews the qualifications on the NZQF to ensure that they remain useful, relevant and fit for purpose. Qualifications are reviewed in groups to ensure that they meet the needs of the sector concerned. The reviews also check that all qualifications are aligned with the rules for listing qualifications on the NZQF.

NZQA is responsible for prescribing rules concerning the process and criteria used to list qualifications on the NZQF, the approval of programmes leading to those qualifications,

Figure 9 New Zealand: The Academic Quality Agency quality-assurance cycle

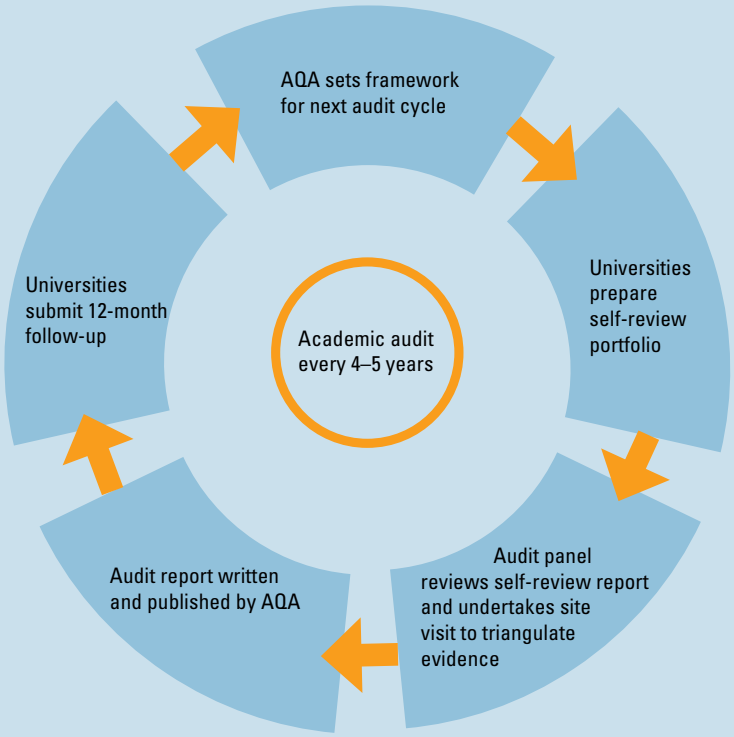
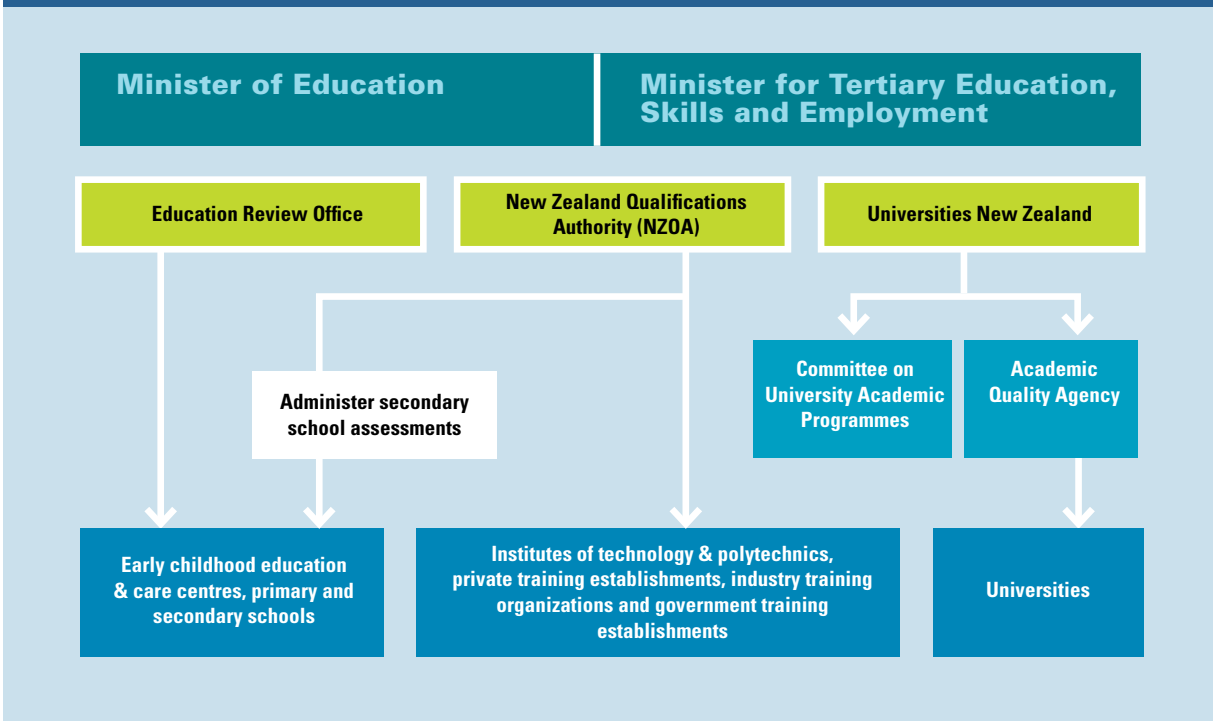


Figure 10 New Zealand: Authorities responsible for quality assurance in New Zealand



and the accreditation of providers to deliver the approved programmes. The criteria within these rules apply to the whole of the tertiary education sector.

Qualifications can be developed by TEOs - universities, institutes of technology and polytechnics, wānanga, private training establishments and government training establishments.

Unit standards and achievement standards that are part of some qualifications at levels 1–6 can be developed by ITOs, NZQA and the Ministry of Education. These are listed on the Directory of Assessment Standards. Some other organizations, such as professional organizations, can also develop qualifications.

Level descriptors and learning outcomes

Purpose of the NZQF
The NZQF is a framework based on outcomes, described in terms of knowledge, skills and attributes, and their application.

NZQA administers the NZQF, which is the definitive source for accurate information about all quality-assured qualifications, covering senior secondary school and tertiary education qualifications, and including all qualifications open to international students. The NZQF provides information about what knowledge and experience holders of qualifications can be expected to have, and about what further education and/or employment opportunities the qualification leads to.

Qualification title, type and level
Qualifications listed on the NZQF have a title. The generic stem of the title begins with the qualification type and is completed by a designator, which identifies its main discipline or subject field, and the level. The title may include other qualifiers, such as optional discipline and focus qualifiers.

The use of qualification titles is restricted to approved qualifications developed by qualifications developers who can demonstrate that their development process has involved, and has had the support of, the appropriate nationally recognized bodies related to the subject title and major content of the qualification.

All qualifications on the NZQF are assigned one of the ten levels. The level is determined by evaluating the qualification graduate profile against the level descriptors. The graduate profile is viewed holistically and the notion of best fit is applied in determining the level.

Strategic purpose statement
A strategic purpose statement identifies why the qualification should be listed on the NZQF. It clearly states the qualification's use and relevance

to learners, industry and the communities. The statement should also acknowledge the cultural and social aspirations of Māori, Pasifika and other communities, where these are reflected in the need for the qualification.

Outcome statements
All qualifications listed on the NZQF contain outcome statements which describe the knowledge, skills and attributes of a graduate. The outcome statement is used by prospective employers and other TEOs, and for comparing qualifications. Different learners will achieve the outcomes in different ways, so outcome statements indicate the minimum achievement expected from a qualification.

Each outcome statement includes:

Graduate profiles that identify the expected graduate outcomes of a qualification. This comprehensively describes what a person awarded the qualification must be able to do, be and know. In developing graduate profiles, the qualification developer should consider the full range of capabilities and competencies.

Education pathways that identify other qualifications that a graduate could enrol onto after completing this qualification. Where qualifications are standalone, and do not prepare graduates for further study, the outcome statement should make this clear.

Employment pathways or contributions to the community that identify the areas in which a graduate may be qualified to work, or the contribution they may make to their community.

Credit value
All qualifications on the NZQF have a credit value. The credit value relates to the amount of learning in the qualification.

In determining the amount of learning in a qualification, a qualification developer estimates how long it would typically take a person to achieve the stated outcomes in the context specified and to demonstrate that achievement through assessment. This determines the credit value for a qualification. One credit is equivalent to ten notional learning hours.

Notional learning hours include:

- direct contact time with teachers and trainers ('directed learning');
- time spent in studying, doing assignments, and undertaking practical tasks ('self-directed');
- time spent in assessment.

A typical learner can usually complete 120 credits of learning in a year.

Subject area classifications
All qualifications on the NZQF are assigned a six-digit code from the New Zealand Standard Classification of Education (NZSCED) classification system. The NZSCED classifies a qualification into a subject area, which can be used when searching for qualifications in an area of interest.

Information about the NZSCED classification system is available from the Ministry of Education website at www.minedu.govt.nz.

Status
All qualifications listed on the NZQF must display and maintain clear information on the status using the following definitions:

Current
Qualifications that are current are those which are listed on the NZQF and can be offered by TEOs.

Expiring
Qualifications which are expiring are those which are either being replaced with a new qualification or the decision has been made for them to be closed. This will normally be as a result of a review.

The qualification may continue to be available to individuals while they complete their programme, but no new learners would be able to enrol. Current candidates will need to complete the qualification before the expiry date.

Discontinued
Qualifications designated as discontinued will no longer be available or awarded.

Recognition and validation of non-formal and informal learning and links to the NQF

Under the section 253 of the Education Act, NZQA has the power to set rules for the quality assurance of the tertiary sector. Section 253(1)(k) states that NZQA may prescribe the details for credits, cross credits, recognition of prior learning, and moderation. NZQA currently undertakes this function through its Approval and Accreditation Rules 2013.

Section 4(4.1), Criterion 5, of the Approval and Accreditation Rules sets out the regulations relating to the approval of programmes in accredited institutions. This requires institutions to have clear, relevant, and appropriate regulations that specify requirements for credit recognition and transfer and recognition of prior learning.

Table 46 New Zealand: Level descriptors and qualification types in the New Zealand Qualifications Framework

LEVEL	NAMING SEQUENCE
10	Doctoral degree
9	Master´s degree
8	Postgraduate diplomas and certificates, Bachelor honours degree
7	Bachelor´s degree, Graduate diplomas and certificates
6 5	Diplomas
4 3 2 1	Certificates

Recognition of prior learning (RPL) is an assessment of relevant and current knowledge gained through prior/information learning – it does not include credit recognition transfer (CRT). An example of RPL is where a New Zealand TEO assesses evidence of a student's prior workplace experience and credits this towards specific papers in a New Zealand qualification.

Internationally, CRT and RPL are commonly referred to as recognition of formal and in-informal learning. Formal learning is intentional from the perspective of the learner and tends to occur within an education provider, is structured, and leads to certification – this is CRT. Non-formal learning is not usually intentional, and is learning resulting from everyday activities related to work, family or leisure. It is not structured and does not lead to certification in of itself – this is RPL. Informal learning refers to learning acquired incidentially through general life experience. The NZQF recognises that learning can occur in non-formal, informal and formal settings, all of which are integrated in the NZQF.

Effective CRT and RPL have an integral role in the education quality-assurance system in New Zealand to:

- Eliminate waste by ensuring learners are not duplicating learning already undertaken ;
- Ensure quality is maintained;
- Provide confidence in learning that is not predicated on where and how the learning has been attained.

Education providers in New Zealand are required to have their own administrative and practical arrangements in place for RPL and CRT. This applies to individual learners, employing organizations, industry and professional bodies, and educational organizations, and includes some institutes of technology and polytechnics which have centres for the assessment of prior learning.

To assist education providers in meeting this requirement, the NZQA has established the following operational principles for credit recognition and transfer:

- Qualifications, courses and programmes should be designed in such a way as to promote and facilitate credit recognition and transfer.
- When making decisions regarding credit transfer, the chief consideration should be the extent to which the decision benefits learners and supports effective learning pathways.
- Transparency in decision-making is critical, particularly where credit recognition and transfer are concerned. Learners are much more likely to remain motivated and involved in their education in an environment where the decision-making process is transparent.
- Mechanisms for credit recognition and transfer should operate across cultural and national borders. Robust policies and procedures need to be in place to support this.
- Credit awarded as a result of recognition of prior learning or current competency is equal in value to credit awarded through other forms of

assessment. Once awarded, credit should be portable by the learner from one qualification to another.

Referencing to regional frameworks

The NZQF is world-leading. New Zealand was one of the first five countries in the world to develop a framework, in the 1990s.

New Zealand is working closely with countries around the world to increase its framework's comparability with the qualification frameworks of our key immigration partner countries, and to support recognition of qualifications in these partner countries.

The main aim of all of New Zealand's referencing and recognition projects is to make it easier to understand and recognize each other's qualifications. Through this work, NZQA and its partner agencies in the other country develop close working relationships, and establish trust in each other's systems.

New Zealand is currently referencing the NZQF to frameworks in the European Union, Australia and Hong Kong. New Zealand is also working with China to develop a referencing framework, to allow New Zealand and China to compare their vocational qualifications.

New Zealand and Malaysia completed the Recognition of Bachelor Degrees pilot project for qualifications recognition in 2012 and are currently working on a project on the recognition of master's and doctoral degrees.

NZQA is contributing to the ASEAN-Australia-New Zealand Free Trade Agreement Economic Cooperation Work Programme (AANZFTA ECWP) projects and has partnered with Thailand and Indonesia in pilot projects for Phase III of the programme. The purpose of the programmes is to increase the capability of ASEAN countries seeking to develop and implement NQFs, by providing planned, tailored, practical and technical support.

The AANZFTA ECWP Capacity Building for NQFs project has two main objectives: first, to increase trade in services, particularly education services and the temporary movement of natural persons, through the development of mutually comparable NQFs; and second, to strengthen education and training systems within each ASEAN member state and the development of a common reference framework to facilitate their harmonization.

Important lessons and future plans

NZQA has learned that reviewing and developing a new qualification requires all parties, including ITOs and education providers, to work collaboratively to identify and understand industry, community and cultural needs. NZQA provides a wide range of guidance and help to qualification developers and others to prevent the duplication of qualifications.

References

Education Act 1989, section 253 and section 159AD.
NZQA. 2015. *The New Zealand Qualifications Framework, Version 3.0*. Wellington, New Zealand.
NZQA. Programme Approval and Accreditation Rules 2013. ttp://bit.ly/1QMrVfc
NZQF. Qualification Listing and Operational Rules 2012. http://bit.ly/1VrQDDb

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with the New Zealand Qualifications Authority

NORWAY

Introduction

Norwegian National Qualifications Framework (NQF) developments were triggered by the 2008 European Qualifications Framework (EQF) recommendation (European Parliament and Council of the European Union, 2008) and its inclusion in the Treaty of the European Economic Area (EEA) in March 2009 (EEA Joint Committee, 2009). Following extensive preparatory work involving the main stakeholders, a comprehensive Norwegian National Qualifications Framework for Lifelong Learning (*Nasjonalt kvalifikasjonsrammeverk for livslang læring*) (NKR) was adopted through government decision in December 2011 (Norwegian Ministry of Education and Research, 2011*b*).

A legal basis defining the overall position of the NKR in relation to the different parts of the education and training system is currently being prepared. Also taking the form of a government decree, this will further strengthen the framework.

The NKR consists of seven levels and covers general, vocational and higher education. It is envisaged that, in a second phase, it will be opened to the non-formal and private sectors. The procedures and criteria for this are currently being discussed among stakeholders. The NKR has now entered an early operational stage, coordinated by the Norwegian coordination point for EQF (hosted by the Norwegian Agency for Quality Assurance in Education) (*Nasjonalt kompetansesenter for utenlandsk utdanning*) (NOKUT).

The NKR was referenced to the EQF in June 2014.

Main policy objectives

The NKR aims at describing the existing national education and training system transparently to make it more understandable, at both national and international levels. This should increase mobility, contribute to more flexible learning pathways and promote lifelong learning.

The NKR will:

- give a comprehensive and general description of what is expected from a learner after completing a qualification;
- provide an overview of the inner logic of education and training systems and so support education and career guidance and counselling;
- provide a description which will make possible comparisons with qualifications in other countries;
- provide a better basis for dialogue with the labour market;
- offer an opportunity to develop new instruments for valuing competences acquired outside the formal system.

More systematic use of learning outcomes is seen as a precondition for the NKR. Learning-outcomes descriptors are supposed to clarify what is expected from any candidate who has successfully acquired a qualification of any type and at any particular level. This will help to clarify the similarities and differences between qualifications and the relationships between them.

The NKR is not seen as an instrument for reform. While it will describe Norwegian education and training, its intention is not to change it. The NKR is instead seen as:

- an instrument/tool that education and training can use for evaluation and further development;
- a platform for debate and dialogue.

The NKR will, for the moment, only cover qualifications awarded by publicly-recognized and accredited education and training institutions. A working group was set up in autumn 2013 to consider possible procedures for inclusion of certificates and qualifications awarded outside the traditional formal education and training sector.

Stakeholder involvement

Development and implementation of the NKR have been based on broad stakeholder involvement. All main education and training stakeholders, as well as representatives from the labour market, have been involved at all levels throughout the process. This involvement has continued into the current implementation phase. Overall, stakeholders have been engaged in and committed to the process, although sometimes expressing very different opinions on the NKR's role and profile. This involvement can be exemplified by the debate following presentation of the initial NKR proposal in January 2011. A total of eighty-five extensive responses were received, submitted by a broad range of stakeholders. The consultation process significantly influenced the final design of and decision on the framework. Particular attention was drawn to its scope and the challenge of opening up to private and non-formal qualifications. Different parts of the education and training system have been actively involved in the process, notably in design of level descriptors and debates following this. It is interesting to note that the social partners, both employers and trade unions, have underlined the framework's potential for reform, in particular for lifelong learning. These stakeholders have, for example, pushed towards an opening up of the NKR to the private sector and in some cases criticized the Ministry of Education for not fully exploiting the framework's potential. This engagement can be seen as positive as it signals a level of commitment.

Framework implementation

The NKR has now reached an early operational stage. This is remarkable as the first development phase, from 2006 to 2009, was fragmented. The process consisted of a series of different initiatives (in higher education, vocational education and training [VET] and tertiary VET) going on in parallel and with limited coordination. This improved from 2009 onwards when the Ministry of Education, reflecting input from stakeholders, stated an intention to work towards a comprehensive framework for lifelong learning and merge existing strands of work into a single approach. The clarifications leading to referencing of the NKR to the EQF in June 2014 concluded this (first) stage of the process and has made it possible for the NKR to move into an operational stage and take its place as an integral part of the overall Norwegian education and training system. Ongoing work on opening up the framework to the private sector will influence the next stage and demonstrate the extent to which the NKR stays a pure transparency instrument or whether its role as a reference point for reform can be taken forward (as wished by some stakeholders).

Level descriptors and learning outcomes

The NKR adopted in December 2011 introduces a framework of seven levels, reflecting the formal education structure and training in Norway. Levels are described through the concepts knowledge (*kunnskap*), skills (*ferdighet*) and general competence (*generell kompetanse*). This approach was already adopted for the higher education framework and seems to be broadly accepted among stakeholders. While the EQF influence is admitted, the main difference lies in the term 'general competence' which refers to kinds of transversal, overarching competences of the learning objectives adopted for upper-secondary education (ability to apply knowledge and skills in different situations by demonstrating the ability to cooperate, by showing responsibility and capacity to reflect, and the ability in critical thinking). Using the term 'competence' in isolation would, according to the proposal, lead to confusion.
The three descriptor elements are further specified in Table 45.

There is broad consensus in Norway on 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 (primary and secondary education and training, years 1 to 13). Finding its main expression in a national core-curriculum, addressing all levels of education and training, the learning-outcomes approach has started to influence assessment and evaluation forms, in particular in VET. An important reason for using learning outcomes is to encourage curriculum consistency at national level. While adaptation is possible at local level, national consistency is important for reasons of quality and also to support validation of non-formal and informal learning.

Adopting the qualifications framework for higher education has also triggered extensive revision of study programmes in higher education, aiming to introduce and apply the learning-outcomes principle in all institutions and programmes. Post-secondary vocational education and training (*fagskole*) have only recently started to apply the learning-outcomes principle in descriptions of their

Table 47 Level descriptors in the NKR

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?

Source: Norwegian Ministry of Education and Research, 2012.

programmes. This development has, to a large extent, been triggered by development of level descriptors in the NKR (Level 5). The priority given in Norway over many years to validation of non-formal and informal learning has also increased awareness of the learning-outcomes approach's potential.

Validation of non-formal and informal learning and links to the NQF[132]

Validation of non-formal and informal learning (*realkompetansevurdering*) has been on the Norwegian political agenda as part of the lifelong learning strategy since the 1990s. In the 2007 strategy for lifelong learning (Ministry of Education and Research), validation was one of the main priorities, and the government's 2009 initiative on lifelong learning states that the system for validation must be promoted and strengthened. In Norway, validation is integrated into the education system, and individuals have the right to have their prior learning and experience validated at all levels of education. The overall responsibility for validation lies with the Ministry of Education and Research. The Norwegian Agency for Lifelong Learning (Vox), cooperating with the Norwegian Directorate for Education and Training, works to promote and support a more uniform implementation of validation across the country, to improve synergy between different stakeholders and increase flexibility of learning pathways.

Existing curricula and study programmes are used as references/standards for validation, so the shift towards learning outcomes, promoted by the NKR, will influence the way validation is carried out. In basic education (grades 1 to 13), curricula have been based on learning outcomes for several years. Validation is performed by services at county or municipal levels. Learners can achieve a partial qualification at any level through validation. They then have the right to access further learning to achieve a full certificate. In upper-secondary VET, adults can take the final craft or journeyman's examination directly, through validation of their practical work experience, instead of having to go through the regular training path. However, they must still pass the final exam to obtain the qualification. In 2014, the Norwegian Directorate for Education and Training published national guidelines for validation in lower- and upper-secondary education (general and VET).

In post-secondary vocational education and higher education, prior learning is validated against learning outcomes or programme goals in local curricula developed in each institution (the shift to learning outcomes is ongoing in this sector). Validation is performed locally in each institution. Access can be obtained through validation, as can exemption from obligatory work, courses and modules. In higher education it is not possible to reach a full qualification through validation. In post-secondary VET, validation for exemption as well as a national credit system was introduced in regulations of 1 August 2013, so further implementation is needed. Results from surveys (published in 2012) and regional meetings with

132 This section draws mainly on input from European Commission et al., 2014.

the institutions (2012/13) underlined the need for support in validation processes. Accordingly, guidelines for validation towards enrolment/access in post-secondary vocational education and towards exemption in higher education were developed and published by Vox in 2013, in cooperation with stakeholders from the sector.

The NKR maintains the right to apply for recognition of formal, non-formal and informal learning at all levels and in all types of formal education and training. In addition, one objective of the NKR is to offer an opportunity to develop new instruments for validating learning from outside the formal system. The Ministry of Education and Research set up a working group with broad stakeholder representation, to explore and propose models for inclusion of non-formal qualifications in the NKR. Work should be finished by end of 2014.

Referencing to regional frameworks

Norway referenced to the EQF in June 2014 (combined with self-certification to qualifications frameworks in the European Higher Education Area [QF-EHEA]). The correspondence between NKR and EQF levels was established as shown in Table 46.

Table 48 Level correspondence between the NKR and the EQF

NKR	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level not included in NKR	Level 1

Source: NOKUT, 2012.

Main sources of information

NOKUT acts as EQF NCP (Ministry of Education and Research, 2011*a*).
Norwegian Ministry of Education and Research: http://bit.ly/1MIRDRf [accessed 29.9.2014].

List of abbreviations

EEA	European Economic Area
EQF	European Qualifications Framework
EU	European Union
NKR	Nasjonalt kvalifikasjonsrammeverk for livslang læring [National Qualifications Framework for Lifelong Learning]
NOKUT	Nasjonalt kompetansesenter for utenlandsk utdanning [Norwegian Agency for Quality Assurance in Education]
NQF	national qualifications framework
QF-EHEA	qualifications frameworks in the European Higher Education Area
VET	vocational education and training
Vox	Norwegian Agency for Lifelong Learning

References

[URLs accessed 29.9.2014]

EEA Joint Committee. 2009. Decision of the EEA Joint Committee No. 91/2009 of 3 July 2009 amending Protocol 31 to the EEA Agreement, on cooperation in specific fields outside the four freedoms. *Official Journal of the European Union,* L 277, 22.10.2009, p. 45. http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:22009D0091&from=EN

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Norway.* http://libserver.cedefop.europa.eu/vetelib/2014/87071_NO.pdf

European Parliament; Council of the European Union. 2008. Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning. *Official Journal of the European Union,* C 111, 6.5.2008, pp. 1–7. http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EN

NOKUT. 2012. *Referencing the Norwegian qualifications framework for lifelong learning to the European qualifications framework (EQF) and self-certification to the qualifications framework of the European Higher Education Area (QF-EHEA).* http://www.nokut.no/Documents/NOKUT/Artikkelbibliotek/Norsk_utdanning/NKR/The_referencing_report.pdf

Norwegian Ministry of Education and Research. 2011*a*. *The Norwegian qualifications framework for lifelong learning*.http://bit.ly/1YQyFi1

Norwegian Ministry of Education and Research. 2011*b*. *Nasjonalt kvalifikasjonsramme – verk for livslang læring (NKR) [National qualifications framework – Work for lifelonglearning].* http://www.regjeringen.no/upload/KD/Vedlegg/Internasjonalt/UNESCO/NasjonaltKvalifikasjon-srammeverk200612.pdf

Norwegian Ministry of Education and Research. 2012. *Norwegian qualifications framework: levels and learning outcome descriptors.* http://www.regjeringen.no/upload/KD/Vedlegg/Internasjonalt/engelskoversettelse.pdf

University of Oslo. 2012. Referencing Norwegian qualifications framework (NKR) levels to the European qualifications framework (EQF). Extension of the technical report to the Norwegian referencing group [unpublished].

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

PAKISTAN

Introduction

The Pakistan National Skills Strategy (NSS) 2009–2013 prioritized paradigm-shifting reforms in Pakistan TVET to ensure alignment with skills demand, increase access and improve quality. The development and implementation of a Pakistan National Qualifications Framework (NQF) forms part of the NSS reform. The NQF aims to bring together all national qualifications under one coherent system (NAVTEC, 2009).[133]

Developments, some supported by donor assistance, have occurred at national and provincial level. The TVET Reform Support Programme is supporting the reform of the national system and is currently being implemented in Pakistan by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Agency for International Cooperation and Development) in cooperation with the National Vocational and Technical Training Commission (NAVTTC, previously known as NAVTEC) and the provincial Technical Education and Vocational Training Authorities (TEVTAs). The project is co-funded by the European Union, the Embassy of the Kingdom of the Netherlands, the Federal Republic of Germany and now also by the Royal Norwegian Embassy. It is scheduled to run for five years from April 2011 until 31 December 2016. A draft of the NQF has been approved for the testing phase by the NAVTTC (GIZ, 2013). As the NQF is a part of the TVET Reform Support Programme, it focuses on the TVET Sector, and is called NQF/TVET or NVQF (National Vocational Qualifications Framework).

Pakistan currently faces enormous socio-economic challenges. The country is in a state of economic and financial crisis due in part to the ongoing conflict with the Taliban and the large internally displaced population. Literacy rates are low (65 per cent of men and 42 per cent of women). As a result there is a shortage of skilled labour to trigger the necessary industrial growth to make Pakistan globally competitive. Domestic industry needs to be made more efficient, so that foreign remittances sent back to Pakistan can be more effectively used (NAVTEC, 2009). The Federation of the Pakistan Chambers of Commerce and Industry (FPCCI) recently drew attention to the challenges presented by the rapidly changing nature of the international job market, emphasizing that new programmes are required to equip workers with the new types of skills being demanded.

The TVET sector faces challenges in a number of areas, including access, quality, relevance and equality. More specifically, the main challenges are:

- the limited capacity of the training system to provide training to a growing workforce comprising more and more young people;
- the lack of connection between the world of education and the world of work, which makes it difficult for employers to find workers with qualifications suited to their needs;
- the fragmentation of TVET provision between several federal and provincial bodies;
- the absence of national skills standards;[134]
- limited participation in TVET (in 2009 there were only 315,000 students enrolled across 1,522 technical and vocational education and training institutes in Pakistan (NAVTEC, 2009);
- the limited number of existing occupational profiles, which at present only partially address the demand present in the economy;
- limited learning pathways from upper-secondary education to TVET and from TVET to post-secondary and higher education;
- the small numbers of Pakistani workers who have acquired technical skills through the TVET system (6 per cent) or who receive on-the-job training in the formal sector (2.5 per cent);

133 Other policy documents have also supported the development of an NQF in Pakistan in the past. The Draft National Educational Policy (April 2008) proposed the development of an overarching NQF, encompassing all qualifications in the country, both academic and vocational/technical.

134 At present, each institution issues its own certificate, which is sometimes recognized by the province. There is no national recognition of these standards. This reduces the economic value of training, provides little transparency and confidence to employers in selecting and hiring, and creates limited incentives to raise the quality of training.

- the huge numbers of Pakistani workers who have received their training in the informal sector, mainly based on the so-called *Ustad-Shagird* system (the traditional apprenticeship system).

Main policy objectives

In the context of the National Skills Strategy 2009–2013 (NAVTTC, 2011), the government intends the NQF to:

- coordinate qualifications under a single body;
- structure existing and new qualifications;
- establish relationships between qualifications and allow progression between different levels;
- provide greater transparency and make it easier to compare different qualifications;
- reform the apprenticeship training system;
- combine academic and vocational education, promoting mobility between the two.

Stakeholder involvement

The National Vocational and Technical Training Commission (NAVTTC) is the main authority that works with provincial Technical and Vocational Training Authorities (TEVTAs) to develop and implement the NQF. The NAVTTC was created following Act XV of 2011 by the President of Pakistan on 25 June 2011. The act empowers the NAVTTC to 'provide for an autonomous organization for regulation, coordination, and policy direction for vocational and technical training and for matters ancillary thereto or connected therewith'. Many functions of the NAVTTC involve labour market information (LMI): for example, with regard to vocational career guidance and counselling, the development or modification of occupational standards, and the assessment of the quality and labour-market relevance of TVET training, especially on the basis of information on school-to-work transitions.

The NQF/TVET is based on the European Qualifications Framework (EQF), and was developed in consultation with public and private stakeholders. It defines levels, level descriptors and rules for equivalencies, and makes allowances for credit transfer, assessment, and recognition of prior learning (RPL). The Pakistani NQF/TVET consists of five vocational levels and one prevocational level, and is valid for all parts of the Pakistani TVET system. The testing phase, which started in summer 2013, involves working with government departments and ministries to facilitate broad implementation of the TVET/NQF. As a result of the start of this testing phase it was decided to develop a final NQF/TVET draft as soon as possible.

The GIZ-TVET Reform Support Programme (GIZ, 2013) has contributed substantially to the development of the NQF in the TVET sector. The NQF forms the foundation for competency-based standards, curricula and assessment packages. Together with the NAVTTC, the GIZ-TVET Reform Support Programme has set out guidelines for the development of curricula, including a standardized template. Most relevant stakeholders were involved in the design phase. The major steps were/are as follows:

- Industry practitioners participate in DACUM (Development of a Curriculum) workshops. They define job tasks and duties, required equipment, and other features of a job.
- Public- and private-sector practitioners, as well as TVET teachers, are involved in subsequent standards development.
- Based on the defined tasks, duties and standards, national curricula are developed for different NQF levels.
- Industry experts are tasked with endorsing the new curricula or suggesting revisions before they are forwarded to and approved by the National Curricula Review Committee (NCRC). The NCRC is a standing committee consisting of representatives from NAVTTC and the TEVTAs, as well as selected TVET experts. Special validation workshops are performed for industrial endorsement. Final approval is given by the NAVTTC.
- Curricula in more than twenty fields (e.g. hospitality, IT, agriculture, renewable energy and housekeeping) were developed or are in the process of development, more than 30 per cent of which are suitable for women.
- TVET institutes are currently being identified to introduce competency-based training (CBT) programmes based on the newly developed curricula. These will include the training of TVET instructors in order to develop their technical, methodological and pedagogical skills. For example, the Chenab training institute in rural Punjab is participating in a competency-based training course for housemaids, based on the curricula developed and implemented by the GIZ-TVET Reform Support Programme. Ninety-six participants have completed the course as competent so far.

The Federation of Pakistan Chambers of Commerce and Industry (FPCCI) is actively participating in technical and vocational curriculum development. In consultation with its affiliated

chambers and Associations, the FPCCI prepares recommendations for skills development according to current industry requirements.

Level descriptors and learning outcomes

At present, there are four levels of technical and vocational certification. These are: GIII (basic level), GII, GI and Diploma. These levels will be correlated to the NQF/TVET.

Recognition and validation of non-formal and informal learning and links to the NQF

The NQF is designed to accommodate all kinds of TVET, whether formal, non-formal or informal, and from both public and private providers.

Formal government-provided training takes place in government vocational institutes (GVIs), government polytechnic institutes (GPIs), vocational training centres (VTCs), apprenticeship training centres (ATCs), government colleges of technology (GCTs) and government technical training institutes (GTTIs).

Private-sector training can be both formal and non-formal, and includes in-company training under the Apprenticeship Training Ordinance of 1962 as well as other in-company training programmes, donor agency-sponsored training programmes and training programmes in private vocational and technical training institutions under the Public-Private-Partnership (PPP) Scheme.

The traditional *Ustad-Shagird* training system, a type of informal apprenticeship, is also used in the informal economy.

The NQF/TVET is designed to promote linkages and pathways between programmes in TVET and general education. The Skilled Worker Certificates grades 1 to 3, for example, provided in vocational institutes, can also be awarded at secondary school level, and successful candidates can achieve a Secondary School Certificate (Vocational).

The NQF/TVET provides equivalencies between the three-year diploma programmes in polytechnics and colleges of technology and the higher secondary certificates (HSC/Intermediate certificate) which are required for entry to higher education courses (engineering degrees or bachelor (pass) degrees). The diploma awarded in the field of engineering is known as the Diploma of Associate Engineers (DAEs).

The Bachelor of Technology (Pass) degree can be attained through one year of industrial training followed by one year of institution-based training. The Bachelor of Technology (Honours) is a two-year course following the award of the Bachelor of Technology (Pass) degree. The Bachelor of Technology (Honours) is considered comparable to an engineering degree (BSc Eng) and combines higher education with practical training in industry. Further linkages and pathways between programmes in TVET and general education will be developed during the testing phase of the NQF/TVET.

Registered apprenticeship training is conducted in around 610 establishments including many state-owned utilities such as railways and airlines. Registered apprenticeship training is highly competitive, the entry requirement effectively being the Secondary School Certificate (Vocational), even though training is at trade level. Apprenticeship schemes are based on guidelines in the Apprenticeship Training Ordinance of 1962, which is now under review. The Germany-Pakistan Training Initiative (GPATI) has developed a workable approach to cooperative training in which theory is taught at two private training institutes and on-the-job training provided by ten German and three Pakistani companies.

There are several short-term (three month to one year) courses conducted by vocational institutes, for which the entry requirement is a Class 8 pass. These lead to the grade of skilled worker, but are recognized only at provincial level (through TEVTA), not at federal level. It is envisaged that these courses will be accommodated in the NQF at entry level. At present, non-formal learning initiatives such as these (including the distance learning programmes offered at open universities and through the Islamic education system, or via competence testing in the workplace) run parallel to the mainstream system. To incorporate these diverse learning initiatives into the NQF/TVET will be a challenge.

Important lessons and future plans

The government of Pakistan is committed to developing an NQF for the TVET sector, and to embedding the NQF in broader reform initiatives, notably those concerned with the apprenticeship system, vocational education in schools, accreditation of technical institutions, the setting up of a labour market information system, national skills standards, and so on. In the long run, such a strategy is expected to make existing policies more coherent, and strengthen existing institutional capacities.

Pakistan is developing its NQF incrementally and phasing its implementation over a period of five years, as time is needed to discuss, negotiate, dispel misunderstandings, reach agreements, and develop trust between stakeholders.

Another lesson learned is the importance of strong private-sector involvement. The NQF and its various components have been extensively discussed with chambers of commerce and industry across the country, in order to make them more effective and relevant to private sector and industry needs. The next steps are:

- to involve private-sector and civil society institutions, as well as other stakeholders, in order to extend the resource base for TVET;
- to provide technical assistance in order to build capacity for public-private partnerships, making private-sector representatives more engaged and willing to share their resources and expertise;
- to extend the management, monitoring and evaluation capacities of central and provincial-level organizations in order to deliver improved TVET;
- to create employment avenues in vulnerable areas, bolstering conflict-resolution efforts;
- to incorporate the feedback of users of the NQF/TVET into the current draft at the end of the testing phase;
- to support the NAVTTC in leading the Project Steering Committee (GIZ-TVET Reform Support Programme, 2013).

References

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH . 2013. *Supporting TVET Reform in Pakistan. Progress Report – 1 April 2012 to 31 March 2013.* Islamabad, Project Office, German Agency for International Cooperation and Development (GIZ).

National Vocational and Technical Education Commission (NAVTEC). 2009. *National Skills Strategy 2009–2013.* Islamabad, Prime Minister's Secretariat.

National Vocational and Technical Training Commission (NAVTTC). 2012. *The National Vocational Qualifications Framework (NVQF): Framework with level descriptors and rules for managing the National Vocational Qualifications Framework.* Islamabad, Prime Minister's Secretariat

de Voogd, Jan and Qureshi, Muhammad Iqbal. 2011. *Labour Market Information: A situational analysis of Pakistan.* Islamabad, Project Office, GIZ.

World Bank. 2009. *National Qualifications Framework and Technical Vocational Education and Training in Pakistan.* South Asia: Human Development Unit, Report No. 26. Washington DC, World Bank.

World Bank. 2011. *World Bank Supports Vocational Training to Boost Employment for Youth in Pakistan.* The World Bank Group. Washington DC, World Bank.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

PALESTINE

Introduction

Palestine has a population of approximately 4.15 million. It has the highest population growth rate (2.7 per cent in 2012) in the Mediterranean region. The share of the population under 14 ranks among the highest not only in the region but also in the world, at 42.4 per cent in 2012, thus putting enormous pressure on current social services (schools, health and housing) and future employment needs. Considering that the absorption capacity of the Palestinian labour market has not increased in the last ten years, this rapid population growth has led to high unemployment, which exceeded 22 per cent from 2005 to 2010, and is now at 21 per cent. Given the limited possibilities offered by the labour market, the main receiver of the new workforce has been the public sector. The public sector currently employs 22.8 per cent (15.7 per cent in the West Bank and 39.7 per cent in the Gaza Strip) of the population. The expansion of employment in the public sector is mainly in the education and health sectors.

More than half of Palestinians live abroad. Palestinian emigrants are generally well qualified, 7.2 per cent being university graduates. The need to look for job opportunities outside their own country is one of the reasons for the importance that students attach to attending and completing university.

The structure of the Palestinian economy is dominated by small and micro-enterprises. According to the definition used by the Palestinian Central Bureau of Statistics, 90.5 per cent of companies are micro (below four employees) and 8.38 per cent are small (below twenty employees). The structure of the Palestinian labour market and the inability of the formal sector to absorb employees have led to an expansion of the informal sector.

The main challenges that the NQF should address are the fragmentation of educational-system governance, the lack of coordination among public and private providers and the limited relevance of existing qualifications to the labour market. More precisely, the draft national consultation paper for the development of the NQF identifies the following problems and obstacles to be addressed:

- No clear identification of educational outcomes for individuals and employers (no clear signals);
- Fragmented qualifications systems in all sectors (general education, higher education and vocational education and training, non-formal and informal learning);
- No unified governance of the education systems;
- Imbalance of academic and vocational programs (no balance in enrolment rates between academic, vocational education and vocational training streams) regarding the needs of the labour market;
- No valuation and encouragement for lifelong learning, adult education and continuing education (no recognition of non-formal and informal learning);
- No comprehensive and efficient accreditation system;
- No links between educational systems and the Arab Occupational Classification (AOC);
- No facilitation of labour mobility by the existing educational systems;
- No articulation between and within the different educational sub-systems.

Main policy objectives

The planned NQF should provide a strategic, comprehensive and integrated national framework for all learning achievement, on lifelong learning principles. Therefore, the NQF should encompass all qualifications within the Palestinian national education system across every field of education and should address the requirements of education systems/providers, individual learners and labour market systems/employers.

In more detail, the NQF's aims are:

- Supporting the formulation of learning outcomes in terms of qualifications according to Palestinian Occupational Classification (POC) standards subsequent to the adaptation

from Arab Occupational Classification (AOC) standards;
- Improving understanding of qualifications and levels of qualifications and giving a clear picture of the relevance of educational outcomes to individuals and employers;
- Organizing and facilitating horizontal and vertical articulation in the education and training system by establishing credit transfer between qualifications;
- Facilitating access to education and training opportunities, and mobility and progression within education, training and career paths to improve learner, labour and career mobility, making progression routes easier and creating bridges within educational systems;
- Ensuring that qualifications are relevant to perceived social and economic needs by linking the education system with the labour market through the adapted POC, and by increasing the value and enrolment rates in the vocational education streams;
- Enhancing the quality of education and training by ensuring that all education and training standards are defined by agreed learning outcomes and standards are applied consistently, and ensuring that education and training providers meet specified quality standards;
- Making it easier to match Palestinian NQF levels with those of other countries, thereby securing not only local but also regional and international recognition for national qualifications.

Stakeholder involvement

The NQF development is the result of a series of reforms taking place in the VET sector. It did not start as an individual project, but as part of the wider reforms to the institutional framework which binds together all the different processes (Palestinian Occupational Classification, curriculum development process etc.), developed in the framework of the TVET strategy. As with most of the ongoing reforms in the country, the consultation with stakeholders has been extensive. A wide range of actors (several ministries in charge of TVET provision, social partners, public and private education providers, learners/students and their parents, employment offices, awarding bodies and quality assurance agencies, etc.) have been actively involved in the formulation of the first proposal for an NQF in Palestine. This consultation process took place in 2012 through a series of workshops with the different sectors of the education system and with the social partners.

The institutional setting created to coordinate the development of the NQF is structured as follows:

- A steering committee composed of the ministers and deputy ministers for education, higher education and labour, which will be in charge of determining the strategic direction of the framework's development and implementation, ensuring coordination of policies across governmental ministries. It will also take decisions on qualifications design and quality assurance and the corresponding regulations.
- A management group of general directors of all sectors and stakeholders, which will be in charge of following up the development and the implementation of the NQF, developing, implementing and reviewing NQF procedures, advising the ministries on policy and resource implications and, in cooperation with the Accreditation and Quality Assurance Commission (AQAC), registering qualifications in the NQF, accrediting education and training providers and being responsible for assessment and certification.

The management group should be supported by a secretariat and an ad hoc editorial/technical team composed of representatives of all sectors.

These institutional settings could be revised following the establishment of the National Agency for Vocational Education and Training (NAVET). This new institution was established by decree of the Cabinet in May 2014 and will take the leadership in all policy developments and implementation for the TVET sector in Palestine. According to the proposed NAVET law, the institution will be in charge of 'developing vocational guidelines for the implementation of the National Qualification Framework related to TVET' (Art. 4, 13). NAVET will also be responsible for "providing lifelong learning and developing vocational capacities to move from one educational level to another as per the adopted standards, NQF and bylaws' (Art. 5, b). The risk is that NAVET, while limiting fragmentation within the TVET sector, which entirely falls under its remit, could result in a more difficult relationship with the other two educational sectors (higher education and general education), which remain under the responsibility of the Ministry of Education.

Level descriptors and learning outcomes

The draft national consultation paper envisages an eight-level national qualifications framework for Palestine. These levels are referenced to the Arab Occupational Classification, existing general education and higher education levels, and TVET levels. Each level is described in terms of knowledge, skills and competences.

Learning outcomes are clearly foreseen by the system as a tool for the matching of educational provision to the framework and as a reference of relevance of learners to the labour market.

Validation of non-formal and informal learning and links to the NQF

Improving horizontal and vertical progression routes and establishing effective mechanisms for recognition of prior learning are two of the main objectives of the developing NQF. Operational mechanisms will be developed following the national consultation process.

Referencing to regional frameworks

No reference to existing regional frameworks has been considered yet. However, the readability of Palestinian qualifications among the neighbouring countries is one of the priorities identified in the national consultation paper. Specific attention to the issue of regional and international recognition will be given within the framework of the consultation process.

Important lessons and future plans

A national consultation was conducted in 2012, and a final proposal for the NQF structure and governance is expected to be approved by the government in 2013.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

PHILLIPINES

Introduction

In October 2012, President Benigno Aquino III signed Executive Order 83 establishing the Philippine Qualifications Framework (PQF). The signing of this executive order came at a time when the Philippines was in the midst of far-reaching reforms to its education system. Designed in 2006 and adopted in 2012, the PQF evolved from the Philippine Technical and Vocational Qualifications Framework (PTVQF). It is designed to harmonize basic education, technical and vocational education and higher education into a nationwide unified framework of skills and competences.

According to the National Statistics Office (NSO), around 2.8 million Filipinos, roughly 7 per cent of the population, are unemployed, while 8.5 million, or 22.7 per cent of the working population, are underemployed. The PQF aims to address these problems, which are largely the result of a mismatch between the jobs on offer and the skills possessed by the workforce.

Main policy objectives

Taking into the account the key points that emerged in discussions with the National Coordinating Council for Education (NCCE) (Isaac, 2011), the objectives of the PNQF are:

- to provide a basis for an integrated system of lifelong education 'from cradle to grave';
- to encompass qualifications in basic education, technical and vocational education and training (TVET) and higher education, and to develop a system of pathways and equivalencies between qualifications within and across these three sectors;
- to meet local industry needs while ensuring alignment with overseas qualifications and NQFs in order to assist Filipino workers seeking employment and/or further education abroad;
- to make qualifications competency-based;
- to establish descriptors for the full range of proposed qualifications (building on the descriptors already adopted in the PTVQF);
- to develop appropriate quality-assurance mechanisms.

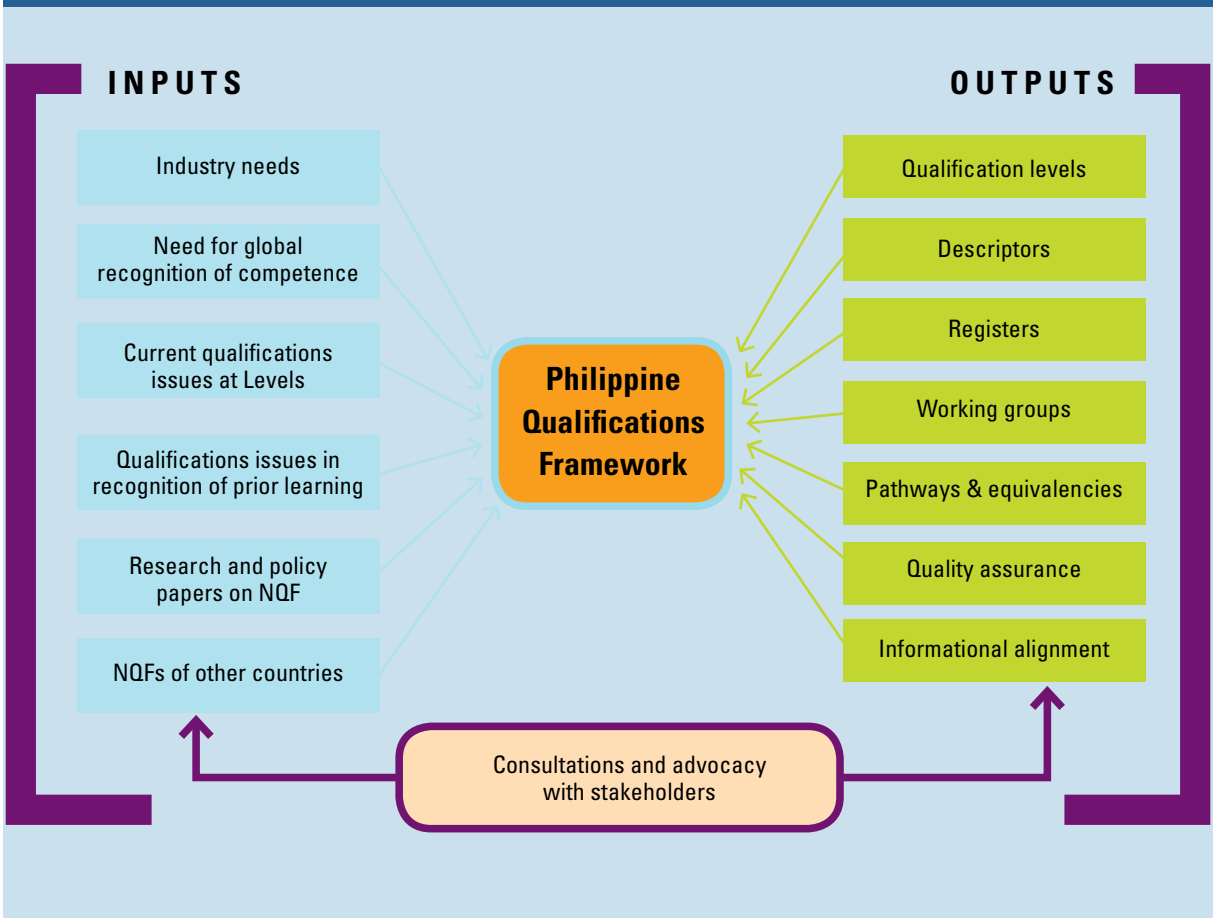
Stakeholder involvement

The PQF was designed by the National Coordinating Council (NCC), an umbrella organization chaired by the Secretary of the Department of Education (DepEd), with the following as members: the Technical Education and Skills Development Authority (TESDA); the Commission on Higher Education (CHED); the Department of Labour and Employment (DOLE); and the Professional Regulation Commission (PRC) (Sec. 2, EO No. 83 s.2012). The functions of the NCC are to: create technical working groups in support of detailing and implementing the PQF; harmonize the levels of qualifications with all levels of education; align education standards and learning outcomes to the level descriptors contained in the PQF; develop and recognize pathways and equivalencies; discuss and agree on the elements of the PQF, including but not limited to their principles, key features, definitions or terminologies, structure and governance arrangements; and review and update the PQF.

The government has established four technical working groups (TWGs) with different functions in relation to the PQF:

1. The DepEd has the task to develop information, education and communication (IEC) materials to promote and advocate PQF. It also formulates guidelines, circulars and policy issuances for the approval of the NCC.
2. TESDA is the lead agency that provides information to employers, trainers and trainees on education and training opportunities, licensure and assessment and certification services in professional and skilled qualifications. TESDA also maintains and updates the database of professional and skilled qualifications in the qualification register.

Figure 11 Philippines: inputs to and outputs from the PQF



Source: Rey, Cariño and Rabago, 2009.

3. CHED is the lead agency for establishing equivalency pathways for education transfer and/or progression between education levels corresponding to the PQF levels. It also develops a national system of credit transfer, and facilitates the enhancement and adoption of the Ladderized Education Programme, consistent with the PQF. CHED develops PQF quality procedures manuals, facilitates the conduct of evaluation and compliance audits and reviews all set standards. CHED also provides recommendations to the NCC based on the results of the evaluation.
4. The PRC is entrusted with the task of conducting studies that compare and benchmark the PQF with other countries and regional/international frameworks. It coordinates with professional organizations with the aim of agreeing on mutual recognition of qualifications.

Together, these organizations are committed to developing a coherent, internationally benchmarked framework covering basic education, TVET and higher education, as well as wider lifelong learning. A research project entitled Defining a Continuum of Philippine Education Competences: Towards a National Qualifications Framework was commissioned by the NCC in 2004. The results of this research, together with previous work done by TESDA through the Philippines Australia Quality TVET (PAQTVET) project, provided momentum for the establishment of the PQF (Isaac, 2011).

There will also be an extensive programme of advocacy and consultation with key stakeholders, including representatives of Filipino industry, universities, TVET institutions, schools, and others with an interest in an integrated system of qualifications.

All levels of the PQF are governed by a quality-assurance system, which includes established qualifications standards, programme accreditation and assessment criteria. At elementary and secondary levels, programme accreditation is carried out by the Department of Education (DepEd) under the Permit and Recognition System. TESDA manages all post-secondary technical and vocational education, and has introduced a unified registration and accreditation

system for this purpose. CHED manages higher education standards by accrediting programmes in higher education institutions. Certificates are issued by the Federation of Accrediting Agencies of the Philippines (FAAP). As part of quality assurance, CHED has identified around 300 centres of excellence and centres of development in various disciplines in public and private institutions throughout the Philippines. Graduates of professional programmes must pass the Professional Regulation Commission licensure examinations before being allowed to practise (Isaac, 2011).

Level descriptors and learning outcomes

According to Executive Order 83, the PNQF accomplishes the following functions:

1. It provides a national system of qualification descriptors to measure students' knowledge, skills, values, assiduity and independence.
2. It describes the levels of educational qualifications and sets standards and learning outcomes.

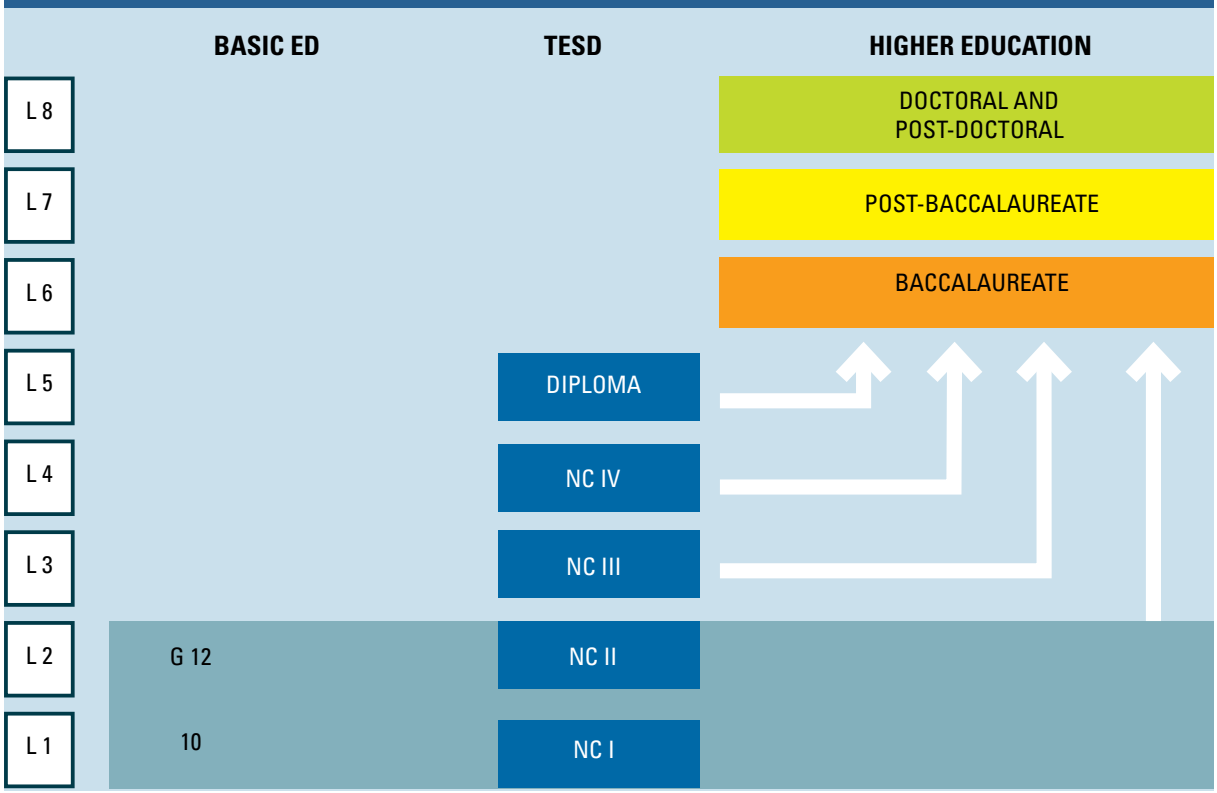
The PNQF is an eight-level framework with sub-frameworks in separate sub-systems of the education and training system. For example, there are five levels in the Technical Education and Skills Development (TESD) sub-system: national certificates (NC) I through IV, and diploma (see Figure 1). Attainment of these qualifications requires a combination of technological and methodological competences. For example, an individual who attains NC III is able to:

- Perform a wide range of highly skilled operations involving known routines and procedures in a complex work context;
- Demonstrate an understanding of the work process, contribute to problem solving, and make decisions regarding the processes, equipment and materials to be used;
- Demonstrate responsibility to participate effectively in teams.

For higher academic education, descriptors have been developed for the following qualification levels: diploma, baccalaureate, postgraduate diploma, master's, and doctorate.

The Enhanced Basic Education Act of 2012 notes that the PQF is in line with its proposed K-12 programme (kindergarten to Grade 12) for preparing and guiding students into the labour force.

Figure 12 Philippines National Qualifications Framework (PNQF)



TESDA = Technical education and skills development
NC = National certificate

Source: Rey, Cariño and Rabago, 2009.

Recognition and validation of non-formal and informal learning and links to the NQF

Lifelong learning is an important principle for education and training in the Philippines. It stresses the appropriate balance of general and traditional schooling and competency-based training.

Non-formal and informal learning represent an important means of acquiring skills for many Filipinos. TESDA has developed a four-level national certification system for standardizing and certifying knowledge, skills and aptitudes acquired through non-formal and informal learning. These levels open up pathways for unemployed but skilled people, especially those in rural areas who have learned a trade from their parents.

The PNQF supports the continuing education and training of teachers of TVET. TESDA has developed a dual,[135] modular system of training for TVET teachers based on a curriculum developed according to competency standards in the TVET sub-framework of the PQF. Assessment is conducted based on evidence of work performance judged against industry standards. The system allows for recognition of prior learning (RPL), and allows learners to enter and exit at different times/levels and to receive an award for competences attained at any point. Approved training programmes are nationally accredited.

The PNQF also supports post-TVET bridging programmes. These provide an efficient way for students to earn credits towards higher education and increase their employability. They are designed to furnish students with the skills, knowledge and attitudes required by their current or desired job or course of study (Isaac, 2011).

In order to address the issue of RPL, the Philippines has developed an alternative learning system (ALS) which awards the same qualifications and credits as the formal system.

Assessment in this system is based on portfolio, interview and/or written examination. Alternative learning programmes exist within all sub-sectors of the education and training system. For basic education, there is the philippine education placement test for basic education. For higher academic education, there is the expanded tertiary education equivalency and accreditation programme for baccalaureate and master's levels. There is also the competency assessment and certification for the technical and vocational education and training system.

Referencing to regional frameworks

The ASEAN Qualifications and Reference Framework (AQRF) task force is working towards a regional framework.

Important lessons and future plans

The PNQF is an important tool for education and training reform in the Philippines. It harmonizes qualifications across the country, ensuring transparency in training provision and conformity with nationally fixed standards. It enables both workers and employers to understand policies relating to credit transfer, articulation between academic and vocational education, portability, bridges, pathways and the recognition, validation and accreditation of non-formal and informal learning. For public authorities, the PNQF provides quality-assurance mechanisms for granting accreditation to providers and stakeholders.

The future plans are for NCC to meet regularly to keep track of the four working groups. In turn, the working groups will develop their own work plans and targets and report periodically to the NCC.

Industry sector representatives will be consulted and involved in the detailing and application of the PQF to ensure alignment of educational outcomes to job requirements (Sec. 4, EO No. 83 s.2012).

References

Camarao, F. C. 2002. *Technology Education in the Philippines.* Manila, National Bookstore.

Isaac, I. 2011. *The Philippine National Qualifications Framework.* (International conference on implementation of NQF policies and strategies, April 27-28 2011 in Bangkok, Thailand.) Manila, TESDA. http://www.unescobkk.org/fileadmin/user_upload/epr/TVET/PHILIPPINES_Paper.pdf (Accessed 26 April 2013.)

Rey, S.; Cariño, L.; Rabago, R. J. H. 2009. *Trainer Qualifications Framework. Philippine TVET. Validation of adult educator's competences: Towards total quality.* (Teachers and Trainers in adult education and lifelong learning. Professional development in Asia and Europe. 29–30 June 2009, Bergisch Gladbach, Germany.) Bonn, DIE

Prepared by: UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

135 School and workplace.

POLAND

Introduction

The Polish Qualifications Framework (PQF) currently being implemented is part of a broad reform of the qualifications system.[136] Coordinated by the intra-ministerial taskforce for lifelong learning,[137] the reform aims at promoting lifelong learning and putting in place education, training and learning solutions better able to respond to the needs of the labour market and society in general. The PQF and the new national register of qualifications are the two key building blocks in this reform.

The new framework comprises eight learning outcome-based levels applicable to all types of qualifications, covering general education, vocational education and training (VET) and higher education. The framework – and the register – will be open to the private and non-formal sectors as long as the qualifications in question meet agreed quality criteria. The new PQF builds on, takes into account, and integrates the work on a qualification framework for higher education linked to the Bologna Process.

The PQF was referenced to the European Qualifications Framework (EQF) in May 2013 (Educational Research Institute, 2013), in a joint report also covering self-certification to the qualification framework for the European Higher Education Area (QF-EHEA) (Educational Research Institute, 2014). A legal process to introduce a separate law covering the national qualifications framework (NQF) and the qualification register was started in autumn 2014. The proposal for the new law was presented to the Polish parliament in spring 2015 and is expected to come into force in January 2016. The PQF will, if things go according to plan, be fully operational on this date.

136 By national qualifications system is understood the entirety of state activities related to the validation of learning outcomes to satisfy the needs of the labour market, civil society and personal development of learners.

137 Appointed by the prime minister and including ministries of education, labour and social policy, science and research, and economy.

Main policy objectives

Work on the qualifications framework is part of broad reform and modernization of the Polish qualifications system, addressing all levels and all sub-systems. An important part of this reform, initiated in 2010, is an overall shift to learning outcomes. This requires redesign of all programmes, standards and curricula, in general, vocational and higher education and training. The framework is seen as an important instrument for strengthening the transparency and overall consistency of education and training, which is considered by some to be fragmented and difficult to navigate. While participation in initial education is very high in Poland, participation in lifelong learning is low compared to other European countries: less than 5 per cent of 25 to 64 year olds report having taken part in lifelong learning, compared to the European Union average of 9 per cent.

The direction chosen for the PQF is interesting in a wider European setting. First, the framework is seen as a tool for reform and change; its role goes beyond merely describing existing qualifications. Second, the qualification framework is seen as one of several elements in a wider strategy. It is acknowledged that qualifications frameworks cannot operate in isolation; their impact depends on how they are integrated into wider policy. Third, while the framework introduces a coherent set of national levels and descriptors, it also identifies the need for additional learning-outcomes descriptors to be used by sub-systems and sectors and which will allow for a more detailed fit-for-purpose approach (see level descriptors and learning outcomes, below).

The new qualifications register is presented as a separate initiative closely linked to the PQF. It is intended to provide a list of all qualifications which can be obtained in Poland. At this stage four different categories of qualification have been identified:

- Those awarded under laws regulating general education;
- Those awarded under laws and regulations on higher education;

- Other qualifications established by national bodies;
- Qualifications established by foreign entities that are awarded in Poland.

The link to the PQF will be assured by attributing all registered qualifications a level in the national framework and the EQF. Qualifications so far not registered in Poland can be included based on assessment by experts. The procedures and criteria for this have yet to be developed, but may follow routes taken in, for example, the Netherlands and Sweden.

Stakeholder involvement

In 2010 the Prime Minister appointed two bodies to take responsibility for overall reform of the Polish qualifications system, including development and implementation of the PQF and the national register of qualifications:

- An intra-ministerial taskforce for lifelong learning strategy, including the PQF, comprising all institutional stakeholders: Ministry of National Education, Ministry of Research and Higher Education, Ministry of Economy, Ministry of Labour and Social Policy, and Ministry of Health. This team is led by the Ministry of National Education;
- A subgroup of the taskforce, the PQF steering committee, comprising all key institutional stakeholders (Ministry of National Education, Ministry of Research and Higher Education, Ministry of Economy, Ministry of Labour and Social Policy, Ministry of Health, and, since May 2011, the ministries of Health, Culture and Defence. This committee is run by the Ministry of Research and Higher Education and is supported by the Polish national coordinating point (NCP) as well as the Educational Research Institute. All projects supporting the development and implementation of the PQF are monitored and coordinated by the steering committee.

The authorities decided in 2009 that establishing the PQF will require additional administrative and research support. Two external institutions were involved in the first stage of preparation: the Education Research Institute and the Cooperation Fund Foundation. In the second stage, the Education Research Institute has the main responsibility for coordinating the design of the PQF, including relevant research, conceptual work and consultation. Also, the Bureau for Academic Recognition and International Exchange has been appointed as national coordination point for the EQF.

Unlike many other countries, the above bodies do not directly include representatives of social partners or civil society. Such representatives can contribute to the work in an advisory capacity, but it is not clear what this means for the involvement and ownership of stakeholders outside public administration. Seen from the outside and compared to other countries, Polish developments can be described as a combination of top-down and research-driven. Whether this could have a negative impact on the implementation of the framework is difficult to judge; how to ensure broad commitment and ownership outside the public sector is an issue to be addressed in the next couple of years. However, two broad consultations have been carried out since 2011 and a high number of meetings (200+) have been organized across the country addressing a wide range of stakeholders.

It is envisaged that it will be necessary to appoint/establish an institution responsible for running the PQF and other instruments emerging from the qualifications reform. Such an institution would, for example, be responsible for maintaining the qualifications register, accrediting awarding bodies and monitoring the use of validation. A decision on this issue has yet to be made.

Framework implementation

The technical development of the PQF has been very thorough and provides a strong basis for future developments. To release this potential, and turn the PQF into an operational framework, a clear legal basis is required. The proposal for a new law on the PQF and the qualification register is expected to be presented to the Polish parliament in 2015. If adopted as planned, this would allow the PQF to become operational from January 2016.

Level descriptors and learning outcomes

The PQF introduces descriptors for different purposes:

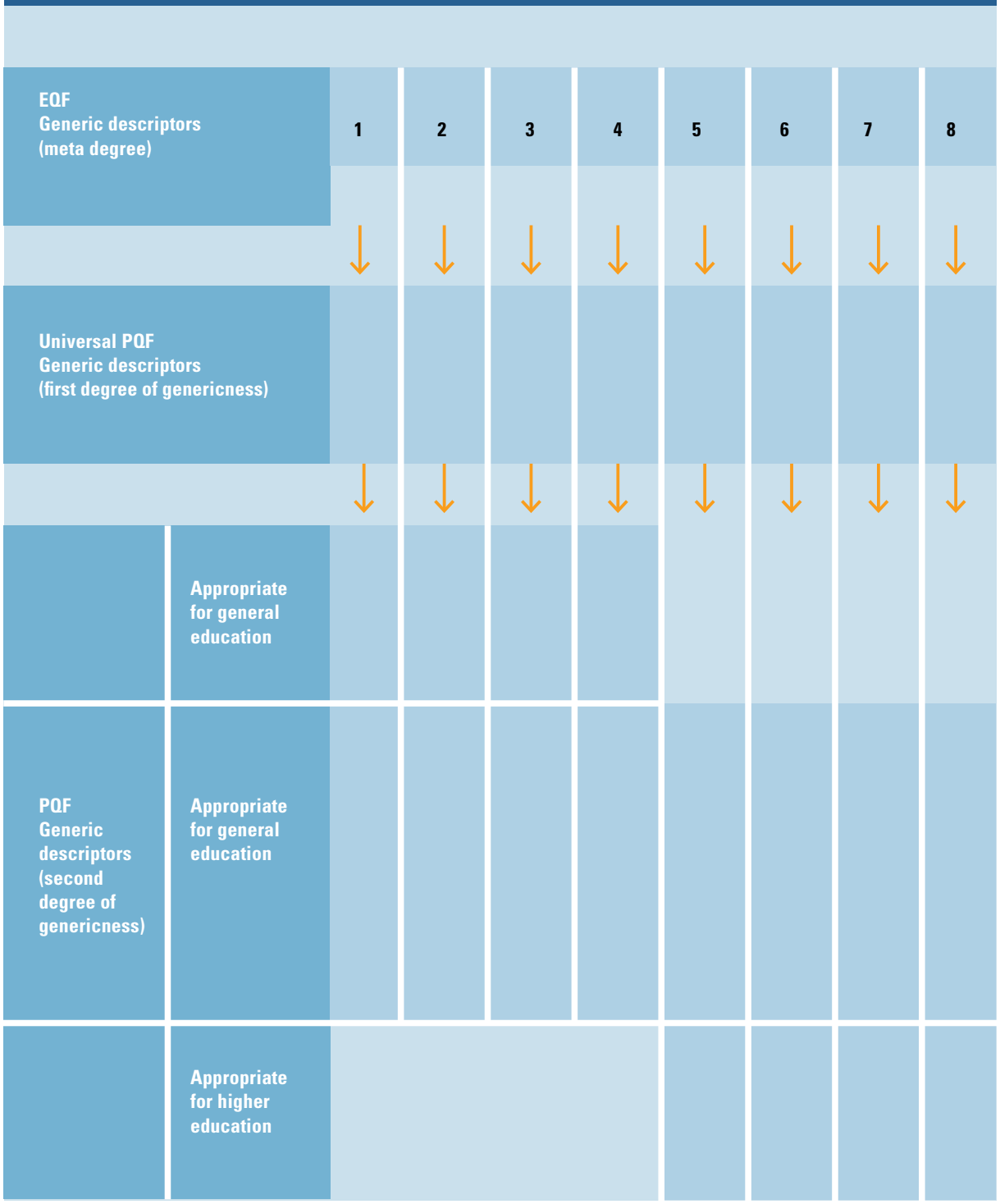
- Polish universal descriptors forming the basis for the comprehensive PQF;
- Polish descriptors for education and training sub-frameworks, for example for general, vocational and higher education;
- Polish descriptors for sector frameworks or for subject areas.

The PQF thus includes three main sets of level descriptors, operating to different degrees of generality. The universal PQF is the most generic (first degree). The second set of descriptors

addresses 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 (not indicated above), for example oriented towards specific fields of higher education (subject areas) or for VET in different economic sectors. The basic principles behind this are illustrated in Figure 13.

While the coexistence of several qualifications sub-frameworks is common in most European countries, the PQF takes one step further and tries to express how these can be made explicit within an overarching conceptual (learning outcomes) approach. This means that when, for example, the financial sector wants to establish a specialized sectoral qualifications framework, it should use learning outcomes descriptors clearly connected

Figure 13 Three sets of level descriptors in the PQF



Source: Educational Research Institute, 2013.

to the level descriptors operating at other levels of generality (including EQF). While moving beyond the general, national level descriptors, the PQF is better able to link to current reform of standards and curriculum development and eventually to learning and assessment.

To what extent this approach will be able to promote communication between different levels and sub-systems can only be tested by an operational framework. The challenge is to avoid a fragmented approach where sectors operate in isolation and – in the worst case – increase rather than reduce obstacles between institutions and sectors.

Originally, the PQF was envisaged as a seven-level framework, closely resembling existing qualifications and degrees in the Polish system; it was later decided to introduce a new Level 5. While still empty, this will allow for more appropriate placing of 'short cycle' academic qualifications as well as advanced vocational qualifications, possibly including the master craftsman (*meister*). The learning-outcomes descriptors developed for the 'universal PQF' refer to the following key learning domains (Table 47).

These descriptors are based on agreement between stakeholders in general, vocational and higher education and are 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 different education and training sectors. The basic distinction between knowledge, skills and social competences will be used in the sub-sector PQF at second generic degree, but will differ in terms of specificity. This is exemplified by the proposal for VET[138] where each of the three main domains has to be specified according to:

- information;
- ideas;
- cooperation;
- tools and materials.

For general education, the same three dimensions, based on initial expert proposals, were grouped under the following titles:

- native and foreign languages;
- maths/sciences;
- natural/environmental sciences;
- social functions;
- identity.

Level descriptors for the third generic degree have yet to be developed. It is possible, however, to see the work of the 'tuning-project' as relevant to defining learning outcomes in particular subject areas of higher education.

Progress can be observed in the overall shift to learning outcomes in Polish education and training. Core curricula formulated in terms of learning outcomes have recently been introduced

Table 49 Level descriptors in the PQF

Knowledge	**Scope**
	Depth of understanding
Skills	**Problem-solving and applying knowledge in practice**
	Learning
	Communication
Social competence	**Identity**
	Cooperation
	Responsibility

Source: Adapted from Educational Research Institute, 2013.

138 No official translation is available and the final version may contain slightly different terms.

for all key areas of education and training. The core curriculum for general education has been gradually introduced since the 2009/10 school year and will be fully in place as of the 2014/15 school year. These learning outcomes also form the basis for assessment. The core curriculum for vocational education will be implemented from the 2012/13 school year, being finalized by 2015/16. The core curriculum also forms the basis for assessment criteria. As of the 2012/13 academic year, the NQF for higher education applies generally, defining learning outcomes in eight areas of learning. Curricula for specific fields addressed by higher education institutions at the first and second cycles have to be described in terms of learning outcomes, as well as show how they can be assessed. For third-cycle studies (doctoral), regulations from the Ministry of Science and Higher Education describe expected learning outcomes.

Validation of non-formal and informal learning and links to the NQF[139]

Work on reforming the national qualifications system includes a number of links to related policy areas: putting in place arrangements for validation of non-formal and informal learning is given high priority. The proposal for a new law covering the NQF and the qualification register was started in autumn 2014 and will also address validation of non-formal and informal learning and indicate how this is linked to the overall reform of education and training.

The current legal framework for education does not define the term 'validation', but there are central-level regulations that address validation of learning outcomes achieved outside of formal education. The legal environment has been gradually adjusting to meet demands in this respect and different aspects of non-formal education are regulated by separate legislation. Adults who are not school students are allowed to take external examinations, organized by regional examination boards, thus confirming both general qualifications (for example, *matura* exams) and vocational qualifications in school professions. The latter can be confirmed also by vocational examination after completing a non-formal qualifying training course.

There are no general rules in higher education for validating learning outcomes achieved outside university. Formulation of such procedures is mainly up to each university, but general rules concerning learning outcomes set by law must be observed. However, according to the proposal to amend the Higher Education Act, the common rules of recognition of prior learning will be introduced in the sector.

There are also other procedures to confirm learning outcomes acquired outside formal education. These include validation provided by professional associations in certain occupations (including security worker, engineers and technical staff in the electrical power sector, work safety and hygiene technicians and officers) or initiatives carried out by third-sector organizations, such as certified non-governmental organization trainers. However, these are not regulated in a systematic way. There are numerous different validation procedures: some have a relatively long tradition, others should be considered more as pilot projects designed not for the confirmation of competences on a large scale, but rather to develop and test new methods of validation in a specific regional, social or occupational context.

The concept of the integrated qualifications register provides the possibility of expanding the set of registered qualifications to those awarded by other organizations outside the formal system.

Referencing to regional frameworks

The PQF was referenced to the EQF in 2013. A self-certification to the QF-EHEA took place at the same time.

Important lessons and future plans

PQF developments are interesting in a broader international context as they represent an effort to combine the introduction of a comprehensive national framework with parallel development of sector and sub-sector frameworks. While the coexistence of frameworks at different levels and for different purposes can be found in many countries, the Polish approach tries to introduce conceptual coherence, allowing for synergies between frameworks at different levels and in different sectors. Practical implementation of the PQF should be followed closely as it may provide a model for other countries struggling to find ways to bridge and connect sectors and sub-sectors of education and training. Whether this complex model will work in practice, and how it can promote consistent use of learning outcomes across levels and sub-systems and sectors, will have to be carefully monitored. Progress made in introducing the learning-outcomes approach in the different sub-sectors of education and training provides a good basis for future developments.

4 This section is based on European Commission et al., 2014.

While providing a very interesting technical model, translation of the current PQF proposal into a credible and politically agreed framework will require that the proposal for a NQF law be successfully carried through the Polish parliament during 2015. Any delays will put in jeopardy the extensive technical work already carried out. The future involvement of stakeholders outside education and training and research will be particularly important.

Main sources of information

Bureau for Academic Recognition and International Exchange acts as the national coordination point: http://www.buwiwm.edu.pl/eng/index.htm [accessed 3.11.2014].

List of abbreviations

EQF	European Qualifications Framework
NQF	National Qualifications Framework
PQF	Polish Qualifications Framework
QF-EHEA	qualification framework for the European Higher Education Area
VET	vocational education and training

References

[URLs accessed 3.11.2014]

Educational Research Institute. 2013. *Referencing the Polish qualifications framework for lifelong learning to the European qualifications framework.* Warsaw: Educational Research Institute. https://ec.europa.eu/ploteus/sites/eac-eqf/files/Polish%20Referencing%20Report.pdf

Educational Research Institute. 2014. *Self-certification report of the national qualifications framework for higher education.* Warsaw: Educational Research Institute. https://ec.europa.eu/ploteus/sites/eac-eqf/files/Polish%20Referencing%20Report.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Poland.* http://libserver.cedefop.europa.eu/vetelib/2014/87072_PL.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

PORTUGAL

Introduction

A comprehensive Portuguese Qualifications Framework (*Quadro Nacional de Qualificações*) (QNQ) has been in place since October 2010 as a single reference for classifying all qualifications awarded by the Portuguese education and training system. Established by Decree Law No. 396/2007 (*Decreto-Lei* No 396/2007),[140] the framework (including eight levels and level descriptors of learning outcomes) was published in July 2009 (*Portaria* No. 782/2009).[141] Higher education qualifications were included in the more detailed framework for higher education qualifications (FHEQ-Portugal), which is part of the comprehensive national qualifications framework (NQF). It was referenced to the European Qualifications Framework (EQF) in 2011 and has been gradually implemented.

Main policy objectives

The NQF is seen as a tool for reforming Portuguese education and training. Initiated through the 2007 reform,[142] development of the national qualifications system and NQF forms part of a broader education and training programme, comprised, notably, of the 'new opportunities' initiative and the 'agenda for reform of vocational training'. These reforms aim to raise the low qualification levels of the Portuguese population (youngsters and adults).[143]

Three main goals are to:

- reinforce vocational/technical pathways as real options for young people (ANQ, 2011) (European Commission et al., 2010);[144]
- upgrade education and qualification levels of the adult population;
- promote attainment of secondary education as a minimum level of qualification in Portuga.[145]

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.[146] For adults, the reform offers those with low qualifications a new opportunity, through formal education and training and validation, to complement and expand their level of knowledge, skills and competences. The validation arrangements are particularly important, offering opportunities in both general and professional fields.

From the public policy perspective, development of an integrated national qualifications system and framework was regarded as necessary and a further contribution to such an ambitious programme as 'new opportunities'. The comprehensive approach to the EQF was seen as an inspiration for initiating reforms and developing a national qualifications system and a comprehensive NQF. This aims to integrate and coordinate qualifications obtained in different education and training sub-systems (general education, vocational education and training [VET], etc.) within the scope of a single framework, allowing people to combine and transfer qualifications.

140 http://bit.ly/1LlWZ7x [accessed 22.9.2014].

141 http://www.catalogo.anqep.gov.pt/boDocumentos/getDocumentos/163 [accessed 22.9.2014].

142 Decree Law No 396/2007.

143 There have been programmes and investments in qualifications over the past two decades. Progress has been made. However, numbers of early school-leavers (aged 18 to 24) – although having decreased sharply in past years – are still high (20.8 per cent in 2012) and the proportion of the working population (aged 24 to 64) having at least upper-secondary education was 40.9 per cent in 2013 (Eurostat data).

144 The National Agency for Qualifications (Agência Nacional para a Qualificação, I.P.) (ANQ), set the objective that 50 per cent of those enrolled in upper-secondary level should achieve a vocational qualification.

145 Portugal has also raised the compulsory schooling age to 18.

146 The ANQ has set an objective that 50 per cent of the cohort at upper secondary level achieves a vocational qualification.

The reforms also aim to develop, integrate and further develop the system for valuing and recognising competences acquired in non-formal and informal contexts, in progress since 2001. However, there have been policy changes in the past year due to austerity measures (see validation of non-formal and informal learning).

There is also new impetus to promoting the attractiveness of vocational training. All VET should serve to strengthen both education levels and professional certification of the workforce. In parallel, a framework for higher education was established and used as a tool to support reforms and developments.[147] The main aims were to set up clear learning standards and identify progression routes through levels of learning (MCTES, 2009).

Apart from the NQF's national reform role, improving comparability and transparency of Portuguese qualifications and their understanding abroad by linking them to the EQF was also emphasized.

Stakeholder involvement

Initial work on the NQF was carried out by the Ministry of Labour and Social Solidarity, with support from the Ministry of Education. In 2007, Decree Law No. 396/2007 was adopted as the legal basis for developing 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 implementation of the national qualifications systems and framework.

Framework implementation

Three main steps were taken to put the national qualifications system and framework into practice. First, a new institutional model was developed to support setting up the national qualifications system and framework. The ANQ, now the National Agency for Qualifications and VET (Agência Nacional para a Qualificação e o Ensino Profissional, I.P.) (ANQEP), under the Ministry of Labour and Social Solidarity and the Ministry of Education, was established in 2007 to coordinate implementation of education and training policies for young people and to develop the system for recognition, validation and certification of competences. The National Council for Vocational Training was set up as a tripartite body. In higher education, the Agency for Assessment and Accreditation of Higher Education (A3ES) was set up in 2007.

Second, a national qualifications catalogue was created in 2007 as a strategic management tool for non-higher national qualifications and a central reference tool for VET provision. For each qualification it defines an occupational profile, a training standard (that awards a double certification) and a recognition, validation and certification of competences standard. The catalogue is continuously updated by ANQEP, in a process supported by 16 sector qualifications councils.

Third, the system for recognizing non-formal and informal learning (RVCC) was further integrated into the NQF. The RVCC 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 adult education and training for basic and secondary level are structured into key competence areas, covering different contents of subjects at these specific educational levels.

ANQEP is the main public body in charge of implementing the NQF. The agency's main responsibilities are the education and double-certified vocational training offer for adults and for young people, the national qualifications catalogue (with help from sector qualifications councils), and the system for recognition, validation and certification of competences. The agency also acts as national coordination point and played a key role in referencing national qualifications to the EQF. Another important role is to articulate and communicate with the General Directorate for Higher Education regarding levels 5 to 8 of the NQF.

The NQF is in an early operational stage. All VET is already organized around the NQF: databases are organized considering the NQF structure and access to financial support also takes the framework into consideration. Further, all national VET qualifications indicate the corresponding NQF qualification level, thus becoming increasingly visible to individuals. Education and training stakeholders are involved in implementation of the NQF. There is still a need to discuss and raise awareness of key new concepts and learning outcomes among different stakeholders and disseminate information to a wide spectrum of stakeholders, especially in the labour market, where the NQF is not very well-known.

147 The current rate of tertiary attainment of 27.2 per cent (2012) is still below the European Union average (35.7 per cent), but Portugal has made significant progress in recent years.

Level descriptors and learning outcomes

An eight-level reference structure was adopted to cover all the qualifications awarded in the Portuguese system. National qualifications levels and level descriptors are the same as in the EQF in terms of categories and principles.

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 qualifications system as 'recognized capacity to mobilize knowledge, skills and attitudes in contexts of work, professional development, education and personal development'.[148]

The learning-outcome approach plays an important role in reforming Portuguese education and training. The NQF has been a driving force behind incorporation of the learning-outcomes approach into the Portuguese education and training system (Cedefop, forthcoming). There is a diversity of approaches and concepts and the level of implementation varies across education sub-systems. Fine-tuning learning outcomes in qualifications design with the NQF level descriptors is a challenging task and is work in progress (such as upgrading not only the national qualifications catalogue, but also qualifications in general education).

In general education, the national curriculum for basic education and essential competences was a national reference document for planning learning activities at both school and class levels until 2011. After a revision of the curriculum structure of basic and secondary education (considered too general and abstract) and to improve quality of education in Portugal, new programmes and curriculum outcome targets (*metas curriculares*) were defined for several subjects of basic and secondary education. This was followed by public consultation. These curriculum outcome targets are focused on knowledge and essential skills students need to master in different school years and cycles. They provide a fundamental and clear reference for teaching, presenting in detail the purpose of these subjects, the content to be acquired and skills and general capabilities to be developed. Entry into force of the curriculum outcome targets and programmes began in 2013/14 and will be run gradually, according to predefined and approved timetables.

In VET, reforms concentrate on the learning-outcomes dimension of developing qualifications standards and curriculum development. The qualifications obtained in VET sub-systems are organized by standards included in the national qualifications catalogue. Each qualification is organized in terms of units. Adjusting qualifications to the level descriptors is work in progress (about 25 per cent of qualifications have been updated and learning outcomes adjusted to the level descriptors). A new methodology for designing and describing qualifications based on learning outcomes has been prepared and will be published by the end of 2014.

In higher education, higher education institutions are responsible for implementing the framework and implementing learning outcomes within the study programmes. Implementation across institutions differs from one institution to another.

Validation of non-formal and informal learning and links to the NQF[149]

Several public policies and initiatives have been developed for validating non-formal and informal learning in Portugal. Since 2001, a comprehensive national system for recognizing non-formal and informal learning has been implemented. During 2012/13, major changes were introduced into the system. A total of 450 new opportunities centres in charge of validation and recognition of competences (for people over eighteen) were replaced by a new network of 214 centres for qualification and vocational training in early 2014. The new network assumes similar functions, but also targets young people (age fifteen) and provides guidance, counselling and validation activities to low-skilled adults and guides/orients young people completing nine years of basic education.

The RVCC system is incorporated in the national qualifications system and framework. It integrates two main processes:

- The education RVCC process, aiming to improve education levels 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.

148 Defined by Order No. 782/2009 (*Portaria* No. 782/2009) on national qualification system.

149 This section draws mainly on input from European Commission et al., 2014.

Adults can acquire basic or secondary-level education certificates and vocational qualification from levels 1 to 4 in the NQF. Such certificates have the same value as those awarded in formal education and training. RVCC processes are based on national standards for education and training (such as key competences in adult education and training reference framework) and integrated into the national catalogue of qualifications, used as a reference for vocational qualifications.

At higher education level, validation is generally linked to the credit system and module-based structure of courses and degrees. Students can obtain ECTS credits through validation that can be used for granting exemptions from part of a course in the first, second or third cycles of Bologna degrees. These credits are portable across higher education institutions in Portugal. The new legislation sets a limit of validation processes of up to one-third of the total number of European credit transfers and the accumulation system relevant for a particular course.

Referencing to regional frameworks

Portugal referenced its national qualifications levels to the EQF and self-certified to the qualifications frameworks in the European Higher Education Area in June 2011.

Table 50 Level correspondence between the Portuguese Qualifications Framework (QNQ) and the EQF

QNQ	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: ANQ, 2011.

Important lessons and future plans

The decision was taken to adopt 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 four-level structure for vocational training;
- define double certification at levels 1, 2, 4 and 5.

Important work has been done by writing the NQF users' guide (ANQ, 2011) and by publishing an e-book, *NQF: interpretation guide.*[150]

This document aims to: support design of qualifications based on learning outcomes; guide inclusion of new qualifications in the NQF; contribute to more effective appropriation of the NQF by its users; and encourage participation of VET actors for systematic and proactive use of descriptors of the NQF in their planning and design of provision.

Further work on qualifications standards, based on explicit learning outcomes, will support coherence and fine-tune the relationship between qualifications and qualifications levels. This work is still in progress, but gained momentum with creation of a new methodology for designing and describing qualifications based on learning outcomes. This methodology will be published by the end of 2014 and will be disseminated to different stakeholders.

There is a need to disseminate outcomes of the referencing and self-certification process to a wide spectrum of stakeholders, especially improving acceptance and use of the NQF by the labour market. In this context, the relationship between the tertiary framework and other parts of the NQF (levels 1 to 5) needs to be made explicit, especially for Level 5 programmes where different ministries are involved.

A strategy is being prepared, in articulation with the General Directorate for Higher Education, for including an explicit reference to the EQF level in national certificates, diplomas and Europass documents.

150 http://www.anqep.gov.pt/default.aspx [accessed 22.9.2014].

Main sources of information

[URLs accessed 22.9.2014]

The ANQEP is the national coordination point for the EQF in Portugal.
Information is available on the ANQEP website, especially on European tools:
http://www.en.anqep.gov.pt

List of abbreviations

ANQ	Agência Nacional para a Qualificação [National Agency for Qualifications]
ANQEP	Agência Nacional para a Qualificação e o Ensino Profissional [National Agency for Qualification and Vocational Education and Training]
ECTS	European credit transfer system
EQF	European Qualifications Framework
FHEQ	framework of higher education qualifications
MCTES	Ministério da Ciência, Tecnologia e Ensino Superior [Ministry of Science, Technology and Higher Education]
NQF	national qualifications framework
QNQ	Quadro Nacional de Qualificações [Portuguese Qualifications Framework]
RVCC	system for recognising non-formal and informal learning
VET	vocational education and training

References

[URLs accessed 22.9.2014]

ANQ. 2011.*Report on referencing the national qualifications framework to the European qualifications framework.* file:///C:/Users/EBAR/Downloads/PT+EQF+Referencing+Report.pdf

Cedefop (forthcoming). *Application of learning outcomes approaches across Europe.*

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Portugal.* http://libserver.cedefop.europa.eu/vetelib/2014/87073_PT.pdf

European Commission; Cedefop; GHK (forthcoming). *European inventory on validation of non-formal and informal learning.* Country report: Portugal.

MCTES. 2010. *The framework for higher education qualifications in Portugal.* http://bit.ly/1FHx9Zs

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

REPUBLIC OF KOREA

Introduction

In 2003 the Korean Research Institute for Vocational Education and Training (KRIVET) established the Korean Qualifications Framework (KQF), which sets out an integrated system of levels common to academic and vocational qualifications. The Ministry of Employment and Labour (MOEL, 2010*a*, 2010*b*) has recently made efforts to reform the KQF through the development of national competency standards (NCS) and the introduction of qualifications grounded in learning outcomes. These new measures are designed to strengthen links between industry, technical and vocational education and training (TVET) and the qualifications system, helping to raise the status and significance of TVET (Seung Il Na, 2012).

One of the challenges the KQF seeks to address is the significant imbalance between vocational and academic qualifications in terms of student numbers. The primary reason for this imbalance is that Korean society places a very high value on academic qualifications, which the Korean education system separates sharply from vocational qualifications. Vocational education is considered a second-class option in the Republic of Korea (Seung Il Na, 2012).

Nevertheless, despite such a highly educated youth population, the country is facing several challenges: (1) it has one of the highest youth unemployment rates among the OECD member states (Park, 2011); (2) the schism between the labour market and higher education creates societal instability; (3) the links between industry and higher education sector are weak in terms of the level of workforce training (Woo, 2010); (4) the skills mismatch ironically forces young people to seek more education, while employers have to invest more in on-the-job training for new recruits; (5) academic degrees are currently not linked to the national qualifications standards; and (6) the academic learning culture of higher education does not promote the full appreciation and value of recognizing non-formal and informal outcomes through the assessment of prior learning.

A further challenge relates to the nature of the TVET system in the country. Since TVET has traditionally focused on the high-school level, post-secondary TVET and lifelong learning have been neglected in TVET policies. As the country enters a knowledge-based economy and skills requirements continue to rise, TVET in schools, as well as in post-secondary and higher education institutions, needs to properly respond to the change.

The government is taking a number of measures to dispel the negative perception of TVET and to improve its quality. Firstly, it is trying to open pathways to higher education for vocational education graduates. Vocational high school students are being given the option of taking academic subjects so that they can later apply for admission to universities. In some schools, academic and vocational students share as much as 75 per cent of a common curriculum. Secondly, a new type of high school, modelled on the German dual education system and known as a *meister*[151] high school, was launched in 2008 to provide education geared towards industrial and business demands (Seung Il Na, 2012).

A further concern, however, is the diversity of the vocational qualifications system in terms of types of vocational qualifications, awarding authorities, and certification procedures (KRIVET, 2001). There are three major types of qualifications in South Korea: national technical qualifications focusing on manufacturing, services and business; national qualifications of non-technical categories, including 120 vocations, such as lawyer, accountant and patent expert; and private qualifications, including areas such as computers, language skills, sports and health, leisure and recreation activities, social welfare, counselling and civil engineering (Framework Act on Qualifications, 2011).

The lack of coherence among vocational qualifications continues since they are issued by various government authorities. Furthermore, the criteria for the vocational qualifications are too complicated and disconnected to allow

151 The German term for master craftsperson.

comparisons with each other. Additionally, it is difficult to grasp exactly how qualifications cope with a certain demand from an industry. Finally, there is a lack of incentive to further competence through acquiring a qualification.

In response to the above lack of coherence, the quality, relevance and credibility of qualifications became an issue. From 2002, the country began to introduce a competency-based approach in its curricula and methods of teaching as well as to develop occupational standards. This was also in response to the criticism leveled at TVET in the 1990s that it was not reflecting the skills requirements of a new economy.

Quality is not the only issue in the education and training system. Demographic challenges such as a low birth rate are resulting in calls for improved access to higher education and VET for as many learners as possible, particularly for adult learners.

Main policy objectives

The aims of the KQF and NCS are:

- to improve coordination among ministries responsible for TVET policy;
- to align TVET qualifications obtained in high schools and junior colleges with national technical qualifications and underlying standards (OECD, 2009, p. 1);
- to strengthen TVET beyond its present theoretical orientation and make it more practical and outcomes-based, so that it delivers the kind of human resources employers say they need;
- to build ladders of occupational and educational progression, so that dental mechanics can become dentists and legal and accounting clerks can become lawyers and accountants (Jeong-Yoon, 2012);
- to make learning and assessment activities more like real work and less like school;
- to strengthen the competitiveness of companies and the nation by recognizing informal learning;
- to link the identification, assessment and recognition of non-formal and informal learning to technical and vocational qualifications (Jeong-Yoon, 2012);
- to raise the perceived value of informal and non-formal learning by improving their quality with reference to the criteria and standards in the KQF and NCS.

Stakeholder involvement and framework implementation

The KQF was initiated by the Ministry of Education in consultation with other departments including the Ministry of Employment and Labour (MOEL) and the Ministry of Trade and Industry.

The Republic of Korea has been developing an articulation system between its traditional higher education system and vocational training and qualifications systems such as the Korean Skills Standards (KSS), the National Occupation System (NOS) and the KQF. The NOS has been developed and operated by MOEL and the KSS by the Ministry of Education.

KSS and NOS were integrated into the NCS in December 2010 by the Office for Policy Coordination. These efforts are designed to link various VET systems and vocational qualifications systems and to enhance the development of the competence-based VET system. Furthermore, the purpose of the merger was to reinforce an overall coordinating function and to conduct effective qualifications-related policy.

Now MOEL and its affiliates are responsible for operating the NCS (KRIVET, 2009). MOEL is responsible for refining vocational qualifications, improving the practicability of vocational certificates and upgrading the system for producing work-oriented tests. MOEL also oversees the application of NCS in the labour market (KRIVET, 2009).

However, work to develop the NCS is implemented mainly by the Human Resource Development Council, which must then be approved by the Korean Government, with research being conducted by KRIVET. Nine government ministries are responsible for the development of NCS in twenty industry categories, including agriculture and forestry, textiles, chemicals, machinery, electronics, environment, financial services, healthcare, culture, tourism, food processing and human services. Sector councils help improve connections between education and training and industry, while the Ministry of Education harmonizes qualifications across the different sectors in consultation with the various stakeholders. Between 2002 and 2012, standards were developed for eighty-five fields and 331 jobs. In future, standards are to be developed for 212 fields and 826 jobs.

The distinction between 'fields' and 'jobs' is important to understand. For example, the medical field has four subdivisions (here, 'jobs') in the Korean NCS: clinical medicine, nursing, basic

medicine and medical specialisms that support clinical medicine such as clinical pathology and medical imaging. It is expected that these standards will be widely used to structure TVET curriculum development.

Level descriptors and learning outcomes

The Korean Qualifications Framework comprises the national competence-based standards (NCS). NCS is a concept which identifies and standardizes competences which are required for job performance. It is a comprehensive concept including abilities such as the knowledge, skills and attitudes necessary to perform a job, and assessment of the ability. The NCS has been developed using the following procedures:

- Development of a comprehensive plan;
- Analysis of vocational structure and job;
- Designing competence units;
- Standardization of competences and levels;
- Evaluation of basic competences;
- Allocation of codes;
- Verification of vocational standards

The NCS serves as a channel for responding to the demands of industries and for reforming the curriculum of secondary schools and colleges, and the educational delivery system. This competence-based system in particular focuses on problem-solving, communicating, relationship management and teamwork.

Recognition and validation of non-formal and informal learning and links to NQF

Korea's mechanisms for the recognition and accreditation of prior and/or non-formal learning have developed in tandem with the KQF and NCS. Efforts are being undertaken to re-organize the national qualifications system in such a way as to allow learners to accumulate credits towards a qualification and a college degree via the Academic Credit Bank System (ACBS).

About 500 education and training institutions participate in the ACBS. The Ministry of Education develops the basic accreditation plan and issues final approval by sending a certificate of accreditation to each institution, whilst the National Institute for Lifelong Education (NILE) implements the plan, screens the documents and develops a final evaluation report for the Ministry of Education (Baik, 2013). The ACBS documents and recognizes outcomes from various non-formal learning activities by granting credits and conferring degrees when certain numbers of credits are accumulated. At present, six sources of credit are recognized by the ACBS:

- Credits transferred from formal higher education institutions;
- Credits obtained by taking part-time courses at formal higher education institutions;
- Credits transferred by from non-formal education and training courses accredited by NILE;
- Credits recognized for 'important intangible cultural properties' (the ACBS accredits master and apprenticeship programmes in the context of artistic activities regarded as traditional and cultural heritage);
- Credits recognized for national vocational qualifications (above the level of industrial technician);
- Credits transferred from the Bachelor's Degree Examination for Self-Education (BDES) (this system makes it possible to obtain an academic degree without attending a regular college or university by passing an examination conducted by NILE).

Of these six recognized sources of credits, the first two refer to universities. These credits are mostly accepted for an academic degree regardless of when they were awarded. Most ACBS accreditation, however, concerns non-formal education and training institutions. The number of credits obtained by acquiring national skills qualifications or by passing examinations depends on the level of difficulty of the exam.

The work of the ACBS is supplemented by the Lifelong Learning Account System (LLAS), a system designed to validate all types of learning by promoting the recognition and certification of both academic and vocational qualifications. The LLAS allows individuals to accumulate lifelong learning experiences and to 'invest' these experiences in moving up the career ladder.

Referencing to regional frameworks

The Republic of Korea seeks to align its own qualifications framework with those under development in other countries of the Asia-Pacific Economic Cooperation Forum (APEC) in order to allow for mutual recognition of qualifications across the region, thus enhancing educational and labour mobility.

Important lessons and future plans

The KQF and the NCS still need to be better understood across the full range of agencies and sector authorities involved in education, training

and employment. Universities, in particular, tend to guard their autonomy and only accept frameworks that reflect their existing practices. This attitude needs to change if the KQF and NCS are to bring about the framework's full intended benefits.

In the future, links to the KQF and NCS will make the ACBS and LLAS more reliable and convenient, not only for learners but also for employers and educators (Baik, 2013). ACBS could play a role in facilitating an NCS-based curriculum across the education and training institutions accredited by the ACBS. Credits from NCS-based education and training programmes might be a new way to link ACBS and TVET and, in doing so, the ACBS might gain more leverage concerning the traditional HE and other systems.

References

APEC. 2009. *Mapping Qualifications Frameworks across APEC Economies*. Singapore, Human Resources Development Working Group. Asia and Pacific Council,

Baik, E.S. 2010. *Company Needs Analysis for the Network Between the Lifelong Learning Account System and the Job Market*. Seoul, National Institute for Lifelong Education (NILE).

Baik, E.S. 2013. Republic of Korea: The Academic Credit Bank and the Lifelong Learning Account System. M. Singh and R. Duvekot (eds), *Linking Recognition Practices and National Qualifications Frameworks: International benchmarking of experiences and strategies in the recognition, validation and accreditation of non-formal and informal learning.* Hamburg, UNESCO Institute for Lifelong Learning.

Choi, S. D. 2007. *Country Background Report Republic of Kore*a. OECD, Thematic review on recognition of non-formal and informal learning. Paris, OECD.

Goodman, R., Hatakenaka, S. and Kim, T. 2009. *The Changing Status of Vocational Higher Education in Contemporary Japan and the Republic of Korea.* UNESCO-UNEVOC Discussion Paper Series, 4. Bonn, UNEVOC International Centre for Technical and Vocational Education and Training.

Halasz, G.; Sweet, R.; Taguma, M. 2009. *Recognition of non-formal and informal learning: Country note for South Korea.* OECD.

Jeong-Yoon,C. 2013. *Vocational Qualifications System in Korea.* http://de.slideshare.net/Shelly38/ vocational-qualifications-system-in-korea (Accessed on 12.02.2013.)

KEDI. 2004. S*tatistical Yearbook of Education.* Seoul, Korean National Statistical Office, Ministry of Education.

KEDI. 2013. *Statistical Yearbook of Education.* Seoul, Korean National Statistical Office, Ministry of Education.

Korea Times, Online Edition. What's wrong with youth employment?, Published 14 October 2012. [Accessed 7 May 2013.]

Korean Institute for Vocational Education and Training (KRIVET). 2001. *Qualification System in Korea*. Seoul, Korea Research Institute for Vocational Education and Training.

Korean Institute for Vocational Education and Training (KRIVET). 2009. *NCS Development Promotion Project.* Seoul, Republic of Korea, Ministry of Education.

Korean Institute for Vocational Education and Training (KRIVET). 2010. *KRIVET. The leading national think tank in HRD and TVET.* Seoul, Korea Research Institute for Vocational Education and Training.

Lee, H. Y.; Ko, Y.S. 2014. RPL/VPL practices in the Academic Credit Bank System of South Korea. R. Duvekot, B. Halba, K. Aagaard, S. Gabrscek, J. Murray (eds), *Validation of Prior Learning as a multi-targeted approach for access to learning opportunities for all.*

Ministry of Education, Science and Technology. 2007. *Second National Lifelong Learning Promotion Plan (2008–2012).* Seoul, Republic of Korea, Ministry of Education,

MOEL. 2010*a. The current state of skills development business.* Seoul, Ministry of Labour and Employment

MOEL. 2010*b. Long-term Basic Plan for National Competency Standards.* Seoul, Ministry of Employment and Labour.

National Institute for Lifelong Education (NILE). 2011. *Lifelong Learning Account System*. Seoul, NILE.

National Institute for Lifelong Education (NILE). 2013. *Manual for the Academic Credit Bank System.* Seoul, NILE

OECD. 2009. *Vocational Education and Training in Korea Strengths, Challenges and Recommendations.* OECD, Directorate for Education, Education and Training Policy Division. http://www.oecd.org/dataoecd/44/44/45166922.pdf (Accessed 11 August 2011.)

Park, D.Y. 2011. *South Korean policies on secondary vocational education.* http:// www.bitt.de/veroeffentlichungen/de publication/download/id76663 (Access 6 April 2014.)
Seung Il Na. 2012. Trends and Challenges of Vocational Education and Training in Korea. M. Pilz (ed.), *The Future of Vocational Education and Training in a Changing World.* Weisbaden, VS Verlag für Sozialwissenschaften/Springer Fachmedien.
Woo, C.S. 2010. *Post-secondary vocational education and training in South Korea: What is new and unique?* http://www.ghrforum.org/abstract/down/pdf/C2_PPTCheon-sik%20WOO.pdf (Accessed 6 April 2014.)
World Bank. 2013. Korea Country Overview. http://data.worldbank.org/country/korea-republic (Accessed 12 February 2013.)

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

REPUBLIC OF MOLDOVA

Introduction

The population of Moldova is approximately 3.6 million, with 58 per cent living in rural areas and 42 per cent in urban. The population is ageing and decreasing gradually.

Remittances rather than wages are the most important source of growth, and exports are low. More than half of gross domestic product (GDP) is concentrated in the capital, Chisinau. Although there is economic growth, inequality is also increasing and poverty is concentrated in rural areas.

The employment rate is only 39 per cent of the working age population. Unemployment is not high (5 per cent) but the majority of people are considered inactive. This includes, however, 25 per cent of the working-age population residing abroad as migrants. Most of these come from the rural areas where 40 per cent of the working-age population has emigrated.

In 2013 29 per cent of the total number of the people employed were engaged in agriculture, 54 per cent were engaged in services, and 17 per cent were engaged in industry and construction. One in four employed people work for the public sector. The majority of people (59 per cent) work for small or medium-sized enterprises (SMEs).

Growing emigration combined with demographic decline challenge the myth that the Moldovan pool of labour is plentiful, skilled and cheap. There are substantial imbalances between supply and demand in the labour market and a shortage of skilled workers. The 2014 study by the Moldovan Organization for SME Development (ODIMM) indicated that 57 per cent of interviewees have difficulties in finding suitable staff.

The National Employment Service is constantly monitoring the labour market. The Professions Barometer for 2014 indicates skill shortages for doctors, nurses, marketing and sales managers, software and other engineers. There is also an increased demand for tailors, cooks and confectioners, waiters and bar staff, cashiers and sales assistants. Occupations for which there is over-supply are also indicated.

Vocational education still lacks attractiveness. The number of students enrolled in secondary vocational and secondary specialized education has fallen by more than 50 per cent over the last twenty years. During the last five years, the number of persons enrolled in VET continued to fall with 20 per cent fewer graduates today than five years ago. In 2012/13, 11.6 per cent of youth went to secondary VET, while 9.7 per cent of youth went to secondary specialized education.

With a decreasing population, participation in higher education has fallen too. But higher education still offers, on average, better labour-market outcomes for individuals, although the benefits over VET are decreasing and the phenomenon of over-education (people finding jobs below their level of education) is increasing.

The main challenges that should be addressed by a national qualifications framework (NQF) can be summarized as follows:

- Education and training needs to respond better to current labour-market demands, through the development of relevant outcomes-based qualifications. The present education system has very few national standards which are quality-assured and meet the needs of the labour market.
- There is still a challenge in moving from a focus on setting curricula to a stronger orientation on assessing achieved learning outcomes. Standards for different sub-sectors of the education system, and the provision of adult learning, should be better aligned to improve permeability of the education and training system and facilitate lifelong learning, including through the validation of non-formal and informal learning.
- Migration and reintegration of migrants is a major concern in the country and the lack of transparency and transferability of skills is one factor among others preventing returning migrants' access to employment that matches their skills.

- VET governance structure is characterized by the concentration of policy processes and implementation functions within the Ministry of Education. Intermediary organizations have been created over the years, but have only recently been strengthened. There is scope for greater involvement of the labour market and social actors in governance within clearly defined roles, in particular in adult learning.

Main policy objectives

Dissatisfaction with the existing education and training system among citizens is one of the main reasons for the education reforms that form the background for the development of the NQF in the Republic of Moldova.

Different policy documents have been adopted recently that create a much clearer policy framework for education and training reforms and the NQF. These include the Moldova 2020 strategy, the Strategy for the Development of Technical and Vocational Education 2013–2020, the Strategy for the Development of Education 2014–2020, the new Education Code 2014, the Association Agreement between the Republic of Moldova and the EU, and the Association Agenda.

These policies underline the importance of an integrated lifelong learning approach, of the need to develop VET and adult learning, of the need to improve access, relevance and the quality of education and to adapt and diversify the offer to identified needs in the labour-market. The NQF is a tool in each of these policy documents.

The Moldova 2020 National Development Strategy recognizes that professional training is a key dimension in sustainable development. The first of the seven development priorities is 'linking the education system to labour market demands in order to increase productivity and employment'.

According to the Strategy for the Development of Technical Vocational Education 2013–2020, technical vocational education has to become attractive, qualitative, relevant to market demands, affordable, career-oriented and flexible, and must allow for the validation of non-formal and informal learning and for mobility in Europe in compliance with the provisions of the Copenhagen Process and the Bruges Communiqué. Graduates of the technical vocational education system should have increased employment opportunities as a result of the key skills, attitudes and professional competences acquired. The modernization of professional training and the improvement of mechanisms for continuous training of the workforce will enable people to adapt to new labour-market conditions. Strategic partnerships between the education system and labour-market components should be created, based on which the education system will be able to adapt quantitatively, qualitatively and structurally to labour demand. Technical and vocational education providers will provide training at levels 3 and 4 of the NQF, linking secondary VET and secondary specialized education in an integrated system. VET graduates should expect enhanced job opportunities as a result of improved key skills, attitudes and professional competences. A National Quality Agency should be responsible for assessment and accreditation of providers; and curricula and training of trainers should be aligned with the NQF.

The Strategy for Education 2020 stresses the importance of quality of education and competences, lifelong learning and particularly relevance of the labour market. It defines policies for better access, improved relevance, and enhanced quality and a stronger focus on the efficiency of public expenditure in education and training. It goes beyond the VET strategy, providing a detailed analysis of the situation in each sector of the education system and proposes concrete actions as solutions. It stresses that adult learning provision should be extended in line with social and economic needs, and better integrated with the initial education system. The structures and quality of education in Moldova should make it comparable with the European area for education. New policies should be tested and then upscaled. Solutions that have worked well elsewhere should be considered for adoption, and the role of institutions should be clarified and developed.

The Strategy for Education 2020 was adopted after the new Education Code (2014) that provides the legal basis of the reforms, including a strong lifelong learning orientation that includes general, technical vocational, higher education and continuous training for adults. Learning outcomes established for eight key competences should be provided to every citizen, a National Agency for Quality Assurance of Vocational Training should be established for the quality-assurance of provision and qualifications of higher education and VET, and a credit system should be introduced as well as a system for the recognition of non-formal and informal learning. The Association Agreement and the Association Agenda state that Moldova and the EU should cooperate to develop a national qualifications framework to improve the transparency and recognition of qualifications and competences.

The development of the NQF started within the framework of the Bologna Process. Since 2005, a two-cycle system has existed in higher education, a new list of education programmes agreed and the European Credit Transfer and Accumulation System (ECTS) introduced. During 2007/2008 the universities worked on rewriting their curricula in terms of learning outcomes, but the engagement of the economic sectors in this process was limited. Since 2008, several commissions worked on developing a concept for an NQF, concentrating principally on developing policies and strategies for quality assurance. In 2010, an NQF concept was adopted covering all eight levels, but was only implemented for the higher levels. Further work on the concept, focusing on VET and lifelong learning, took place in 2013 with support from ETF but has not yet resulted in an updated version of the 2010 concept. The Council of Europe also provided detailed comments on the 2010 concept in late 2013, indicating how it could be improved to bring it fully in line with the qualifications framework of the European Higher Education Area. According to the education strategy (November 2014), the national qualifications framework for lifelong learning is under development and, apart from higher education, still in its initial phase. Current developments are driven by the wish to align better to the EQF and the latest changes in the national economy. The plan is to ensure coherence with broad reforms regarding qualifications, which will be described according to learning outcomes and will be structured in a national qualifications framework. The aim is to harmonise training supply with labour-market skills needs, as described in occupational standards by relevant partners organized in sector committees. A national system for the validation of non-formal and informal learning outcomes should be developed to emphasise the lifelong learning perspective. A draft concept for the validation of non-formal and informal learning was developed in 2013 with the support of ETF, and is still being developed.

Although policy developments have stressed common principles and approaches, the approaches actually used for setting standards for higher education, initial vocational education and secondary specialized education have been very different. A different interpretation of the concept of the national qualifications framework has been at the root of this. Whereas a qualifications framework is generally understood as a common framework to classify qualifications at different levels in order to relate them to each other, in Moldova the NQF is developed for each cycle or level of learning. Thus, until very recently mention was made of an NQF for Level 3, an NQF for Level 4, etc. Even the Education Code states that the NQF in higher education is developed for each cycle of learning and includes a description of the direction of training, a description of qualifications and the training, the educational goals and learning outcomes, the workload expressed in units and credits, methods of learning, teaching and assessment, and quality-assurance procedures.

For higher education, complex standards have been defined at national level by groups of academics from different universities, consulting as well, where appropriate, the representatives of the world of work. The standards have several layers determining outcomes, for levels and for specific domains, as well as for specific specializations (as in subject area benchmarks), and include key competences. A matrix structure has been used to link outcomes to curriculum subjects, but they do not seem to provide very clear outcomes for assessment.

In the college sector (secondary specialized education, now part of technical and vocational education), standards originally followed the standard structure for higher education. Programmes have been developed for post-secondary technical vocational education based on general and specialist competences for over 80 per cent of subjects in seventy-eight specialisms (years 1 to 4). The novelty of the new programmes is that they offer training in vocational competences both at the level of the subject and at the level of the specialism. New programmes have been updated in line with modern scientific and technological achievements. A credit system for post-secondary technical vocational education was approved in September 2013 and has been being piloted in thirteen colleges. Currently, the standards follow a similar structure as for initial vocational education and training (IVET) standards. Although many standards have been reviewed, the list of specializations is said to be out of date. Standards in higher education and for secondary specialized education include a description of the qualification characteristics defining the competences expected by the labour market. Although these have been developed in consultation with stakeholders from the world of work, they are defined by the education sector.

The secondary VET standards are to be based on occupational standards. These are defined by representatives from sector committees. A new structure with a clear focus on assessment was adopted for vocational qualifications last year. It can also function as a model for other qualifications. Due to the lack of occupational standards, the number of new vocational qualifications is only growing gradually, but there is support from an EU-funded project to produce more standards and qualifications.

Continuing vocational training (CVT) standards date from 2005 and although they stipulate that they need to contain 'professional competences and assessment', these standards mainly define input criteria, such as duration, curriculum and staff requirements. They contain a list of disciplines but it is not clear how learning outcomes are described.

The Ministry of Social Protection and Family adopted a new classification of occupations in 2014. Study programmes offered by secondary vocational education institutions are included in the Nomenclature of Professions for Secondary Vocational Education Training, which defines between eighty and ninety trades and professions for which training is available in technical vocational educational institutions in Moldova. The nomenclature was also updated in 2014.

Quality assurance for the entire technical vocational education system is undergoing a comprehensive development process covering issues of relevance for the labour market – as reflected in occupational standards and transposed to qualification standards contained in the NQF – and is continuing with the development of an adapted curriculum and the tackling of issues related to infrastructure and networks. Evaluation and accreditation of programmes, institutions and teacher training in support of the process are also included.

According to the Education Code, technical vocational education qualifications are awarded in accordance with the NQF, developed on the basis of occupational standards or profiles for each level of vocational education in line with the European Qualifications Framework and in accordance with labour market needs. The NQF is being developed by the Ministry of Education in collaboration with the relevant ministries, sector committees, technical vocational educational institutions, businesses and other social partners, and is approved by the government.

Stakeholder involvement

In 2011, a procedure and format for the development of occupational standards was established, with strong involvement of the social partners, and approved by the Prime Minister (Government Decision no. 952/2011). Sector committees are in charge of drafting new and reviewing existing occupational standards. The sector committees are established by a decision of the National Committee for Collective Bargaining and Consultation. There are currently five sector committees, covering construction, agriculture and food, transport and road infrastructure, and the recently established information and communication technologies and trade workers and non-food sectors (both within the Ministry of the Economy). The Strategy for the Development of Technical Vocational Education 2013–2020 plans to establish sector committees in eleven sectors in total by 2020. The consolidation of the sector committees as legal entities is not yet resolved. The occupational standards form the basis for the vocational qualifications. For the development of occupational standards, the sector committees establish working groups and commissions: (1) the working group for occupational analysis and development of occupational profiles; (2) the working group for developing occupational standards; and (3) the occupational standard verification and validation committee charged with verifying and validating occupational standards. As a next step, the National Council for Occupational Standards needs to examine and approve the occupational standards before they are adopted by a common order of the Ministry of Education and the Ministry of Labour, Social Protection and Family. In 2013, six occupational standards were adopted for the roles of painter, locksmith-installer of sanitary equipment, wine maker, confectioner, and concrete worker and stone-mason. With the support of a European project to implement the Strategy for the Development of Technical Vocational Education 2013–2020 and the roadmap for the development of new occupational standards, a complete set of occupational standards for technical vocational trades/specialisms is expected to be prepared by 2017. The project developed a streamlined approach for the design and approval of occupational standards. This simplified approach was approved last year. The project has so far supported the development of four new standards for baker, electrician, driver and ICT fitter. Some 250 people were involved in the training for developing standards and qualifications in 2014.

The Centre for VET Development is being strengthened to provide methodological support for the sector committees. The existing sector committees have started to map the occupations, for which they plan to develop new standards.

Since 2007 close to 100 specialized commissions have working every three years on new higher education programmes based on learning outcomes. These commissions consult social partners. The process for developing standards, involving so many academics and discussing with them the importance of learning outcomes, and trying to make them more relevant to the labour market, deserves admiration. However, there is still much variation in the quality of the standards,

and they are very different in structure from the VET standards.

According to the Education Code, the National Agency for Vocational Education Quality Assurance is responsible for developing a methodology for evaluating and accrediting providers of training programmes in VET and higher education. For secondary vocational education it will evaluate the curriculum, the educational process and learning outcomes. The agency will establish criteria for the qualifying examination. This applies both to the summative assessment of formal education, as well as for the validation of non-formal and informal learning. The agency does not yet exist but a council for the creation of the agency was established in August 2014. The quality assurance agency might develop into a qualifications agency, but this is not yet decided. The Ministry of Education will maintain the national register of qualifications.

Level descriptors and learning outcomes

Eight levels have been identified for an overarching NQF. For higher education, a two-cycle system (equivalent to bachelor's and master's courses) has been implemented and a third cycle covers the Ph.D. and the doctor of sciences qualification. ECTS is being introduced via legislative amendments. In 2014, the third generation of new higher education standards was adopted.

According to the general provisions, the NQF concept of 2010 represents a single instrument establishing a structure of qualifications for the (vocational) education and training system of the Republic of Moldova. Yet while describing the structure of the NQF two approaches are used: one occupationally-oriented set of level descriptors based on three generalised indexes of human activity: *diversity of empowerments and responsibility* (general competences), *complexity of activity* (nature of competences) and *scientific intensity of activity* (knowledge); and one with a lifelong orientation that can be directly referenced to the EQF but goes beyond the EQF descriptors in detail. The second table covers *knowledge, skills* and *competences*, but also contains a table with ways to attain the given level of qualification. The existence of two sets of level descriptors is not unique to Moldova. However, while the purpose of each set of level descriptors is explained, using two different sets is not promoting an integrated approach to the NQF. At least from a technical point of view it seems feasible to integrate both sets of descriptors.

Learning outcomes have clearly entered training programmes and curricula, across the education and training system, although there are still some examples around that could be characterized as 'old contents in a new format' (see Strategy for Education 2014–2020). The use of learning outcomes for assessment is less widespread and needs to be reinforced.

Validation of non-formal and informal learning

The limitations of the VET system are reflected in the labour market. Most of the professions coded in the national classifier equate to qualifications awarded on graduating from upper-secondary VET and to those awarded by the post-secondary colleges. There is little room for career progress from vocational and technical jobs, as jobs above the equivalent of EQF Level 5 in the public and private sectors are reserved for managers and decision-makers who tend to be university graduates in fields not offered by post-secondary colleges.

VET has also lost out due to the effective absence of horizontal pathways between vocational and general secondary education and vertical openings towards higher education. The legitimate aim of increasing the quality of secondary VET has led to the creation of many different types of school (such as business schools, vocational schools, vocational lyceums and vocational high schools) but has also raised uncertainty in the VET internal structure. Post-secondary VET colleges have also been disadvantaged following changes driven by the Bologna Process and the adaptation to the International Standard Classification of Education (ISCED) and the Moldovan Classification of Educational Programmes (MoldCED). The Education Code now foresees the integration of different types of institutions in the technical and vocational education sector around the best-performing schools. There is some discussion as well about creating new dual pathways in VET. With the emphasis on lifelong learning, the permeability and progression pathways are likely to be strengthened, although improved progression routes in education are not mentioned as a specific goal. The emphasis on the eight key competences that have been identified in the strategy for education are seen as an implicit condition for improved mobility and progression opportunities. The upgrading and quality enhancement of the network of VET providers could also boost the reputation of VET and hence bring it closer to higher education.

With a considerable share of migrants among the adult population, mechanisms for reintegrating them in the labour market is a national priority. Within the labour market development component of the Moldovan Mobility Partnership programme, a concept was developed in 2011 for establishing a system and services for the recognition of non-formal and informal learning in order to increase the transparency of skills of adult workers. The proposal is based on the use of occupational standards as a reference instrument for assessment and recognition of skills. The approval of a national Validation of Non-formal and Informal Learning (VNFIL) approach, aligned with the NQF development, is also backed by the Strategy for Technical and Vocational Education 2012–2020.

A concept paper for the national validation system for non-formal and informal learning was developed with the support of ETF in 2013. It proposed to start VNFIL procedures for selected occupations, involving a limited number of public institutions, in particular VET providers, in order to develop a decentralized model of assessment centres. At national level, the Council for Occupational Standards and Certification of Professional skills and national policy representatives could oversee implementation. At sector level, sector committees are in charge of the 'sector communication process' to promote VNFIL and provide experts at local level for evaluation committees. The Ministry of Education is ultimately responsible for issuing certification. In order to ensure trust in this new system, assessors must be competent. Assessors could operate in pairs of two persons that are recruited through sector committees, trained and certificated. Supervisors should quality-assure and validate the assessment at the level of the assessment centre. A VNFIL report drawn up by the assessors should be submitted to a certification commission which reviews the results of the assessment reports before they are passed on to Ministry of Education for decision-making and certification. The certification committees would exist between five and seven people. It is also proposed to establish a national centre of expertise on VNFIL. The concept is being developed further under the coordination of the Ministry of Education to bring it in line with the Education Code, but an updated version is not yet available. Apart from the absence of an approved concept, the main bottleneck for starting the testing and implementation of a VNFIL system is the lack of standards. There are now ten occupational standards available that could be used, but their number is likely to grow during 2015. Another open issue is the type of certificate that would be issued. In accordance with the Education Code, the Quality Assurance Agency should have a role in setting the criteria for the qualifying examination, and this would also need to be built into the system. Testing could start in 2016.

Referencing to regional frameworks

A strong motivation of the Republic of Moldova to develop an NQF is the link to the EQF and alignment with the qualifications framework of the European Area for Higher Education (QF EHEA), in order to use the EU's tools for quality standards, and to improve the mobility and skills validation of the many migrants from Moldova. Although Moldovan documents make reference to the EQF there is no reference to the EQF in the Association Agreement, although it makes reference to the development of the NQF. National experts expect that for self-certification, a further two- to three-year time frame is needed, as the Quality Assurance Agency will need to become fully operational and further adaptations of the framework and standards are anticipated.

Important lessons and future plans

As can be seen from the description of the process on designing the qualifications framework for higher education, this has already been a lengthy process with many actors involved. The new legal framework with its emphasis on lifelong learning and key competences, the establishment of the Agency for the Quality Assurance of Vocational Training, the consolidation of the sector committees, the strengthening of the role of the Centre for the Development of VET and the strengthening of the VET institutions is creating a conducive environment for progress. This supports the development of more relevant, coherent and transparent qualifications standards, which are at the basis of new curricula, new approaches to assessment and, finally, more confidence in the qualifications and opportunities for qualification holders.

Clarifying the NQF concept

The key issue now is to clarify how these qualifications will be related to one another, and whether there will be two NQFs, one for higher education and one for VET and lifelong learning, or the NQF will be brought in line with the EQF, creating one overarching NQF of which the higher education qualifications framework will be a sub-framework with more detailed specifications.

The concepts for the NQF and the proposed level descriptors should be reviewed and possibly amended in order to bring them in line with the EQF and the QF EHEA, facilitating self-certification.

Bringing qualifications into the national register

A provisional mapping of qualification types that should be part of the NQF should take place, starting from existing qualifications, deciding how to address the allocation of vocational qualifications to different levels, and considering as well how to address adult learning and how to facilitate partial recognition (unitisation) which is important to facilitate validation of non-formal and informal learning. A procedure will need to be developed for including qualifications in the national register for qualifications, deciding, on the one hand, how to deal with the existing qualifications and, on the other, how to address qualifications in the future. The links between the national register, the NQF and the classifier of occupations, the new law on professions, and the classifiers of education programmes, should be clarified.

Mapping roles and responsibilities of institutions

The different legal acts and policy papers have helped to clarify the new institutional framework. The Ministry of Education holds the prime policy responsibility and is responsible for the national register of qualifications. The Ministry of Labour, Social Protection and Family and the National Employment Service are in charge of improving the labour market information, in cooperation with the sector committees. Sector committees, supported by the Centre for VET Development, develop occupational standards and contribute to the development of qualifications and the validation of non-formal and informal learning. The Council for Occupational Standards reviews and approves occupational standards and is proposed to act as a body coordinating the development of the validation of non-formal and informal learning. The Agency for Quality Assurance for Vocational Training is in charge of defining criteria for qualifying examinations. HE institutions act both as providers and awarding institutions, while the Ministry of Education is responsible for the certification of all other forms of training. There is nevertheless a need to map these roles carefully in the light of the NQF's implementation. This will also help in completing the regulatory framework.

Validation of non-formal and informal learning

Following the development of more occupational standards, and the clarification of the roles of the Agency for Quality Assurance, the Council for Occupational Standards, and the Ministry of Education as the certificating body, a start could be made with the introduction of the validation of non-formal and informal learning in line with the adopted concept.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

ROMANIA

Introduction

Romania has adopted a national qualifications framework (NQF) based on learning outcomes: the Romanian national qualifications framework (ROQF), created by government Decision No. 918/2013.[152] This aims to bring together nationally-recognized qualifications from both initial and continuing vocational education and training (CVET), apprenticeship, general and higher education, and helps integrate validation of non-formal learning into the national qualifications system.

The framework builds on reforms in vocational education and training (VET) and development of competence-based qualifications since the 1990s. The National Council for Adult Training was established with responsibility for coordinating the national register of (vocational) qualifications and for putting the validation system into practice (authorizing validation centres, certifying individual assessors, issuing formal competence certificates, etc.). Parallel work was carried out in higher education, steered by the Agency for Qualifications in Higher Education, and has been taken forward in a partnership between universities and representatives of the social and economic environment. A qualifications framework for higher education, in line with the Bologna Process and the European Qualifications Framework (EQF), has been implemented. Self-certification was completed in 2011.

One of the main challenges in recent years has been to link these two development processes, structures and stakeholders from VET, higher education and the labour market in a more comprehensive framework. An important step was taken in June 2011 when the National Council for Adult Training and the Agency for Qualifications in Higher Education were merged into one single body – the National Authority for Qualifications (Autoritatea Nationala pentru Calificari) (ANC) – responsible for developing and implementing a comprehensive NQF.

Reform of the Romanian education system is underpinned by legislation, mainly the National Education Law (Law No 1/2011),[153] with subsequent amendments, aiming to open up and upgrade the education system. Promoting a broad, lifelong learning perspective, the law also emphasizes importance of validation.

Main policy objectives

Apart from its transparency function, the ROQF is seen as a tool to support national reforms and modernization of education and training, opening up a possibility to address several issues, such as coherence and progression in the education system, use of validation, adult participation, and transitions between work and education. Romania faces a challenge in raising quality of education. There is also a reported lack of coherence in the qualification system and lack of progression possibilities between initial VET, CVET and higher education systems. Several qualifications frameworks (notably for VET and higher education) exist and there is a lack of validation of non-formal and informal learning within formal education needed to support entry and mobility within education. Adult participation in lifelong learning is low (1.4 per cent in 2012) (European Commission, 2013). Additionally, qualifications should respond better to labour-market needs and there is a requirement for greater transparency of learning outcomes and labour-force mobility. National qualifications also need to be understood abroad and linked to the EQF.

Development of a comprehensive NQF addresses the following policy objectives:

- Integration and coordination of national qualification subsystems;
- Improvement in transparency;
- Making access to lifelong learning for all easier;

152 Government Decision No. 918/2013 regarding approval of the NQF. http://bit.ly/1LlYsuA [accessed 15.10.2014].

153 National Education Law No. 1/2011. http://www.edu.ro/index.php/legaldocs/14847 [accessed 15.10.2014].

- Assuring progress;
- Improving qualification quality in line with needs of the labour market and broader society.

Stakeholder involvement

The Ministry of National Education initiated work on a comprehensive framework in cooperation with the Ministry of Labour, Family, Social Protection and Elderly. Other ministries, as well as social partners and stakeholders from education and training, were involved. The ANC – coordinated by the Ministry of National Education – is responsible for work on the ROQF.

The main body responsible for development and implementation of a comprehensive ROQF is the ANC, established in June 2011. It brings together two institutions: the National Council for Adult Training, in charge of CVET qualifications, and the National Agency for Qualifications in Higher Education, responsible for higher education qualifications.

This single legal entity – coordinated by the Ministry of Education, Research, Youth and Sports – has the following responsibilities:

- Proposes elements of national policies and strategies, draft legislation on the NQF;
- Develops, implements and updates the NQF;
- Develops and updates methodologies for NQF implementation;
- Develops instruments needed for monitoring, evaluation and control of the NQF;
- Quality-assures implementation of the NQF;
- Manages the national qualifications register (Romanian Ministry of Education and ANC, 2014, pp. 30–31).

Framework implementation

The qualifications framework is firmly based on national legislation and adopted by Government Decision No. 918/2013.[154] It has a clear governance structure. However, it is not operational yet. Stakeholders need to agree on how to implement it.

A (draft) EQF referencing report was presented in June 2014. The ROQF, as proposed for referencing, is a classification framework. Its future reforming role to support development and revision of qualifications and quality-assurance arrangements is acknowledged. One explicit aim of the ROQF is to support lifelong learning. Currently, the ROQF comprises all educational stages and levels of education (from primary school education to doctoral level). It can be regarded as a comprehensive framework. However, it is restricted to qualifications from formal education and training; levels 6 to 8 are limited to qualifications awarded by higher education institutions. The question arises of how open or closed the framework will be in the future; what actual role will it play in supporting lifelong learning, access, progression and participation (especially of adults)? Will it become a tool for recognition of lifelong learning achievements? The links between the framework for higher education in place since 2011 and the framework for lifelong learning are not clear.

Level descriptors and learning outcomes

The ROQF describes eight levels of qualifications that can be acquired in the education and training system and by validation of learning outcomes from non-formal and informal learning arenas. National level descriptors are identical to EQF level descriptors. They are defined as knowledge (theoretical and factual), skills (cognitive skills – use of logical, intuitive and creative thinking), practical skills (manual dexterity and use of methods, materials, tools and instruments) and scope of responsibility and autonomy.

Extensive previous work on national level descriptors for the qualifications framework for lifelong learning – defined as knowledge, abilities and transversal competences – was not taken forward and integrated into the government decision. The concepts applied in the previous NQF proposal were broadly shared with the framework for higher education – already self-certified to the qualification frameworks in the European Higher Education Area (National Qualifications Authority, 2011), potentially paving the way for smooth integration of this framework into the framework for lifelong learning. Eight generic level descriptors were identified within three broad categories (knowledge, abilities and transversal competences). Knowledge was subdivided into two strands: knowledge, understanding and use of specific language and explanation and interpretation. The concept of abilities included application, transfer and problem-solving; critical and constructive reflection; and creativity and

154 Government Decision No. 918/2013 regarding approval of the NQF. http://bit.ly/1LlYsuA [accessed 15.10.2014].

innovation. Transversal competences referred to autonomy and responsibility; social interaction; and personal and professional development. In future developments and implementation it remains to be seen how these two parallel processes and frameworks will be linked and integrated.

There is commitment and visible preoccupation to strengthen the learning-outcomes approach as part of the national reform programme. The Law of Education (1/2011)[155] embraces a learning-outcomes approach and provides a clearer legislative framework. Changes in national policies are mainly generated by the European legislative framework; in recent years also influenced by workforce migration and student mobility. Low results in the Programme for International Student Assessment (PISA) (OECD, 2014) put pressure on general education and teacher training (initial and continuous) to have more comprehensive understanding of learning outcomes and use of knowledge and skills in real-life situations.

As reported in a Cedefop study on learning outcomes (Cedefop, forthcoming), the learning-outcomes concept is not widely shared. There are many different interpretations due to various linguistic and pedagogic concepts.

In VET, a learning-outcomes approach responds directly to social and economic needs. Many learning programmes developed in VET are based on competences. Occupational standards are used in CVET and are based on actual elements of competence to be proved in the workplace. Vocational training standards based on learning outcomes have been developed in collaboration with the social partners and approved by the Ministry of National Education. New curricula have been designed.

Adult education has a weak tradition in Romania. There are two factors which keep the learning-outcomes approach at an early stage: very low participation of adults in lifelong learning (1.4 per cent in 2012) and a very diversified institutional landscape with different types of institutions, programmes and organizational arrangements.

Within higher education, qualifications are linked to the credit structure of the European credit transfer system (ECTS). Applying this is compulsory for all higher education institutions in Romania. Use of a competence-based model is part of higher education reform. However, many competences for study programmes are not well defined to differentiate between bachelor and master's levels. There is a challenge in using competence-based models in designing curricula, learning resources and assessment tools (Cedefop, forthcoming).

Validation of non-formal and informal learning and links to the NQF[156]

As indicated above, the National Law of Education No. 1/2011[157] reaffirms validation's role in lifelong learning policies. The chapter on lifelong learning creates the legal framework for developing lifelong learning community centres with a specific role in increasing access to validation for disadvantaged communities and also emphasizes use of lifelong learning portfolios in formal education. Creation of these centres, however, is still under discussion.

The legislative framework for the ROQF states that qualifications obtained through non-formal and informal education will be included in the NQF, using ROQF level descriptors. At the moment, the methodology allows only for Level 4 or lower to obtain a qualification through validation of non-formal and informal learning. However, it is important to note that in the ROQF, validation is still linked only with occupational standards that relate to CVET qualifications, and is not yet operational with regard to formal education. According to the ANC, the current system of validation in Romania is rather parallel to the formal system, and the bridge between the two is still not fully developed. It is not possible to obtain formal qualifications (full or partial) through validation of non-formal and informal learning. The validation system is mainly for adults and people who do not tend to go back to the formal system. However, this is an open discussion at the moment.

There are already 146 assessment centres and 49,900 people have been assessed and certified so far, of which about 21,900 people were assessed and certified during 2010–13. There has been an increase in numbers of assessment centres and beneficiaries of validation. Interest in validation has been stimulated by the lifelong learning programme in Romania in recent years. In particular, a growing number of non-governmental organizations are interested in mobility and non-formal learning projects linked to Youthpass and Europass.

155 National Education Law No. 1/2011. http://www.edu.ro/index.php/legaldocs/14847 [accessed 15.10.2014].

156 This section draws mainly on input from European Commission et al., 2014.

157 National Education Law No. 1/2011. http://www.edu.ro/index.php/legaldocs/14847 [accessed 15.10.2014].

Referencing to regional frameworks

The referencing of the NQF to the EQF is ongoing. The first referencing report was presented to the EQF in June 2014.

Table 51 Level correspondence between the Romanian Qualifications Framework and the EQF

RQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Romanian Ministry of Education and ANC, 2014.

Important lessons and future plans

It is important to have good cooperation between different stakeholders and structures. Merging the National Council for Adult Training and the Agency for Qualifications in Higher Education into a single body – the ANC – responsible for development and implementation of a comprehensive NQF is seen as an important step in supporting more coherent approaches.

Increasing participation in adult learning remains a challenge. Recent amendments to legislation on adult training establish completed and certified adult training as part of the national education and training system. Legislation also requires permanent community learning centres to be established by local authorities, in partnership with education providers. The centres will play a key role in implementing lifelong learning initiatives at local level, focusing on education and training, information and dissemination and personal development. Activities will include second-chance programmes and validation. Establishing these centres is expected to help increase participation rates for under-represented groups.

Main sources of information

[URLs accessed 19.9.2014]

ANC: www.anc.edu.ro
Ministry of National Education (Ministerul Educaţiei Naţionale): http://edu.ro/
Romanian Ministry of Education and ANC, 2011.
Romanian Ministry of Education and ANC, 2014.

List of abbreviations

ANC	Autoritatea Nationala pentru Calificari [National Qualifications Authority]
CVET	continuing vocational education and training
EQF	European Qualifications Framework
NQF	national qualifications framework
OECD	Organisation for Economic Cooperation and Development
ROQF	Romanian National Qualifications Framework
VET	vocational education and training

References [URLs accessed 19.9.2014]

Cedefop (forthcoming). *Application of learning-outcomes approaches across Europe.*

European Commission. 2013. *Education and training monitor 2013: Romania.* http://ec.europa.eu/education/tools/et-monitor_en.htm

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Romania.* http://libserver.cedefop.europa.eu/vetelib/2014/87074_RO.pdf

OECD. 2014. *PISA 2012 results in focus: What 15-year-olds know and what they can do with what they know.* Paris: OECD Publishing.http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf

Romanian Ministry of Education; ANC. 2011. *Verification of compatibility of the Romanian national qualifications framework for higher education with the framework for qualifications of the European Higher Education Area: self-certification report.* http://www.ehea.info/Uploads/Irina/Self_certification_Report_RO_2011.pdf

Romanian Ministry of Education; ANC. 2014. *Referencing the Romanian national qualifications framework to the European qualifications framework for lifelong learning.* http://www.anc.edu.ro/uploads/images/info_utile/Referencing_the_ROQF_to_EQF_mai%202014_final.pdf

Prepared by: European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

RWANDA

Introduction

Rwanda currently has two qualifications sub-frameworks: the Rwandan Qualifications Framework for Higher Education (RQFHE, also called the Rwandan National Qualifications Framework) and the National Technical and Vocational Education and Training (TVET) Qualifications Framework (NTQF).

Historically, higher education in Rwanda was provided for only a few students at undergraduate level. There was little investment in quality, research, innovation and knowledge transfer. The present government acknowledges the importance of investing in teaching, learning and research so as to improve the quality and relevance of undergraduate and continuing education (Ministry of Education, 2008).

Rwanda's TVET sector is struggling with the interrelated issues of skills mismatch and limited job growth. Over 42 per cent of young people are unemployed, underemployed or engaging in subsistence agriculture. Several programmes have been developed to address youth unemployment, but since they are not systematically interlinked, these initiatives are failing to reach as many young people as they might (OECD, 2012). At present, policy frameworks for skills development, job creation and gender equality rarely translate into tangible impacts.

Main policy objectives

The RQFHE aims to:

- enable international benchmarking of standards;
- ensure that educational programmes are developed and delivered in conformity with the framework and its quality-assurance system (Rwandan National Qualifications Framework, 2007, p. 3);
- make the Rwandan higher education sector more internationally credible and competitive;
- widen participation in and access to education in Rwanda;
- align Rwandan qualifications more closely with the world of work; and
- support research, innovation and knowledge transfer.

In alignment with the policy of the TVET sub-sector as a whole, the NTQF aims to:

- promote the establishment of a knowledge-based economy for the purposes of sustainable development in Rwanda;
- establish mechanisms for the recognition of formal, non-formal and informal learning;
- widen access to TVET; and
- enhance the professional development of Rwandan workers by furnishing them with skills and knowledge which are relevant to the labour market.

Stakeholder involvement

The RQFHE is the responsibility of the Higher Education Council (HEC). The function of the HEC is to carry out institutional quality audits and subject reviews, and to monitor and report on the performance of the higher education sector against national targets.

The NTQF is governed by the TVET Authority, which was established by law to promote skills development in the national workforce in order to enhance Rwandan workers' competitiveness and employability (Ministry of Education, 2008). The TVET Authority is governed by a council whose membership reflects the authority's wide range of stakeholders and beneficiaries in both the public and private sectors. The council's chairs include representatives from relevant ministries, the private-sector federation and its chambers, employers and employees, NGOs, TVET providers, farmers, professional associations, faith-based organizations and all public institutions which deal with human resource development. The weight of employers in the council will be critical for its success (Ministry of Education, 2008, pp. 16–17).

The TVET Authority defines levels and standards for the NTQF and indicates learning outcomes at

each level which specify what a learner is able to do as a result of the learning process. It also defines the level descriptors which detail the competences (knowledge, skills and attitudes) a person has acquired and/or is able to demonstrate after completion of a learning programme and in order to be considered qualified at a given level in a given field. 'Competence' refers to the ability to apply the complete set of skills, knowledge and attitudes (learning outcomes) in a defined context, for example in the performance of a specific occupation.

The National Examination and Certification Framework, a legal authority, will offer examinations and certification for all qualification levels. A labour market information system (LMIS) will provide information on the needs of employers, which will shape curriculum development. A business incubation (entrepreneurship development) facility will provide support services to up-and-coming entrepreneurs with lower vocational skills.

Level descriptors and learning outcomes

The RQFHE has seven levels. Learning outcomes at each level are described in terms of five dimensions. These are: knowledge and understanding; applied knowledge and understanding; cognitive skills; communication, ICT and numeracy skills; and autonomy, responsibility and working with others. The level descriptors provide a clear understanding of the learning outcomes expected at each level. All subject groups are required to produce benchmark statements to define their learning outcomes. Programme teams are expected to specify learning outcomes across all five dimensions for each given programme. These are subject to approval by the Higher Education Council before the programme is delivered.

Two factors determine the level of a qualification within the RQFHE: the difficulty of the learning outcomes and the volume of credit that can be achieved (see Table 50).

Table 52 Higher Education Level 1 (Certificate of Higher Education) as an example

Knowledge and understanding	Practice: applied knowledge and understanding	Cognitive skills	Communication, ICT and numeracy skills	Autonomy, responsibility and working with others
Demonstrate: • a broad knowledge of the main principles of the subject; • an awareness that knowledge is constantly evolving; • an understanding of the difference between knowledge supported by data and proof and knowledge that is discursive and conceptual without the support of evidence.	Use some of the basic and routine techniques and/or materials associated with the subject. Practise these techniques in routine and non-routine situations.	Present and evaluate arguments, information and ideas which are routine to the subject. Use a range of approaches to address pre-defined and/or routine problems in familiar contexts.	Use a range of routine skills associated with the discipline, for example: • convey complex ideas in a well-structured and coherent form; • use a range of forms of communication effectively in both familiar and new contexts; • use standard ICT applications to obtain and process a variety of information and data; • use a range of numerical and graphical skills.	Be able to work with little or no supervision. Be able to work with others to achieve defined objectives. Take responsibility for own work. Be able to take a leadership role in group work.

Source: Rwandan National Qualifications Framework, 2007.

The requirements for the award of qualifications from higher education institutions are in line with the draft Rwandan National Qualifications Framework for Higher Education produced by the National Council for Higher Education.

At the core of the RQFHE is a Credit Accumulation and Modular Scheme (CAMS), which is benchmarked to internationally recognized standards. This is illustrated by Table 51 below.

Table 53 Rwanda: The RQFHE credit accumulation and modular scheme

Award	Level	Credit	Year (undergraduate full time)
Certificate of HE	1	120 Level 1	1
Diploma in HE	2	240: 120 Level 1 + 120 Level 2	2
Advanced diploma in HE	3	300: 120 Level 1 + 120 Level 2 + 60 Level 3	3 Semester 1
Bachelor's degree	4	360: 120 Level 1 + 120 Level 2 + 60 Level 3 + 60 Level 4	3 Semester 2
Bachelor's degree with honours	5	480: 120 Level 1 + 120 Level 2 + 60 Level 3 + 60 Level 4 + 120 Level 5	4
Postgraduate certificate	6	Minimum 60 at Level 6	
Postgraduate diploma	6	Minimum 120 at Level 6	
Master's (following an integrated programme from undergraduate to master's level study)	6	Minimum 600, with a minimum of 120 at Level 6	
MA/MSs (name of programme)	6	180, with a minimum of 140 at Level 6	
MA/MSc by learning contract	6	180, with a minimum of 140 at Level 6	
Masters by research	6	Not credit rated (research degree)	
MPhil/MLitt (named subject)	6	240 credits with a minimum of 200 at Level 6	
Prof M	6	360 at Level 6	
MPhil (subject not named)	6	Not credit rated (research degree)	
Ph.D.	7	Not credit rated (research degree)	
Prof D	7	Minimum 540, with a minimum of 420 at Level 7	

Source: Rwandan National Qualifications Framework, 2007.

Recognition and validation of non-formal and informal learning

The NTQF aims as far as possible to incorporate already existing TVET activities into its qualification programmes. Enrolment in TVET courses is expected to be fairly evenly balanced between commerce and science subjects due to the large number of female students opting for accountancy and secretarial/administrative courses (Ministry of Education, 2008).

Horizontal and vertical mobility both within the TVET sector and between TVET and general education are considered essential for responding to technological progress and professionalizing the workforce. Mobility is made possible by the creation of equivalencies between different streams. The rules regarding equivalencies are set by the TVET Authority on behalf of the NTQF. Entry and exit pathways at all levels and programmes give TVET graduates the option of progressing to higher education commensurate with their abilities and the opportunities present in the labour market (Ministry of Education, 2008, p.14). Bridging courses are envisaged to smooth the progress of students moving from one stream to another and ensure that they are not at a disadvantage as they enter the new stream.

Referencing to regional frameworks

The leaders and citizens of East African countries are committed to constructing a powerful and sustainable East African economic and political bloc (EAC, 2011). This commitment is reflected in Rwanda's membership of regional organizations such as the East African Community (EAC), a regional inter-governmental organization which also includes the republics of Kenya, Uganda, Tanzania and Burundi. Negotiations are also underway to create an East African Monetary Union and an East African Federation.

The Inter-University Council for East Africa (IUCEA) in close collaboration with EAC and the East African Business Council has developed the EAC Regional Higher Education Qualifications Framework (RHEQF) (IUCEA, 2014). It will act as a translation device to make NQFs more readable across the region and international frontiers, as well as promoting worker and learner mobility between countries.

Important lessons and future plans

Significant progress has been made since 1994 in establishing a sound base for higher education in Rwanda. The government remains focused on maintaining high standards and continuing to develop collaborative working relationships between public higher education institutions and the private sector (Ministry of Education, 2008). TVET has been recognized as a national priority and the quality and accessibility of TVET programmes have been improved accordingly (Ministry of Education, 2008, p. 11).

References

East African Community (EAC). 2011. East African Community Portal. http://www.eac.int/about-eac.html (Accessed 27 July 2011.)

Inter-University Council for East Africa. 2014; East African Community (EAC). *Regional Higher Education Qualifications Framework.* IUCEA, in collaboration with EAC and East African Business Council (EABC).

Ministry of Education. 2008. *Technical and Vocational Education and Training (TVET) Policy in Rwanda.* http://www.wda.gov.rw/publications/tvet.pdf (Accessed 27 July 2011.)

Ministry of Education. 2010. *Education Sector Strategic Plan 2010–2015.* Kigali, Ministry of Education. http://planipolis.iiep.unesco.org/upload/Rwanda/RwandaESSP20102015.pdf (Accessed 14 February 2013)

Organisation for Economic Cooperation and Development (OECD); African Development Bank (ADB). 2012. *African Economic Outlook 2012.* Paris, OECD Publishing.

Rwandan National Qualifications Framework. 2007. *Rwandan National Qualifications Framework for Higher Education.* Kigali, Ministry of Education. http://www.kie.ac.rw/IMG/pdf/RWANDAN_NATIONAL_QUALIFICATIONS_FRAMEWORK.pdf (Accessed 27 July 2011.)

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

RUSSIAN FEDERATION

Introduction

The Russian Federation has a population of 143.5 million people, of whom 75.5 million are economically active. However, declining birth rates are resulting in decreasing cohorts of the economically-active population. According to both domestic and international projections, by 2030 the over-65 age group as a share of the total population will grow by 60 per cent; by contrast, the 15–64 age group as a share of the whole population will diminish by between 9 and 10 million during the same period. The migrant population is expected to reach between 6.8 and 10 million people during the period 2010–2030.

These changes will have a considerable impact on society and the economy, including the size of the working population, numbers of students and the consumers of different goods and services. These changes will require a supply of high-productivity jobs, which will need to be sustained by quality training.

In January 2014, Russia's unemployment level was 5.6 per cent. The rate of youth unemployment is higher, as is the case in most EU member states. Young graduates have problems finding jobs; the unemployment rate for 15–20 year-olds in early 2014 was 14 per cent.

According to the new Law on Education in the Russian Federation, VET refers to the sector of secondary VET, which trains both skilled workers (initial VET programmes) and middle-level specialists (secondary VET programmes). Hence, secondary VET implements programmes leading to two qualification levels (equivalent to EQF levels 3 and 4, respectively).

The public VET sector comprises 4,444 public VET institutions and 212 public universities, which implement secondary VET programmes equivalent to Level 4 of the EQF. There are 2.8 million students.

Private VET includes 256 VET institutions (circa one million students), and sixteen departments at higher education institutions (330,000 students).

In higher education, nearly 5.6 million students study at 969 universities. About 87 per cent of secondary school graduates opt for higher education.

The major challenges Russia facing Russia, which the NQF is intended to help address, are the skills mismatches and shortages that result from a gap in the demand and supply of skills and from an overproduction of higher education qualifications due to the wide access to universities and the low prestige of VET (problems not confined to Russia). The mismatches are most pronounced in the innovation sectors and high-tech companies. According to estimates, by 2020 Russia would need 25 million highly productive professionals to fill new jobs.

Main policy objectives

Given globalization, rapid technological change and the country's negative demographic trends, there is an urgent need to put in place a comprehensive system of continuing upskilling and recognition and validation of skills acquired outside the system of formal education and training. The NQF is intended, with other measures, to address these challenges.

The above challenges call for building a sustainable system of interaction between the education and training system and the world of work to:

- identify the changing requirements of skills and qualifications and to respond to them;
- develop an up-to-date classification of labour-market occupations and of qualifications, the latter to be based on learning outcomes;
- ensure transparency of qualifications for all target groups – students, education policy-makers, education establishments, the workforce and employers;
- ensure permeability between/greater equality of educational sub-systems (e.g. vocational and academic education).

Stakeholder involvement

Overall responsibility for coordinating Russia's NQF development, including supervision of the development of occupational standards, lies with the National Qualifications Council, which was established as an autonomous agency in April 2014. Agencies, ministries and official bodies engaged in the NQF's development are the Ministry of Labour, the Ministry of Education, employer associations and professional bodies.

The initial impetus to establish the NQF came from the Russian Union of Industrialists and Entrepreneurs, which established the National Qualifications Development Agency (NARK) in 2007. It was planned that the agency would coordinate the development of occupational standards and sectoral qualifications. It was expected that the occupational standards and the sector qualifications would lay the foundation for the national qualifications framework. At this time, a draft of the national qualifications framework was developed by the Institute for Education Development. The draft failed to obtain official approval as it did not rely on learning outcomes and merely reflected the structure of the education system.

The development of occupational standards acquired a new impetus after the May 2012 presidential decrees on measures for the implementation of the state social policy and to implement the state policy in the field of education and science. At this point, the targets for occupational standards development were set: 800 occupational standards are to be approved by 2015. By federal law 03.12.2012 N 236-ФЗ, the notions of qualifications and occupational standards have been included in the Labour Code and in the Law Technical Regulation.

A road map for the national system of qualifications and competences was developed by the newly-established Agency for Strategic Initiatives[1]. This holistic road map includes career guidance to help citizens make an informed choice of occupations relevant to the labour market, a comprehensive standards development programme, as well as targets for education and training. The objective of the roadmap is to set up an interface between citizens, business structures and public bodies responsible for education, and to support the development and assessment of competences for a more competitive and productive workforce. All current policy documents in the qualifications field envisage enhancement of links between the world of work and education and training systems to ensure a balance of the demand and supply of qualifications and to enhance quality of qualifications, in order to contribute to increased productivity.

These documents include:

- Federal Law #273-FZ of 29 December, 2012, on Education in the Russian Federation;
- Decree of the President of the Russian Federation #597 of 7 May, 2012, on Measures to Implement the National Social Policy;
- Decree of the President of the Russian Federation #599 of 7 May, 2012, on Measures to Implement the National Social Policy in Education and Science;
- The Strategy for Innovative Development of the Russian Federation for the Period up to 2020 (Directive of the Government of the Russian Federation #2227-р of 8 December, 2011);
- The Government Programme of Education Development for 2013–2020 (approved by Directive of the Government of the Russian Federation #792-р of 15 May, 2013);
- The Action Plan (Roadmap) for Social Reforms Aimed at Improving the Performance in Education and Science (approved by Directive of the Government of the Russian Federation #2620-р of 30 December, 2012);
- The Strategy for Workforce Training and Skills Development in the Russian Federation for the Period up to 2020.

Level descriptors and learning outcomes

In 2012 the development of occupational standards was entrusted to the Ministry of Labour and Social Protection. To address this goal, the ministry approved the template for the occupational standards development, a methodology for filling out the template and a structure of qualifications (description of qualifications linked to the educational attainment).

The framework is based on the following descriptors: responsibility (which correlates with the competences column of the EQF), skills and knowledge. It is a nine-level structure (the ninth level covers postdoctoral qualifications) and descriptors are similar to those of the European Qualifications Framework.

While this system shares some characteristics of an NQF, it differs from prevailing conceptions of NQFs in a number of ways: it has been developed without strong stakeholder participation and has not undergone open public review processes. Additionally, the descriptors include the parameters, 'ways of attaining the level of qualification' and 'duration of formal

education programmes', which limit attainment of qualifications to formal education pathways, contradictory to a lifelong learning philosophy. Hence, even when provision is made to recognize practical experience, it contradicts the other parameters in the descriptors.

In parallel to this, under Tempus projects, other attempts have been made to develop regional qualifications frameworks and sectoral qualifications frameworks (e.g. in the food industry, environmental field, land management, IT and management, and a regional qualifications system for the Chelyabinsk region, which has been developed with participation and direct involvement of thirty-three companies in the region).

Currently, sectoral qualifications frameworks are under development in Moscow for the commerce, hospitality and tourism sectors, developed by sector employers and VET colleges working together. Additionally, these bodies have developed a draft regional qualifications framework for the Moscow region.

A further impetus to the development of the NQF and occupational standards will come from the National Council for Occupational Qualifications, recently established by presidential decree. The council is a consultative body set up to address issues relating to the development of a system of occupational qualifications in the Russian Federation. The establishment of this umbrella high-level body will contribute to overcoming the fragmentation of earlier efforts and will inject a systemic character to the development of up-to-date qualifications in Russia. The council has approved five working groups: on the development of sector qualifications (a prototype of sector skills councils); on occupational standards development; on application of occupational standards in the system of education and training; on independent assessment of qualifications; and on analysis of best practices.

These new developments are intended to contribute to the development of new qualifications, which would support development of the NQF and the national system of qualifications, embracing institutional (sector qualifications development councils/sector bodies), methodological (occupational standards), and quality-assurance (sector bodies that will coordinate assessment, validation and recognition of qualifications) mechanisms.

Parallel to the above, a methodology is under development that would facilitate linking occupational standards, qualifications standards and education and training standards.

The enhanced interaction between the world of work and education and training has resulted in growing awareness of the need to diversify qualifications. To this end, applied bachelor qualifications and technological master qualifications are under development.

Validation of non-formal and informal learning and links to the NQF

Opportunities for recognition of non-formal learning are gradually gaining acceptance and respective mechanisms (both institutional and legal) are under development under various publicly-funded projects. There are also a number of pilots underway. However, so far the certification of competences and qualifications fails to meet the commonly-approved approaches and is often in the hands of VET institutions, and thus fails to be employer-led.

It is hoped that this system will gradually improve, supported by a sound legal framework, which is currently under development, to preclude distortion of key underlying principles. The more quality occupational standards there are, the better the foundation for the certification system.

Referencing to regional frameworks

Russia joined the Bologna Process in 2003 and reforms in the higher education sector have been progressing since then. The pace of change is inevitably slow given the huge scale of the higher education sector in Russia (approximately 1,000 higher education institutions).

Important lessons and future plans

The National Qualifications Council will next proceed with: coordinating development of occupational standards, which will provide the basis for qualifications standards and qualifications; the establishment of sector skills councils – five by the end of 2014, as stipulated by the government order; and the development of qualifications certification procedures and institutional mechanisms.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

[1] The Agency for Strategic Initiatives is a high-level private-public partnership including leading business representatives and senior members of government.

SERBIA

Introduction

Serbia is a candidate country for entry into the European Union (EU). It has a population of just over 7 million, and is experiencing population contraction. The population is ageing, due to a low fertility rate and migration of young people.

The country's transition has brought slow structural changes in the Serbian economy whose gross domestic product (GDP) added-value share in agriculture (at 13 per cent) and industry (28 per cent) have remained almost constant in the last years. The only growth sector is the services sector, whose GDP share represented 59 per cent in 2010. The employment share by sector saw a decrease in agriculture (to 18.5 per cent in 2010) and in industry (to 27.3 per cent) and an increase in the service sector (to 54.2 per cent). The informal economy represents about one-fifth of GDP. The economy is characterized by high unemployment, a large non- formal sector and significant numbers of redundant workers as a consequence of the transition process and the economic crisis. The crisis has caused an economic slowdown and a slump in labour demand. The employment rate of those aged 20 to 64 was just 52.1 per cent in 2011, well below the EU average of 68.6 per cent. The economic recovery in 2013 did not initially improve labour market conditions, but early 2014 data show employment growth (49.2 per cent) and decreasing unemployment rates (21 per cent). Youth unemployment remains high, reaching 51 per cent in 2013, and is one of the main challenges in the country.

Serbia's difficult economic transition over the past two decades has resulted in a rapid and significant growth in social disparities, as well as new forms of segregation and social exclusion. In order to improve social inclusion, Serbia needs to create the conditions for sustainable economic growth and employment creation. The role of VET in secondary education, adult education, post-secondary education and training for the unemployed is critical to ensure that Serbia generates the skills it needs to compete in the global economy.

The country is a participant in the same EU Education and Training 2020 process as the EU 28 member states and so seeks to meet the same strategic objectives set by the EU framework. These objectives are supported by a series of reference levels of European average performance, or the 'European benchmarks', which set goals to be achieved by 2020. Skills development and employability are high priorities on the Serbian national agenda to bring the country closer to these EU Education and Training 2020 strategic objectives. Serbia shows mixed performance against the EU 2020 benchmarks (figures for the EU 27 [2013] and Serbia [2012] are indicated in parentheses after the EU 2020 goal):

- Share of early school leavers should be less than 10 per cent (EU 12.0 per cent, Serbia 8.1 per cent).
- At least 15% of those aged 25–64 should participate in lifelong learning (EU 10.5 per cent, Serbia 3.6 per cent).
- At least 95 per cent of four year-olds should be in education (EU 90.8 per cent, Serbia 53.2 per cent).
- Less than 15% of 15-year-olds with low reading performance in PISA (EU 17.8 per cent [2012], Serbia 33.2 per cent).

A major challenge to address is youth unemployment which is very high (49.4 per cent in 2013 and 41.7 per cent in the second quarter of 2014). One factor is the mismatch between labour market needs and the supply of the vocational education and training system. The 2014 Torino Process report for Serbia indicates that employers regularly highlight dissatisfaction with education programmes and resulting skills as well as the lack of practical knowledge among young people. Serbian employers also report recruitment difficulties in several sectors (e.g. automotive and ICT). Technical or occupation-specific skills are lacking in several dynamic sectors, in particular in enterprises which have introduced new technologies.

Young people with university degrees have also been hit by the economic crisis and, from 2008 to 2012 the unemployment rate of young people

with university degrees doubled (to 55 per cent). In addition to being unemployed, a significant number of young people are at the same time not in education and training. The number of young people who are not employed, and not in education or other forms of training, amounted to 19.5 per cent of young people aged 15–24 in 2013 (25.3 per cent of those aged 18–24) .

The unemployment rate for older workers doubled in the period from 2008 to 2013, from 8.2 per cent to 15.2 per cent. Only 16.5 per cent of adults aged 25–64 participated in the training, retraining and further training system in 2011.

As a candidate country, Serbia participates in the Copenhagen/ Bruges Process and seeks to meet the strategic objectives and short-term deliverables set out in the Bruges Communique. Serbia has made progress regarding certain short-term deliverables such as development of an NQF; development of a career guidance strategy and action plan; development of entrepreneurship education; and raising the participation of low-skilled and other at-risk groups in education and training. In other areas, Serbia's progress has been limited, in particular regarding the participation of adults in CVET and in lifelong learning. [1].

[1] See for the Bruges Communique http://ec.europa.eu/education/policy/vocational-policy/doc/brugescom_en.pdf

Main policy objectives

The Strategy for Education Development in Serbia, adopted in November 2012, includes a vision for vocational education and training with strong links with the labour market and economic development. The VET strategy covers both initial and continuing VET. The strategy stresses the crucial need for the implementation of a national qualifications framework for lifelong learning.

According to the law and the strategy, the main objectives Serbia wants to achieve through an NQF are:

- a competence-based and learning outcomes-oriented education;
- facilitation of the acquisition of knowledge, skills and competences at all ages and educational levels;
- a clear system of qualifications and profiles with transparent progression routes and a system of credit transfer;
- ensuring that qualifications are aligned with the most up-to-date occupational standards
- engaging the social partners in defining occupational and qualifications standards;
- ensuring the recognition of all learning outcomes through better connections between formal, non-formal and informal education;
- ensuring the quality of education through clearly-defined educational standards;
- ensuring the mobility of students and other learners through the compatibility of Serbian qualifications with the European Qualifications Framework.

Stakeholder involvement

The key body for guiding the overall development of the NQF for vocational education and Training, the Council for Vocational and Adult Education (CVAE), was set up following a government decision in 2010. The council has 21 members, including representatives of the Chamber of Commerce, craftsmen, employers' association, vocational education experts, representatives of labour, employment and social policy institutions, VET school teachers and members of representative trade unions. The council contributes to the development of human resources needed to create a knowledge-based economy and society built around the principles of lifelong learning. The Council ensures the involvement of all stakeholders in the development of vocational education and adult education, in line with the needs and expectations of the labour market; it connects the world of work and the world of education and participates in the development and management of the vocational education and adult education system.

In September 2010 the council adopted a decision on developing an NQF for the VET sector. The Institute for Improvement of Education prepared the draft NQF for VET, levels 1–5, providing methodology and a well-developed framework, in co-operation with a working group appointed by the minister. This working group consisted of twenty-one experts from a range of institutions such as the ministries of education and labour, the Chamber of Commerce, the Association of Employers, the Confederation of Autonomous Trade Unions, the National Employment Service and the Association of Secondary Schools for Agriculture, Production and Food Processing. The final draft NQF for VET was completed by the end of 2013.

In parallel, and separately, the National Council for Higher Education elaborated a proposal for an NQF for higher education in 2008, in the frame of the Bologna Process. The text of the National Qualification Framework of Serbia (NQFS) for

higher education, which covers the qualifications in the higher education system of Serbia, was adopted by the National Council for Higher Education on 23 April 2010.

Currently, therefore, two separate NQFs exist in Serbia: an NQF for VET, levels 1–5, prepared by a working group nominated by the Minister of Education, Science and Technological Development (MESTD) and an NQF for higher education levels 6–8, endorsed by the National Council for Higher Education and proposed to MESTD.

The two separate frameworks will be unified into one comprehensive national qualifications framework for lifelong learning, in line with the European Qualifications Framework. By the end of 2014 an NQF working group under the umbrella of the Minister of Education, Science and Technological Development, started with a two-year mandate to develop and implement a unified NQF for lifelong learning, including a draft law. Members of the working group have been involved in the work on the two existing frameworks and have experience in NQF framework development.

The involvement of sectors has been limited to date. In 2012, four sector councils were established as a pilot project under the umbrella of an EU IPA (Instrument for Pre-Accession Assistance) project. The selected sectors were agriculture, food processing, tourism and catering, and ICT. The majority of sector council members were from industry, with some representatives from education and the National Employment Service.

Tasks of the sector councils were:

1. Review the list of occupations in their sector;
2. Review the job descriptions for the still-relevant occupations and for new occupations;
3. Identify knowledge and skills required to perform the jobs in occupational profiles;
4. Develop qualification profiles and find out whether there are related VET programmes.

The sector councils were to continue in a systematic way the work initiated during past pilot VET projects. A feature of the Serbian VET system is that, over the years, a large number of VET programmes have been developed and implemented, with support of international donors, but only a limited number of these were mainstreamed at national level. For example, fifty-sixcompetence-based and modular curricula were developed under the EU CARDS (Community Assistance for Reconstruction, Development and Stabilization) projects; revised curricula in VET, based on standards of occupation, are being introduced gradually in the education system. The task of the sector councils was to ensure that revised pilot profiles were mainstreamed throughout the system. The sector councils' research was presented to the NQF working group.

The sector councils made a promising start but when the pilot ended, at the end of 2012, the work of the councils came to a standstill. Efforts to bring them back to life are ongoing. At the beginning of 2015 a working group was installed to re-establish the sector councils with support from the Ministry of Education, Science and Technology and the VET Council.

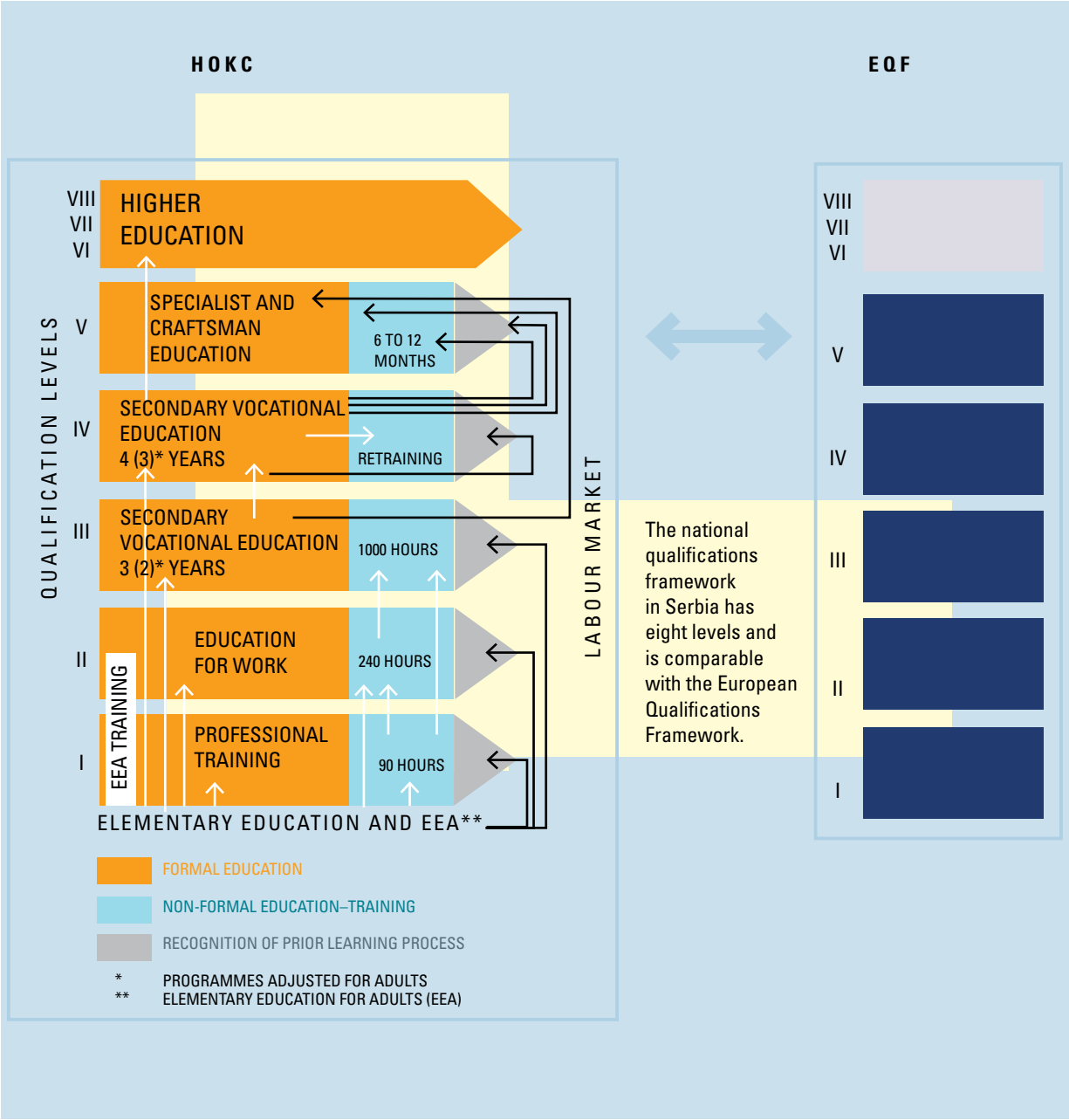
Level descriptors and learning outcomes

The unified NQF will have eight levels. Levels 6–8 will be allocated to higher education, levels 1–5 to vocational education and training.

The current draft NQF for VET distinguishes between formal education, non-formal education and training, and recognition of prior learning (see scheme below).

The draft NQF for vocational education has descriptors for knowledge, skills, and abilities and attitudes for each of the five levels. The draft NQF for higher education follows the Dublin descriptors.

Parallel to the development of the NQF for VET a new classification of occupations has been developed, the Unique Nomenclature of Occupations, in line with the International Standard Classification of Occupations (ISCO). The new nomenclature is considered a prerequisite for further reforms in vocational education. Based on this new classification of occupational requirements, social partners in sector councils (to be) will define standards of qualifications for all education profiles to be included in the NQF. This task implies the identification of profiles based on existing and predicted needs of the economy and the revision of existing qualifications or the introduction of new ones. It will include the review and revision of all profiles at levels 3 and 4. It is expected that this will lead to the reduction of educational profiles from the current existing 347 to 150, which would correspond to the state of the economy and the education system – many of these profiles are redundant. The review of profiles based on the new nomenclature will also lead to development of craft vocations and specialist education programmes at Level 5, as well as the development of qualifications for levels 1 and 2.



The establishment of an NQF is closely connected to the development of a quality assurance system to promote consistent standards throughout the education system and ensure compliance with the requirements of the NQF. Serbia has been putting in place elements of a quality-assurance system through past CARDS and IPA projects, notably by defining normative standards for revised profiles and identifying basic criteria and indicators to measure quality in education, while laying down procedures for self-assessment and external monitoring/evaluation that any future quality-assurance system will need to articulate. The Council for Vocational Training and Adult Education will need support in developing and implementing the system.

Validation of non-formal and informal learning and links to NQFs

According to the draft NQF for VET document, it will be possible to acquire qualifications at levels 1–6 through a validation of non-formal learning process (the term RPL is used), but not as a general rule and this will only apply to those qualifications that will be approved beforehand. At Level 4, it will be possible to access the RPL process in case of retraining (e.g. a person who has graduated from a gymnasium and has a two-year experience as a business administrator, can obtain the Level 4 qualification, Business Administrator through the RPL process).

At Level 5, it will be possible to access the RPL process in case of additional training (e.g. a person who has graduated from a gymnasium and has a two-year experience as a tourist guide can obtain the Level 5 qualification, Tourist Guide). Holders of qualifications that have been created under the auspices and for the needs of multinational companies (e.g. Coca-Cola or McDonalds) or propulsive sectors such as the ICT sector (e.g. Microsoft or Oracle) will be able to validate their acquired competences through the RPL process.

Referencing to regional frameworks

Serbia participates in the Bologna Process and has developed its NQF in HE according to Bologna requirements. The country is also a participant in the EQF advisory group, although referencing its NQF to the EQF is some years away.

Important lessons and future plans

A main problem in Serbia seems to be the lack of institutional ownership of the NQF so far. The planned merger of the two existing frameworks for VET and HE into one overarching NQF for lifelong learning requires political decisions regarding governance, steering and administrative management of the NQF and which institution will be in charge of the implementation of the NQF.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

SEYCHELLES

Introduction

The Seychelles Qualifications Framework (SQF) is a ten-level framework which was designed in 2007 following the creation in 2005 of the Seychelles Qualifications Authority (SQA) under the Qualifications Authority Act (Ministry of Education, 2008, pp. 8–11).

The Seychelles aims to double its gross domestic product (GDP) by 2017. In order to develop the human resources required to meet this goal, the government is taking steps to improve training in vocational, managerial and service skills. Training is to be restructured in alignment with internationally recognized standards and certification processes. This will be made possible through partnerships with international institutions of higher learning which will offer a variety of training courses to Seychelles students, from skills programmes and short courses through to full qualification programmes.

The active involvement of sectors of the economy such as tourism, fisheries and financial services will help strengthen links between training and the world of work, making the Seychelles education system more responsive to both local and international labour market needs (Ministry of Education, 2008, pp. 15–16). Particular emphasis is being placed on improving the IT skills of the workforce so as to render it more competitive in today's technologically-driven business environment.

Main policy objectives

The SQF is designed to provide:

- high-quality training and qualifications;
- recognition and credit for prior learning and skills;
- parity between academic and vocational qualifications;
- qualifications based on unit standards linked to the requirements of industry and society;
- a more integrated approach to education and training;
- a coherent learning system offering possibilities for mobility between different courses and levels;
- qualifications which are nationally and internationally comparable and portable (SQA, n.d.).

Stakeholder involvement

The SQA uses fixed standards to evaluate existing training courses and position them on the SQF. Although the SQA was created in 2005, this work did not begin until 2008. Thereafter, all providers of education and training programmes leading to the achievement of unit standards and/or full qualifications were required to become accredited by the SQA.

The development of the SQA and SQF needs to be understood in the context of the major political and social changes that were taking place at the time, as the Seychelles moved from a state-controlled to a market-oriented economy. This shift profoundly affected the management of key sectors of the economy and provided the impetus for the government's Public Sector Investment Programme (PSIP), a branch of the broader Human Resource Development Programme (HRDP) instigated by the National Human Resource Development Council (NHRDC) which was set up by the National Human Resource Act in 2006 (Ministry of Education, 2008, p. 14).

The NHRDC and the Department of Employment have been instrumental in creating mechanisms for the recognition of prior learning (RPL) aligned to SQF qualifications and unit standards. The NHRDC provides direction on manpower sectors earmarked as potential RPL areas.

Level descriptors and learning outcomes

The SQF has ten levels, ranging from primary to doctoral and post-doctoral qualifications. These are based on a hierarchy of competences which are detailed in the level descriptors provided for

each level. Post-secondary level qualifications are further categorized into types such as diplomas, associate degrees and certificates, and carry a fixed minimum number of credits and notional hours in order to provide flexibility in programme design. The smallest number of notional hours for the achievement of an SQF qualification is 1,200, amounting to 120 credits (SQA, n.d.). The framework for general education up to and including secondary level continues to be based on the input-based national curriculum, rather than on learning outcomes.

Core skills form an essential part of all SQF qualifications. These include communication skills (including the use of the English language, which is considered essential for promoting international mobility), numeracy and IT skills, and life skills, which include social behaviour and ethics.

Recognition and validation of non-formal and informal learning and links with the NQF

The SQF offers a number of progression pathways by which candidates can move from basic to more advanced certificates. In addition to this, mechanisms for RPL give individuals who have gained significant experience in a particular field the opportunity to become formally qualified at a level commensurate with their abilities. Candidates may achieve partial or even whole qualifications through RPL, or may qualify for credit at a higher level than that of the qualification applied for. At degree level up to 50 per cent of a qualification can be obtained through RPL. Once implementation of the SQF is complete, learners will be able to register for a number of courses over an extended period and thus accumulate credits towards a recognized qualification.

RPL is not a new concept in the Seychelles. Trade tests in a variety of vocational disciplines have been conducted for more than three decades. Training institutions are actively involved in the RPL process. One example is the upgrading of qualifications in the health sector in the fields of environmental health and health information. The Employment Department sensitizes its own employees to RPL so that they are able to spread the message and encourage workers in other fields to undergo RPL assessment. The SQA has campaigned, for example, for the formation of a hairdressers' association to develop standards for the hairdressing profession in the Seychelles and encourage hairdressers to undergo RPL assessment.

In the area of adult learning the SQF recognizes all forms of learning, formal, non-formal and informal. A special division of the Ministry of Education, the Technical and Further Education Division (TFED), is responsible for linking youth and adult education to the SQF. The Adult Learning and Distance Education Centre (ALDEC), one of the training centres of the TFED, offers distance programmes in collaboration with international universities such as the University of South Africa and the Indira Gandhi National Open University.

Achieving parity between academic and vocational qualifications is considered vital for the creation of a pool of skilled labour to meet the needs of the economy and promote development (Ministry of Education, 2008, p. 17–19). It is important that young people and adults studying for vocational and technical qualifications do not feel that their chosen path is inferior to that of their academic counterparts. Articulation between TVET and higher academic education is increasingly becoming a reality in the Seychelles, largely due to SQF-led reforms. Students of some vocational training institutions, such as the Seychelles Polytechnic and the National Institute of Health and Social Studies (NIHSS), are being admitted to higher education courses based on assessment of their skills and experience. (Ministry of Education, 2008, p. 35).

Referencing to regional frameworks

The Seychelles is a member of the Southern African Development Community (SADC) and thus plays a part in the ongoing development of the regional qualifications framework.

The SQA contracted the South African Qualifications Authority in 2007 to help build capacity to establish the SQF.

Like Mauritius, the Seychelles has a well-established and functioning NQF. However, the SQF is more closely aligned to the Competency-based Modular Training (CBMT) approach, whereas the Mauritian Qualifications Framework follows an outcomes-based approach

Important lessons and future plans

Communicating information about the SQF to all stakeholders is the most ambitious project carried out by the SQA so far. Several groups have already been successfully sensitized to the importance of RPL, including health workers, construction workers, and human resource development officers in both private and public enterprises.

However, education and training providers have yet to become fully cognizant of the importance of RPL and integrate it into their work. The SQA is working with a number of partners to address this situation, most importantly the Inter-organizational Working Group for RPL which is made up of international consultants, NHRDC members and representatives of the employment sector.

Quality-assurance processes in the Seychelles are still at an early stage of development as the country continues to work on rationalizing the qualifications landscape. Once these are in place, the next stage will be the accreditation of training providers. The two processes, when completed, should provide transparent quality assurance for certification.

References

International Institute for Educational Planning (IIEP). 2005. *Report of the Sub-Regional Seminar on Assessment and Certification of Competences for the Indian Ocean Countries.* (Mauritius, 2–4 May 2005). Paris, IIEP.

Keevy, J. 2008. *The Seychelles National Qualifications Framework from policy to implementation.* Pretoria, South African Qualifications Framework. http://www.saqa.org.za/news/keevy_sqa08.pdf (Accessed 22 February 2013.)

Ministry of Education. 2008. *National Report on the Development and State of the Art of Adult Learning and Education (ALE).* Submitted for CONFINTEA VI. Victoria, Ministry of Education.

Seychelles Qualifications Authority. (n.d.). *The National Qualifications Framework: An Introduction.* Victoria, SQA. http://bit.ly/1LSch2G (Accessed 22 February 2013.)

South African Qualifications Authority (SAQA). 2007. *Occupation qualifications in the Seychelles and South Africa: a critical reflection on progress to date.* Pretoria, SAQA. http://www.saqa.org.za/docs/events/q_africa07/presentations/keevy_j.pdf (Accessed 22 February 2013.)

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

SINGAPORE

Introduction

The Workforce Skills Qualifications system (WSQ) is the product of major recent reforms to Singapore's continuing education and training (CET) system, which provides training and education to all levels of the workforce. The WSQ system focuses on vocational as opposed to academic education. In 2003, the Singapore Government made the move to coordinate CET efforts across different government departments under a new statutory board, the Singapore Workforce Development Agency (WDA). One of the key initiatives of the WDA was to establish a comprehensive CET system, which was launched in 2005 as the WSQ system.

Considerable efforts had already been made prior to the launch of the WSQ system to improve the skills and knowledge of the workforce through training programmes. However, the system was fragmented and many courses were institution-based and overly academic in focus, making them inaccessible to a large proportion of the workforce.

When the government commissioned the development of the WSQ system in 2004, there were an estimated 500,000 workers who lacked secondary school level qualifications. Singapore's resident workforce increased from 1.73 million out of a total workforce of 2.34 million in 2004 to 1.93 million out of a total workforce of 2.94 million in 2008. One of the challenges is to ensure that all workers are equipped with employable skills that are in demand in the globalized labour market.

Main policy objectives

The main policy objectives of the WSQ system can be seen from national, sectoral and individual worker perspectives:

- At the national level, the WSQ system strives to meet the needs of existing and emerging sectors by ensuring that all workers are equipped with relevant and portable competences that support their lifelong employability.
- At the sectoral/industry level, the WSQ system aims to strengthen the expertise of industries, professionalize their workforce and enhance the productivity of their workers.
- At the individual worker level, the WSQ system seeks to improve the provision of quality programmes to support the training needs and aspirations of all workers. WSQ programmes lead to industry-recognized qualifications and are designed to allow progression to other qualifications either within or outside of the WSQ system.

Stakeholder involvement

The WDA functions as the awarding body for WSQ modular certifications and qualifications. It provides guidelines on competency standards and curricula, oversees the award of certificates and the implementation of training and assessment programmes, and is responsible for the quality of CET programmes.

The WDA worked closely with other economic agencies to establish a Manpower Skills and Training Council (MSTC) and related skills technical committees. This high-level council is in charge of looking into the manpower skills and training needs of various industry sectors. It advises the WDA on new qualifications, the design of the WSQ system, occupational competency standards, and so on. Members of the MSTC are usually senior management staff of multi-national corporations (MNCs) and small and micro enterprises (SMEs), industry experts, union representatives, government ministry and agency representatives, or independent practitioners and business owners. Skills technical committees support the MSTC by providing design input and validation to WSQ qualifications and competency standards.

The WSQ system is underpinned by a tripartite representation of unions, employers and the government. This helps to ensure the industry relevance of WSQ programmes.

The WSQ system benefits from an extensive network of training providers, both large and

small. There are currently more than 500 training providers offering WSQ training and assessment programmes. Through these providers, the WSQ system has benefited more than 600,000 workers, and more than 1.7 million WSQ modular certificates and 32,000 full WSQ qualifications have been awarded.

Larger providers include well-established institutions such as the Institute of Technical Education (ITE), polytechnics and institutes of higher learning. About 50 larger training providers, called continuing training centres (CTCs), represent key access points for subsidized training programmes, career advice and counselling and training placement and employment services. CTCs also serve as assessment centres where both local and foreign workers can gain qualifications on the basis of assessment and recognition of their existing capabilities. Both modular and full WSQ programmes are also offered by major private training institutes.

Smaller WSQ providers concentrate on customizing programmes for corporate accounts, particularly those who wish to incorporate competency-based training (CBT) principles and WSQ programmes into their staff training and development. Smaller training providers and in-house training departments tend to concentrate on niche areas.

The WSQ quality-assurance framework includes pre-accreditation and continuous accreditation mechanisms. During the pre-accreditation stage, potential WSQ training providers are subjected to checks on their organizational status and track record, processes and systems. Once accredited, training providers undergo annual review audits.

Singapore lays great emphasis on improving the capability of trainers. The training and adult education (TAE) framework was developed to support the capability development of WSQ trainers, assessors and curriculum developers (collectively referred to as adult educators). The WDA set up the Institute for Adult Learning (IAL) to look into capability development of adult educators, deliver programmes under the TAE framework and conduct research in the area of adult learning and workforce development. It is the WDA's policy to ensure that most if not all adult educators attain the relevant qualifications for their role (or equivalent) under the TAE framework by 2015. The IAL has also launched the Adult Educator Network (AEN) to support the professional development of its members and bring adult educators together to share practices with the purpose of improving the quality of adult learning.

In addition to this work, the IAL hosts overseas master's programmes in the areas of CET and competency-based training and assessment. It has set up an Academy for Continuing Education Specialists (ACES) which is intended to provide a platform for engagement, collaboration and sharing among the CET community, offering both face-to-face workshops (e.g. on competency standard writing, recognition of prior learning, etc.) and a virtual learning environment online.

Level descriptors and learning outcomes

The shift from a subject-based to a competency-based qualifications system is seen by the WDA as an essential stage in the development of the WSQ system. The system covers both broad foundational competences and industry-specific occupational competences.

The WSQ system comprises six levels of occupation-based qualifications, ranging from certificates and higher certificates (targeted at operational or technical jobs) through advanced certificates and diplomas (targeted at supervisory or managerial jobs) to specialist diplomas and graduate certificates/diplomas (targeted at professional and specialist jobs).

The WSQ system now covers 26 industry clusters such as aerospace, security, digital animation and tourism, and interdisciplinary frameworks that include areas such as business management, leadership, people management and service excellence.

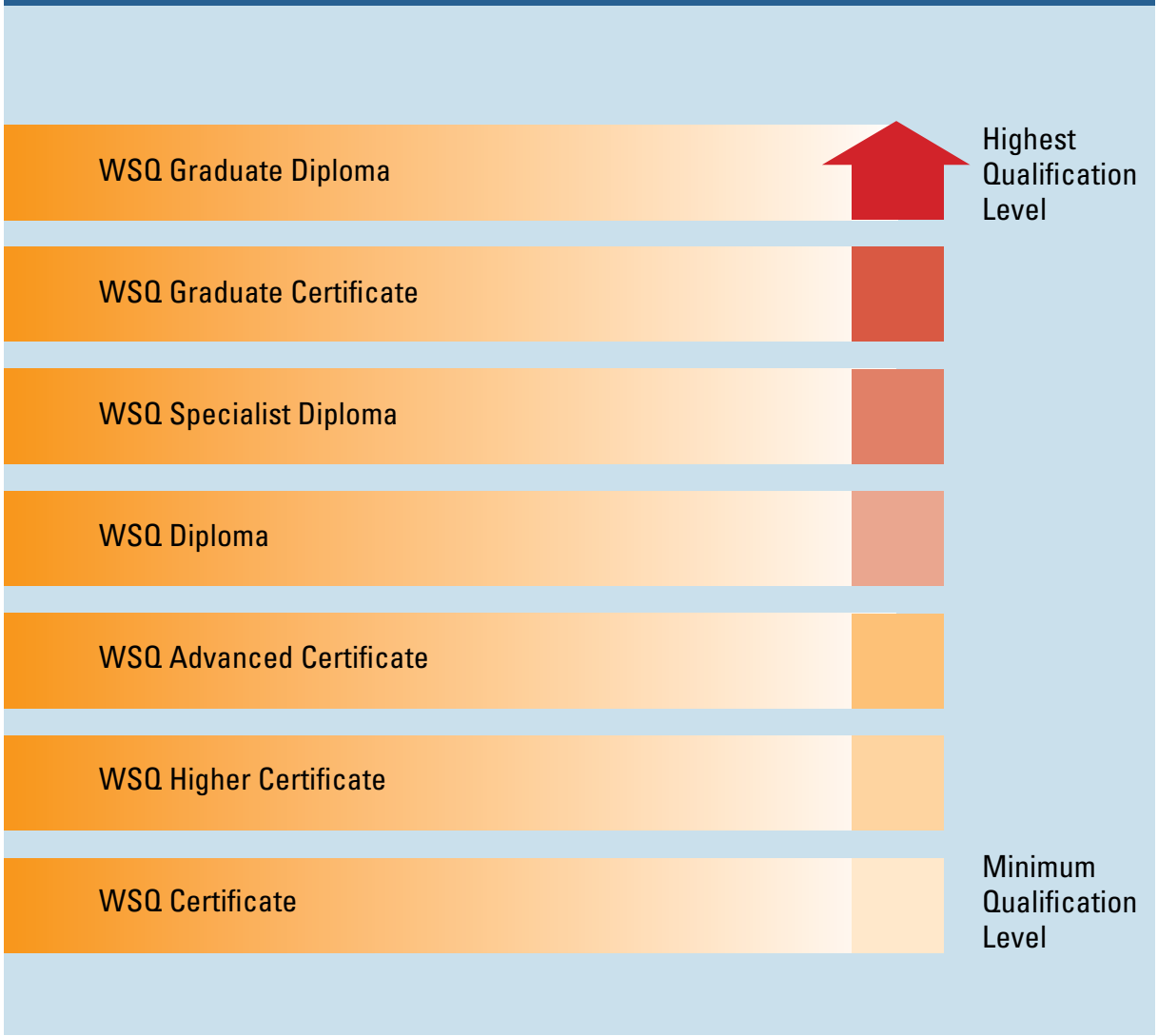
Recognition and validation of non-formal and informal learning and links to the NQF

Workforce education and development in Singapore comprises two main components: pre-employment education and training (PET) and continuing education and training (CET).

The PET system is supported by a robust world-class education system from early childhood to university education. The PET system is for children and young adults. It equips them with broad-based education and life skills, develops them as individuals and prepares them for adulthood and the workforce.

The CET system is more diverse in provision and is aimed at adults, including all members of the workforce. The aim of CET is to support Singapore's economic growth by equipping the workforce with the competences they need to

Figure 14 Singapore: Workforce Skills Qualifications Framework



Source: lee, 2011.

remain employable, so that industries benefit from the high-level performance of skilled workers. CET is thus targeted to the specific needs of learners and industries.

The WSQ framework is designed to promote progression pathways between the different types and levels of qualifications, allowing individuals to continually re-skill and upgrade. Modular and flexible training programmes enable individuals to acquire new skills and knowledge leading either to statements of attainment or to full qualifications which are recognized by industry and awarded by the WDA and other established awarding bodies. Assessment and certification are based on the candidate's ability to demonstrate the capabilities required by industry. WSQ qualifications are comparable to credentials issued by international and local awarding bodies.

Referencing to regional frameworks

In 2007 and 2008 the WDA commissioned UK NARIC[158] to conduct a benchmarking study to compare the WSQ framework to Singapore's academic system under the Singapore Ministry of Education, as well as to the national qualifications frameworks of Australia, New Zealand, Canada, United Kingdom (England and Scotland), the Netherlands and Japan. The findings of the study indicate that the WSQ system is comparable both to Singapore's academic system and to other national qualifications systems. These findings encouraged increasing numbers of industry stakeholders, employers and institutions

158 UK NARIC is the national agency responsible for providing information, advice and expert opinion on qualifications world-wide.

to recognize WSQ awards as admissions qualifications for the purposes of employment and further study. The Singapore Department of Statistics has also included WSQ awards in the Singapore Standard Educational Classification alongside Singapore's academic awards.

Important lessons and future plans

The shift towards adoption of the WSQ system as Singapore's chief qualifications system for vocational skills did not come about easily, as many employers and institutions were inclined to give preference to traditional academic qualifications and needed first to be convinced of the value of WSQ qualifications. Yet, year on year since the inception of the system, the WDA has seen a steady increase in the number of WSQ certifications being issued. Companies and individuals alike have reported the positive impact of the WSQ system. One lesson to be learned from the WSQ experience is that it is crucial to involve the right mix of partners and stakeholders in the development and implementation of a qualifications system. Government agencies need to work hand-in-hand to address and resolve manpower development issues in any given sector.

In future, Singapore plans to broaden WSQ coverage to cater to workers of all levels, including professionals, managers and executives: the so-called 'PMEs' who are growing in proportion to rank-and-file workers. In the immediate term, the WDA will be working more closely with other local institutions to make CET truly seamless for individuals, using research to identify and incorporate new and best practices to enhance CET provision through the WSQ system.

References

Institute for Adult Learning (IAL). http://www.ial.edu.sg/

Labour statistics and indicators are available at http://www.mom.gov.sg/Pages/default.aspx

Lee, T. 2011. *Singapore's CET qualifications framework: The Singapore workforce skills qualifications system.* (International Seminar on National Qualification Framework Policies and Strategies, 27–28 April 2011, Bangkok, Thailand). Singapore, Workforce Development Agency.

Low, L. 2000. *Education, Skills Training and National Development: Experience and lessons from Singapore.* Tokyo, Asian Productivity Organization.

Low, L. 2006. *The Political Economy of a City-State Revisited.* Singapore, Marshall Cavendish Academic.

Prepared by:

UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

SLOVAKIA

Introduction

Work on the Slovak Qualifications Framework has been under way for some time, based on a 2009 government decision on European Qualifications Framework (EQF) implementation in Slovakia.[159] This was confirmed by the Act on Lifelong Learning of 2009 (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2009*a*), amended in 2012 (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2012) stipulating the legal background for development of a national qualifications system and framework. Development was complemented by legislation: the School Act of 2008 (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2008), and the Vocational Education and Training (VET) Act of 2009 (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2009*b*). In 2011, level descriptors for a comprehensive national qualifications framework (NQF) for lifelong learning were approved by the Ministry of Education, Science, Research and Sports, encompassing qualifications from all sub-systems of formal education and training (VET, general education and higher education).

However, in 2013, strategies for revision of the initial NQF were proposed, as well as suggestions for creation of a national qualifications system. The State Institute of VET (Štátny inštitút odborného vzdelávania) (ŠIOV) launched a national project under the auspices of the Ministry of Education, Science, Research and Sport, aiming to develop a national system of qualifications. The system is intended to provide a comprehensive view of all full and partial qualifications with qualifications and assessment standards and pave the way for recognition of non-formal and informal learning (NFIL). It is also intended to ease communication between the education and the labour market, as well as support creation of content and improve quality.

A revised NQF is foreseen as one outcome of the project, meaning each qualification of the national system will be classified at one of the levels of the NQF. The NQF is seen as a tool for transparency, comparing qualifications and supporting transfer and recognition of qualifications. The revised NQF is intended to include all qualifications – general education, VET, higher education, qualifications gained through validation and qualifications outside the formal education system. The framework will be learning outcomes-based, with revised descriptors covering knowledge, skills and competence.

Project work takes place in five working groups, with stakeholders such as sectorial ministries, social partners and practitioners. Around twenty sector councils are involved, contributing to identification of sectorial skills and development of occupational standards. The work itself is seen as long term in nature, due to updating and complementing qualifications according to labour-market needs. However, it is not yet clear whether there are plans for continuing work beyond 2013–15.

The project is co-financed by European Union (EU) structural funds. A project website has been set up for creating a national system of qualifications' (*Tvorba Národnej sústavy kvalifikácií*).[160]

Main policy objectives

Apart from its transparency function and ease of referencing to the EQF, a comprehensive NQF has the following specific objectives:

- Improving links between education and labour market needs;
- Improving transparency and consistency of qualifications;
- Supporting validation of NFIL and improving lifelong learning.

159 The decision is only available in Slovak: http://bit.ly/1FKaYBB [accessed 5.10.2014].

160 http://www.tvorbansk.sk/ [accessed 15.9.2014].

Measures are planned to improve the match between labour-market needs and skills supply (European Commission, 2013, pp. 133–137). The NQF, with its clear learning outcomes orientation, aims to support these actions.

The NQF's main pillars are the national register of qualifications and the national register of occupations. The NQF aims to create a system environment to support comparability of learning outcomes achieved by various forms of learning and enable recognition of real knowledge and competences independently of the way they were acquired. A unified methodology for defining learning outcomes will be prepared and used for developing and renewing state educational programmes and study programmes for continuous training.

In Slovakia, adult participation in lifelong learning is among the lowest in the EU, at 3.1 per cent in 2012 compared to an EU average of 9.0 per cent that year. Plans have been made to review adult learning and continuing VET; in 2012, an action plan was adopted that includes specific measures to ease progress in adult learning.

Stakeholder involvement

Work on the initial NQF was started and 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, with members 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 and Ministry of Culture. Administrative and research support was provided by the Ministry of Education. State institutes (the State Vocational Education Institute and the National Institute of Pedagogy) are responsible for formal education.

A ministerial working group was created to analyse existing qualifications and do preparatory work with employers and employees. Coordination between NQF and Bologna implementation had already been established through cooperation with a national team of Bologna experts and the higher education department at the Ministry of Education.

In the review process, NQF revision is closely linked to development of the national qualifications system. In this process, stakeholder involvement also from the world of work is vital, including employers' chambers, unions, confederations and other professional associations. The Ministry of Education will be responsible for quality assurance, also involving the social partners.

Framework implementation

Implementation of the framework is an ongoing and gradual process, naturally, since framework development has been taking place in stages. Work on implementation of the learning outcomes approach has been going on for some time.

Level descriptors and learning outcomes

In the initial work, an eight-level structure was approved to cover the main characteristics of the national qualifications system and also be compatible with the EQF in terms of principles, categories and level descriptors. Level descriptors were defined as knowledge, skills and competence. However, they are being revised with more focus on skills descriptors to be in line with other national documents and to allow for inclusion of non-formal qualifications.

The learning-outcomes approach has been recognized as part of the reform agenda and is being integrated into all new developments. The 'shift to learning outcomes' policy is well embedded in national discourse and partly also in legislation. The learning outcomes approach is described in action plans, for example, related to:

- changes in accreditation processes at higher education institutions, with a shift of emphasis to output indicators rather than input;
- improved employability through a better match between content of education and demands of the labour market;
- setting educational standards (including content and performance components) for primary and secondary schools;
- progress in identification of occupational standards.

General education (primary/secondary) programmes have been revised to strengthen performance standards.

In VET, the learning outcomes approach is being reinforced through the VET Act of 2009 (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2009*b*) and curriculum reform. Two-level educational VET programmes were introduced allowing schools to develop their own school curricula in cooperation with regional partners. In 2013, a new European Social Fund

(ESF) project, 'Development of the national qualifications system', was launched to elaborate occupational and qualification standards.

In higher education, progress has been modest. Higher Education Law 2002 (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2002) requires higher education institutions to describe a graduate's profile when applying for accreditation, but explicit identification of learning outcomes was not advanced (Cedefop, forthcoming).

Validation of non-formal and informal learning and links to the NQF[161]

At present, there is no national system of validation in place. National strategy is in development and the current review process is focusing on validation, including discussion of links between NFIL and the NQF. The underlying principles, including a framework for quality assurance for recognition of NFIL, are set out in the Act on Lifelong Learning (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2009*a*), but while some aspects of the legislation have been implemented and already revised (in particular quality assurance of non-formal education), others have not yet been implemented.

Procedures for recognition of NFIL will be defined in the national project on development of the qualifications system, which will develop qualifications and assessment standards for a range of qualifications. As of now, vocational qualifications in Slovakia are not based on units and they do not use a credit system.

Schools that want to carry out NFIL must be accredited by a regional council for education (this does not apply to higher education institutes). It is up to accredited education and training institutions to choose the assessment method to be used, in line with content of the qualification and assessment standard. The Act on Lifelong Learning (Ministry of Education, Science, Research and Sport of the Slovak Republic, 2009*a*), states there has to be a theoretical and a practical part which can be written, oral or practical assignments or a combination of the three.

The main responsibility for validation policies lies with the Ministry of Education. Policies and initiatives are designed in cooperation with stakeholders: social partners, regional authorities, education and training institutions and central public administration.

Referencing to regional frameworks

An integrated referencing report to link to the EQF and self-certify against the qualifications framework in the European Higher Education Area (QF-EHEA) is planned for September 2015.

Important lessons and future plans

One vital precondition for developing an NQF is establishing a good partnership platform between all stakeholders, especially involving social partners. Challenges ahead include intensifying cooperation with stakeholders and consulting with sector councils.

Work has been hampered by political discussions on the purpose, role and added value of the NQF, so progress has been slow and deadlines have not been met. However, since 2013 the need to establish a national qualifications system and framework has materialized in two ESF projects and an established NQF is seen as an important instrument for reviewing qualifications and programmes. Future work will strive to draw on experience from previous and current projects.

At present, plans exist for the review process (in the national project mentioned above) and completion of the referencing report (by 2015). Also, the intention is to indicate EQF levels on certificates, diplomas and Europass supplements, as well as in national qualifications databases, soon after completing the referencing process.

Main sources of information

[URLs accessed 18.9.2014]
Ministry of Education, Science, Research and Sport: http://www.minedu.sk/index.php
ŠIOV: http://www.siov.sk/
Project website for the creation of the national system of qualifications (Tvorba Národnej sústavy kvalifikácií): http://www.tvorbansk.sk/

161 This section draws mainly on input from European Commission et al., 2014.

List of abbreviations

EQF	European Qualifications Framework
ESF	European Social Fund
NFIL	non-formal and informal learning
NQF	national qualifications framework
QF-EHEA	qualifications framework in the European Higher Education Area
ŠIOV	Štátny inštitút odborného vzdelávania [State Institute of VET]
VET	vocational education and training

References

[URLs accessed 15.9.2014]

Cedefop (forthcoming). *Application of learning-outcomes approaches across Europe.*

European Commission. 2013. *Education and training monitor 2013: Country report.* http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=11422&no=3

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Slovakia.* http://libserver.cedefop.europa.eu/vetelib/2014/87077_SK.pdf

Ministry of Education, Science, Research and Sport of the Slovak Republic. 2002. *Zákona č. 131/2002 Z. z.o vysokých školách* [Law No 131/20002 on higher education]. http://web.tuke.sk/lf/legislativa/131_2002.pdf

Ministry of Education, Science, Research and Sport of the Slovak Republic. 2008. 245/2008 *Z.z. Zákon z 22.mája 2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov* [Act of 22 May 2008 on education and training (School Act) and amendments to certain acts]. http://www.uips.sk/sub/uips.sk/images/PKvs/z245_2008.pdf

Ministry of Education, Science, Research and Sport of the Slovak Republic (2009*a*). 568/2009 *Z.z. Zákon z 1. decembra 2009 o celoživotnom vzdelávaní a o zmene a doplnení niektorých zákonov* [Act of 1 December 2009 on lifelong learning and amendments to certain acts]. https://www.minedu.sk/data/att/4125.pdf

Ministry of Education, Science, Research and Sport of the Slovak Republic (2009*b*). 184/2009 *Z.z. Zákon z 23 apríla 2009 o odbornom vzdelávaní a príprave a o zmene a doplnení niektorých zákonov* [Act of 23 April 2009 on VET and amendments to certain acts]. http://bit.ly/1P75WkV

Ministry of Education, Science, Research and Sport of the Slovak Republic (2012). 315/2012 *Z.z. Zákon z 21 septembra 2012, ktorým sa mení a dopĺňa zákon č. 568/2009 Z.z. o celoživotnom vzdelávaní a o zmene a doplnení niektorých zákonov* [Law of 21 September 2012 amending and supplementing Law No 568/2009 on lifelong learning and amendments to certain laws]. http://www.nocka.sk/uploads/32/66/326699b345212127bf6c794389136960/zakon-315-2012.pdf

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

SLOVENIA

Introduction

Slovenia has reached an advanced stage of national qualifications framework (NQF) development. A ten-level comprehensive Slovenian Qualifications Framework (SQF) was presented by a steering committee in April 2011 (Institute of the Republic of Slovenia for VET, 2011) and discussed with stakeholders. Agreement was reached on bringing major national qualifications into NQF levels, including qualifications from formal education and training (in vocational education and training [VET], higher education, general education, adult education) and the system of national vocational qualifications under the remit of the Ministry of Labour. A draft law on the Slovenian Qualifications Framework was prepared and widely discussed. It serves as a legal basis for SQF implementation. It has yet to come into force.

SQF development builds on a series of education and training reforms since the mid-1990s (in VET, higher education, general education and adult education) and the introduction of certification and validation of non-formal learning in 2000.

Main policy objectives

All subsystems of education and training in Slovenia have been reformed since the mid-1990s. There is a general view that the system functions well in terms of permeability; there are almost no dead-ends at upper-secondary level and individuals can move vertically and horizontally without major obstacles. However, there is a need to strengthen cooperation and coordination between different education and training sub-systems and increase participation in lifelong learning. It is necessary to improve the link between education and certification and the responsiveness of qualifications to labour market and individual needs, and have a reliable tool for assessing and recognizing non-formal and informal knowledge and skills. Slovenia has achieved good results in educational indicators in recent years (participation of adults aged 25 to 64 was 13.8 per cent in 2012 and the dropout rate is one of the lowest in Europe). However, making VET more attractive and improving transition from education to work remains a challenge. (European Commission, 2013).

SQF's main objective is 'to integrate and harmonize Slovenian qualifications sub-systems and improve transparency, accessibility, progress and quality of qualifications being responsive to labour market and civil society needs' (Institute of the Republic of Slovenia for VET, 2011).

The following policy objectives are addressed in more detail:

- Improving transnational understanding and comparability of Slovenian qualifications as well as the potential for transfer and recognition;
- Supporting coherent approaches to lifelong learning by providing access, progression, recognition of learning, coherence and better use of qualifications;
- Ensuring capacity to certify knowledge, skills and competences not yet incorporated into formal education and training, and providing better links and transferability between education and training and certification systems;
- Improving efficiency in achieving qualifications focused on labour-market needs (such as requalification);
- Providing individualized pathways mainly for adults and dropouts.

Stakeholder involvement

Work was initiated by the Ministry of Education and Sport, in cooperation with the Ministry of Higher Education, Science and Technology and the Ministry of Labour, Family and Social Affairs, in 2005 through the EQF consultation process.

In January 2010, a national steering committee for referencing SQF levels to the EQF was nominated by the government. It is composed of representatives from the Ministry of Education and Sport (chair), the Ministry of Higher Education, Science and Technology, the Ministry of Labour,

Family and Social Affairs, the Statistical Office, the National Institute for VET and social partners. The group prepared a proposal for the SQF, which was broadly debated in national consultation processes.

Framework implementation

The SQF is not yet operational. A draft law on the SQF[162] was prepared and widely discussed. However, adoption has been delayed due to a change of government. This is a technical law which summarizes stakeholders' and ministries' main responsibilities in designing and awarding qualifications at different levels, and defines tasks of the EQF national coordination point (NCP). It refers to procedures and methods of allocation of qualifications from formal education and training and national vocational qualifications as defined in sectoral legislation. It defines inclusion of supplementary qualifications, referencing NQF levels to the EQF and qualification frameworks in the European Higher Education Area (QF EHEA). It also defines maintenance of an SQF register and funding. The SQF register[163] describes qualifications in accordance with SQF and EQF parameters (title, type and category of a qualification, credit points, access requirements, SQF/EQF level, ISCED level, learning outcomes, awarding body and transition possibilities). In the EQF portal testing phase, Slovenia contributed to testing compatibility of a national register with the EQF portal. The SQF register still needs to be further developed and more qualifications included in the register. Once fully developed, the SQF register will significantly increase transparency of qualifications and the national qualifications system.

The EQF NCP was set up at the National Institute for VET. Its main role is to support development and implementation of the SQF, establish and maintain the SQF register, and become the main information desk for citizens and institutions.

Level descriptors and learning outcomes

The SQF has ten levels. The descriptor for each level contains three categories of learning outcomes: knowledge, skills and competences. Each qualification in the framework includes all three categories, although it is not necessarily the case that each category has equal weight within the qualification. Such a selection of categories allows 'capture' of the full diversity of learning outcomes and qualifications that, though acquired in different settings and for different purposes, are comparable in terms of learning outcomes.

The SQF is a framework of communication that also includes elements of reform. The starting points for classification of qualifications in the SQF are relevant sectoral legislation and the classification system of education and training (*Klasius*). The SQF aims to establish a flexible connection between education and qualification structures. It links two concepts: educational activities/programmes and learning outcomes.

For qualifications acquired after completion of nationally accredited programmes, additional input criteria are used: access requirements, typical length of the programme, and input in terms of volume of learning activities in VET and higher education defined also in credit points.

SQF includes three categories of qualifications:

- Educational qualifications awarded after completion of formal education programmes at all levels (general, vocational or higher);
- National vocational qualifications defined as work-related vocational or professional capacity to perform an occupation at a certain level of complexity; these can be achieved through recognition of non-formal and informal learning in line with national standards;
- Supplementary qualifications acquired in further and supplementary training (tied to supplementing abilities and competences) and not issued by the national authorities, widely debated in the national consultation process and strongly supported by stakeholders. It was decided to deal with this issue in the second stage of NQF implementation.

The learning-outcomes approach, following reforms carried out since the 1990s, is already embedded in the Slovene education system and well accepted.

Education programmes have moved from a content-based to an objectives-based approach. Reforms have supported and broadened assessment of learning outcomes. A balance is sought in emphasizing the role played by general knowledge and acquired key competences, sufficiently broad technical knowledge and certain pedagogical processes in defining educational outcomes.

In VET, the learning-outcomes approach is seen as a very useful way of bringing vocational programmes and schools closer to 'real life'

162 http://bit.ly/1JPEfWK [accessed 19.9.2014].

163 http://bit.ly/1N3QFBT [accessed 15.9.2014].

and labour-market needs. The basis for all VET qualifications is a system of occupational profiles and standards, identifying knowledge and skills required in the labour market. National VET framework curricula define expected knowledge, skills and attitudes to be acquired by students. The school curriculum was also introduced and is an important innovation in Slovenia, giving schools increased autonomy in curriculum planning, especially in taking the local environment and employers' needs into account when developing the curriculum.

Assessment in VET (at NQF levels 4 and 5) is in project work, testing practical skills and underpinning knowledge; written tests are also used at Level 5 to test theoretical professional knowledge and knowledge of general subjects (Slovenian language, foreign languages, mathematics), which are tested externally.

New programmes in general education (compulsory and upper-secondary) include learning outcomes to be achieved either at the end of the three stages in compulsory education or at the end of upper-secondary education tested in the external *matura* examination.

In higher education, reform and introduction of study programmes in accordance with guidelines of the Bologna declaration has taken place gradually. The old, pre-Bologna courses were last published in 2008/09, and students in these courses must complete their studies no later than 2015/16. Starting with 2009/10, only new study programmes for all three cycles were available. Students entering higher education after 2009/10 thus pursue their education in courses of the first, second and third cycles, in line with the guidelines of the Bologna declaration. Learning outcomes in higher education are described in terms of general and professional competences. The course credits system (ECTS) has been obligatory since 2002.

Validation of non-formal and informal learning and links to the NQF[164]

Validation of non-formal and informal learning has been an important issue on the Slovenian education policy agenda in the past decade. Since 2006, it covers all education sub-systems, regulated by sector-specific acts. An overall strategy applying to all levels of education is, however, not yet implemented. Validation of non-formal and informal learning is most advanced in VET, but other sub-systems allow certain validation possibilities. For example, people over twenty-one can take the matura exam without being enrolled in formal education. There are two types of VET qualification in Slovenia: first, educational VET qualifications are awarded after completion of formal vocational programmes; non-formally acquired knowledge and skills are taken into account to shorten the length of studies. Second, national vocational qualifications (NVQ) can be acquired though recognition of non-formal and informal learning outcomes. The National Professional Qualifications Act (amended 2009)[165] connects both systems; occupational standards are the basis for qualification and assessment standards and national VET programmes. The master-craftsman qualification can also be acquired though validation, though participation in preparatory programmes is possible and common. Since 2010, most developments can be observed in higher education. The Act on Higher Education (2012)[166] obliges institutions to prepare validation measures and form a committee for validation of non-formal and informal learning. Universities are autonomous and can decide on their own procedures for validation. They normally use professional assessors or committees.

Referencing to regional frameworks

A joint report to link SQF levels to the EQF and QF-EHEA was presented to the EQF advisory group at the end of May 2013.

Table 54 Level correspondence between the SQF and the EQF

SQF	EQF
Level10	Level 8
Level 9	Level 8
Level 8	Level 7
Level 7	Level 6
Level 6	Level 5
Level 5	Level 4
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: Institute of the Republic of Slovenia for VET, 2013.

164 This section draws mainly on input from European Commission et al., 2014.

166 Zakon o visokem s šolstvu [Higher Education Act], http://www.uradni-list.si/1/content?id=108446 [accessed 19.9.2014].

Important lessons and future plans

Developments in Slovenia are based on an incremental approach and reforms under way since the mid-1990s, as well as a good situation in education, training and qualification developments compared to EU benchmarks.

However, at system level some drawbacks have been identified. For example, there is a need for better linking/bridging between formal education and training governed by the Ministry of Education and the certification system, steered by the Ministry of Labour, to allow individuals to combine learning outcomes better from different settings; opening up the qualification system to supplementary qualifications is planned. Quality assurance is regarded as essential and is being focused increasingly on outputs, for example testing quality indicators like destination of graduates. One weak point of the system is communication between education and the labour market and the mismatch between skills and knowledge obtained in education and training and labour-market needs. The current second stage of the VET curriculum and qualification reforms, based on learning outcomes, provides this sector with an opportunity to improve its attractiveness and strengthen links to the labour market.

Further planned developments will focus on strengthening cooperation between different stakeholders in developing and implementing effective lifelong learning.

Main sources of information

[URLs accessed 15.9.2014]

National Institute for VET: http://www.cpi.si
Institute of the Republic of Slovenia for VET: SQF register: http://www.nok.si/en/qualifications-framework-register.aspx

List of abbreviations

ECTS	European credit transfer and accumulation system
EQF	European Qualifications Framework
NCP	national coordination point
NQF	national qualifications framework
QF-EHEA	qualification frameworks in the European Higher Education Area
SQF	Slovenian Qualifications Framework
VET	vocational education and training

References

[URLs accessed 15.9.2014]

European Commission. 2013. *Education and training monitor 2013.* http://ec.europa.eu/education/library/publications/monitor13_en.pdf

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Slovenia.* http://libserver.cedefop.europa.eu/vetelib/2014/87076_SI.pdf

Institute of the Republic of Slovenia for VET. 2011. Slovenian qualifications framework: proposal by the steering committee group on the preparation of the national qualifications framework. http://www.nok.si/en/files/nok/userfiles/datoteke/68_file_path.pdf

Institute of the Republic of Slovenia for VET. 2013. Referencing the SQF to the European qualifications framework for lifelong learning and the qualifications framework for the European Higher Education Area [unpublished].

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SOUTH AFRICA

Introduction

South Africa has in recent years achieved a high level of macro-economic and political stability. At the same time, the legacy of Apartheid remains a significant challenge, even today, with various formal and informal initiatives underway to improve the level of education of historically disadvantaged people. Society in South Africa is profoundly unequal. While this has historical causes, the current economic environment has not been able to eliminate large social inequality gaps. Thus, though levels of inequality remain high (Gini coefficient = 0.35), they are no longer solely based on racial divisions. High levels of unemployment exist, particularly in the under-30 age group, and unemployment is higher among women than men (Samuels, 2013). A key challenge at the moment is quality provision in the entire schooling sector, with only pockets of high-quality provision. International comparative studies rate this sector as needing strengthening, more so in mathematics and science subjects. Several initiatives to address this problem are underway, including annual national assessments through which problem areas are identified, addressed and tracked. Despite these efforts, the legacy of Apartheid is starkly evident in the schooling sector and much more will have to be done.

Approximately 4 per cent of the South African population are citizens of other countries, mostly from the Southern African Development Community (SADC). Qualifications obtained outside South Africa are evaluated by the South African Qualifications Authority (SAQA), with the majority of applications falling into the highly skilled grouping. Most of these highly skilled migrants originate from SADC countries, for example the majority (26.9 per cent) come from Zimbabwe.

South Africa has a large rural population. Forty-one per cent live in rural areas where the levels of poverty and unemployment are high. At the same time, South Africa is experiencing rapid urban migration, especially among men in the 20–34 age groups. Most urban areas are surrounded by a periphery of shack settlements with little access to basic services. A high proportion of households in rural areas are headed by young women (Statistics South Africa, 2002).

Between 1995 and 2004 the total number of qualifications awarded in South Africa increased, with an average annual growth rate of 4.3 per cent (SAQA, 2007). The highest growth was seen in undergraduate degree levels. The growth in the number of qualifications awarded from 1995 to 2004 has been accompanied by a drastic increase in university enrolments – there is just less than one million learners in the university system – which constitutes a significant challenge in the country (ibid.). From 2002 until 2011 over 281,843 work-related qualifications and 1.6 million work-related part-qualifications were obtained, which shows steady improvement in the culture of learning in the workplace.

The vocational sector, comprising fifty further education and training (FET) colleges, has grown significantly over the last five years from about 360,000 enrolments to over 800,000 in 2014. Despite significant government investment, there are still problems as FET colleges are often viewed as a second or third choice option for those with less ability. In an attempt to strengthen this sector, some FET colleges are being transformed into community colleges, and other are being repositioned as technical and vocational education and training (TVET) colleges. While enrolment rates have improved in recent years, as stated above, much still needs to be done to convince the broader public that the vocational route can also be a first choice for the majority of students.

The South African National Qualifications Framework (NQF) was established in 1998 following the promulgation of the South African Qualifications Authority (SAQA) Act in 1995. The NQF has been designed as an integrated system with a strong transformational agenda to promote lifelong learning for all South Africans in a non-racial, non-sexist and democratic way. Preceding the SAQA Act, a broad and extensive consultation process took place that had, as one of its roots, in the late 1980s, the labour movement's desire to recognize the tradable skills of black workers in the bargaining forums for better conditions of service.

The overarching purpose of the NQF is to facilitate articulation, recognition, access, and redress across education, training, development and workplace learning for all South Africans. The NQF is the principal instrument through which national education and training qualifications are recognised and quality-assured in South Africa.

The NQF Act was promulgated in 2008 and came into effect from 1 June 2009, replacing the SAQA Act of 1995. Some of the main reasons for the review and subsequent change to the NQF environment have been debates over the integration of education and training, the different needs of the sectors in education and training, stakeholders versus experts, and power-relations between bodies within the NQF structure. The most important change was the establishment of three sub-frameworks as part of the comprehensive NQF: the General and Further Education and Training Qualifications Sub-Framework (GFETQSF), the Higher Education Qualifications Sub-Framework (HEQSF), and the Occupational Qualifications Sub-Framework (OQSF). Within the new NQF landscape, professional bodies apply to SAQA to be recognized within the education and training system, while professional designations are also included through an agreed process between SAQA and professional bodies (SAQA, 2012*b*).

At present, the main focus is on streamlining and simplifying the implementation of the NQF, and making it more responsive to South Africa's needs. SAQA and its quality partners, the three quality councils (the Council on Higher Education, CHE Umalusi, and the Quality Council for Trades and Occupations, QCTO) are working together to achieve the objectives of the NQF.

Main policy objectives

The specific objectives of the NQF, as outlined in the NQF Act No. 67 of 2008, are the same as the objectives of the South African NQF when the SAQA Act was promulgated in 1995. These are to:

- create a single integrated national framework for learning achievements;
- facilitate access to, and mobility and progression within, education, training and career paths;
- enhance the quality of education and training;
- accelerate the redress of past unfair discrimination in education, training and employment opportunities.

The objectives of the NQF are designed to contribute to the full personal development of each learner and the social and economic development of the nation at large. SAQA and the quality councils must:

- develop, foster and maintain an integrated transparent national framework for the recognition of learning achievements;
- ensure South African qualifications are of an acceptable quality and are internationally comparable.

Level descriptors and learning outcomes

One of the main changes to the South African NQF was an expansion of the levels from eight to ten. Where the eight-level NQF required master's degrees and doctorates to be grouped together on Level 8, the ten-level NQF now rectifies this situation.

Learning outcomes are widely used across all sectors in South Africa. Learning outcomes also form the basis of the NQF and the qualifications registered on the framework. SAQA is currently in the process of strengthening its approach to the evaluation of foreign qualifications to be learning outcomes-oriented.

Considerable progress has been made with the implementation of the revised NQF since 2009. Policies on the recognition of prior learning (RPL), the registration of qualifications and part-qualifications, the recognition of professional bodies, credit accumulation and transfer (CAT) and assessment have been completed. The level descriptors have also been agreed between SAQA and the quality councils. In order to strengthen collaboration amongst the key agencies, SAQA has overseen the development of a system of collaboration and an NQF implementation framework, which is the roadmap for NQF implementation. An NQF advisory service has been developed to assist users to navigate the education and training system. Credential evaluation also remains closely integrated with the NQF. The National Learners' Records Database (NLRD), which is the national repository for information on learner achievements and related matters, continues to provide important insights into the status of the education and training system in South Africa.

Table 55 South African NQF including the three sub-frameworks (Higher Education, General and Further Education and Training, and Occupational)

NATIONAL QUALIFICATIONS FRAMEWORK		
Level	**Sub-framework and qualification types**	
10	DOCTORAL DEGREE DOCTORAL DEGREE (PROFESSIONAL)	
9	MASTER'S DEGREE MASTER'S DEGREE (PROFESSIONAL)	
8	BACHELOR HONOURS DEGREE POSTGRADUATE DIPLOMA BACHELOR'S DEGREE	OCCUPATIONAL CERTIFICATE (LEVEL 8)
7	BACHELOR'S DEGREE ADVANCED DIPLOMA	OCCUPATIONAL CERTIFICATE (LEVEL 7)
6	DIPLOMA ADVANCED CERTIFICATE	OCCUPATIONAL CERTIFICATE (LEVEL 6)
5	HIGHER CERTIFICATE	OCCUPATIONAL CERTIFICATE (LEVEL 5)
4	NATIONAL CERTIFICATE	OCCUPATIONAL CERTIFICATE (LEVEL 4)
3	INTERMEDIATE CERTIFICATE	OCCUPATIONAL CERTIFICATE (LEVEL 3)
2	ELEMENTARY CERTIFICATE	OCCUPATIONAL CERTIFICATE (LEVEL 2)
1	GENERAL CERTIFICATE	OCCUPATIONAL CERTIFICATE (LEVEL 1)

Note: Qualification types beyond Level 8 on the Occupational Qualifications Sub-Framework (OQSF) will be developed when needed.

Stakeholder involvement

In addition to changes in the NQF legislation, the government also reformed the political and administrative structures of the education and training landscape in order to improve the quality of education and training. The Department of Education was divided into two: (1) the Department of Higher Education and Training (DHET), and (2) the Department of Basic Education (DBE). The training component was transferred from the Department of Labour to the DHET. This means that the DHET is responsible for universities, universities of technology, further education and training colleges (being renamed as community colleges and TVET colleges), adult basic education and the entire training sector. Individual training colleges (e.g. nursing, agricultural, etc.) are still functioning under different departments. The DBE is responsible for the formal schooling sector, from primary to secondary school, as well as for the national adult literacy campaign, known as Kha Ri Gude.

The NQF continues to be led by a central statutory body, SAQA, with extensive input from other stakeholders. Three sector-specific bodies have taken over the responsibility for quality assurance and standards development within their respective sectors, while SAQA registers all qualifications. The sector bodies are referred to as quality councils. The three quality councils are responsible for the sub-frameworks of higher education, general and further education and training, and trades and occupations. Each quality council is responsible for determining their qualification types in accordance with the overall criteria determined by SAQA. SAQA is responsible for the overall development and implementation of the NQF and the coordination of the three quality councils. The quality councils and SAQA report to the Minister of Higher Education and Training, while Umalusi (one the quality councils) on certain aspects reports to the Minister of Basic Education.

Representatives from trade unions, provider bodies (including higher education, further education, and general education) professional bodies, employers, and experts serve on the boards and councils of SAQA and the quality councils.

Within the NQF landscape, professional bodies have also been given the opportunity to take on specific responsibilities related to qualifications development and quality assurance provided they meet the policy and criteria set by SAQA. By March 2015, seventy-three professional bodies had already met these requirements with over 260 professional designations registered.

Recognition and validation of non-formal and informal learning and links with the NQF

In South Africa the term RPL is used for the recognition of non-formal and informal learning and is defined as comparison of the previous learning and experience of a learner, howsoever obtained, against the learning outcomes required for a specified qualification. Learning is measured in terms of specific learning outcomes for a specific qualification and may lead to achievement of credits towards the qualification. Two types of RPL have emerged in South Africa: RPL for credit usually associated with general and further education and training, and RPL for access, usually associated with higher education.

In the eighteen years since the creation of the NQF, RPL has become a reality for over 500,000 people who have either gone through or are currently engaged in an RPL process. From 'islands of excellent practice', the country continues to move towards a national RPL system. There are three main target groups for RPL: The access group: under-qualified adult learners wishing to up-skill and improve their qualifications, and candidates lacking minimum requirements for entry into a formal learning programme; the redress group: workers who may be semi-skilled and even unemployed, who may have worked for many years but were prevented from gaining qualifications due to restrictive past policies; candidates who leave formal education prematurely and who have, over a number of years, built up learning through short programmes.

The greatest number of RPL candidates fall between NQF levels 2 and 4, and do not, in the main, possess a school-leaving certificate (Samuels, 2013).

Referencing to regional frameworks

South Africa, as a member state of the South African Development Community (SADC), has played an active role in the development of a regional qualifications framework for SADC since 2001 (SADC, 2005). Progress has, however, been slow and impeded mainly as a result of the diversity of the educational training systems, the varying levels of development between countries and the lack of a strong central driving agency.

Important lessons and future plans

The South African NQF has become an integral feature of the education and training landscape in South Africa. Learning outcomes are widely used across all sectors. SAQA and the three quality councils have become mature organizations with clearly defined mandates that work together to implement the NQF.

Articulation between the sub-frameworks of the NQF remains an area that needs to be improved in the future. A national policy and a set of articulation criteria are currently being considered to address some of these challenges.

The intention is to expand RPL through a national co-ordinated strategy. To ensure that this RPL strategy has a major impact, the Minister of Higher Education and Training has tasked a national RPL task team to develop a national RPL strategy. The task team completed its work in 2013.

New legislation for the post-school sector is currently being developed. A White Paper on the post-school education and training system has been released to the public and implementation plans are currently being developed.

SAQA is currently shifting its focus from policy development, which has been required by the NQF Act of 2008 and had been largely completed by 2014, towards overseeing policy implementation. This will include greater emphasis on monitoring and evaluation, as well as an increased role for SAQA in cases where unfair and discriminatory exclusionary practices occur preventing the mobility of learners.

International benchmarking between the South African NQF and other countries will also be considered. Such a process has already been initiated with Malaysia and will be completed in 2015.

References

Organisation for Economic Co-operation and Development (OECD). 2007. S*outh African Qualifications Authority (SAQA) Country Report 2007*. Paris, Organisation for Economic Co-operation and Development.

SADC. 2005. Concept document for the SADC Regional Qualifications Framework. Unpublished.

Samuels, J. 2013. Contextual and institutional arrangements for lifelong learning. M. Singh and R. Duvekot (eds), *Linking Recognition Practices and National Qualifications Frameworks. International benchmarking of experiences and strategies on the recognition, validation and accreditation (RVA) of non-formal and informal learning.* Hamburg, UNESCO Institute for Lifelong Learning (UIL).

South African Qualifications Authority (SAQA). 2007. *Trends in Public Higher Education in South Africa 1995–2004*. Pretoria, SAQA.

South African Qualifications Authority (SAQA). 2012. *Level Descriptors for the South African National Qualifications Framework.* Pretoria, SAQA.

South African Qualifications Authority (SAQA). 2012*b*. *Policy and criteria for the recognising a professional body and registering a professional designation for the purposes of the NQF Act.* Pretoria, SAQA.

Southern African Development Community. (SADC) 2005. *Towards a SADC Qualifications Framework Concept Paper and Implementation plan.* Maseru, SADC Secretariat.

Statistics South Africa. 2002. *Census 2001*. Pretoria, Statistics South Africa.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

SPAIN

Introduction

Spain has developed a qualifications framework for lifelong learning (ESQF), known as the Spanish Qualifications Framework (*Marco Español de Cualificaciones*) (MECU). It is based on learning outcomes and aims to link and coordinate different education and training sub-systems. The framework will include qualifications obtained in compulsory, post-secondary and higher education, and will integrate validation of non-formal and informal learning processes.

The draft royal decree on the introduction of MECU is the legal basis for its implementation, although this decree has yet to come into force. It defines levels and level descriptors for referencing the MECU to the EQF levels. The decree was developed in consultation with main stakeholders and supervised by the national advisory bodies.

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.[167]

Main policy objectives

One of the main objectives of developing an ESQF compatible with the European Qualifications Framework (EQF) and those in the European Higher Education Area (QF-EHEA) is to make Spanish qualifications easier to understand by describing them in terms of learning outcomes; it should also clarify relations between them. It is expected that this will improve the extent to which stakeholders are informed about national qualifications, raising trust and making mobility easier. The ESQF aims to support lifelong learning, link initial vocational education and training (IVET) and continuing VET, and improve access and participation for everyone, including the disadvantaged. Through the ESQF – it is expected – it will be easier to identify, validate and recognize 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.

Developments take into account experiences with occupational standards. Of special attention and lively discussion are levels 3 and 4 of the national qualifications framework (NQF), where formal vocational qualifications/titles, regulated by the Ministry of Education, and professional qualifications/certificates, under the remit of the Ministry of Labour, would be assigned. They are different in the learning they represent, but can be linked to the same level of the catalogue.

Another important aim is to support transition and progression possibilities within the various sub-systems of education and vocational training; examples include 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 recognizing non-formal learning and to reduce early school leaving (18 to 24 age group) (European Commission, 2013, pp.144–148).[167]

The MECU should also have an important communication role for diverse stakeholders.

Stakeholder involvement

The Ministry of Education, Directorate General for Vocational Training, is coordinating NQF development and implementation in cooperation with other ministries (employment and social security, industry, energy and tourism, health, social services and equality, economy and competitiveness). The development work includes a wide range of other stakeholders such as social partners (unions, Spanish Confederation of Employers' Organizations, Spanish Confederation

167 Established by Royal Decree 1027/211 http://bit.ly/1kN8cys [accessed 16.10.2014].

167 Despite the reduction from 31.2 per cent in 2009 to 24.9 per cent in 2012, the early school leaving rate is above the EU average (12.7 per cent), with big regional disparities.

of Small and Medium Enterprises), institutional coordination bodies (such as the Sectoral Conference of Education and the 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). Regional councils for education have been involved in the process. Spain is seeking to create a simple and practical system that is robust, but also flexible enough to respond to the requirements of regional autonomy. However, it is important to note that overall responsibility for the development and implementation of the MECU, in accordance with the Spanish constitution, lies with the central government. The state has exclusive competence on all regulation of qualifications (an aspect correspondingly developed and revised by the 2006 and the 2013 Organic Acts).

Cooperation with the Ministry of Employment and Social Security has been reinforced recently to address high unemployment in the country.

Cooperation with the Bologna Process is ensured with members represented in both the committee for MECU and in the group for MECES to achieve methodological and structural coherence, making possible the alignment of the two frameworks.

Framework implementation

The framework is not yet operational. The royal decree on the introduction of MECU will establish the legal basis for its implementation but this has yet to come into force. The draft royal decree recommends establishing a MECU committee, including stakeholders such as ministries, representatives of professional associations, trade union and business representatives and qualifications framework experts from different sectors. The committee will be mandated to decide on assignment of framework levels to the Spanish qualifications and to submit proposals to the government for approval. The national qualifications will be assigned to MECU levels based on three criteria:

- Comparability of qualifications type descriptors defined in terms of learning outcomes and the MECU level descriptors;
- Implementation of common quality assurance in higher education and in VET, in line with annex III of the EQF Recommendation;
- Public consultation with bodies involved in the design, award and use of qualifications in a respective field.

Qualifications from formal education and training will be assigned first; no major challenges are expected. More challenging is the inclusion of qualifications resulting from the validation of non-formal or informal learning. These processes are more recent and consolidated experiences are still weak.

Level descriptors and learning outcomes

An eight-level framework has been proposed to cover all main types of Spanish qualification. The four highest levels are compatible with the Spanish qualification framework for higher education, which is based on the Dublin descriptors.

Level descriptors are defined in terms of knowledge, skills and competence. They have been inspired by 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 emphasized. Competence is defined as autonomy and responsibility, including learning skills and attitudes.

Broad generic descriptors for the NQF will be supplemented with more detailed descriptors when necessary, such as for academic qualifications.

The learning-outcomes approach is seen as an essential part of MECU and MECES development and implementation. However, as reported for the Cedefop study on learning outcomes (Cedefop, forthcoming), the notion of learning outcomes is a new concept in the Spanish context and not widely shared. Competences and capacities are often referred to in various policy documents, with many different interpretations due to various linguistic and pedagogic concepts. The level of implementation also varies across sub-systems; the most developed and elaborated is in VET. It is expected that the development of both MECU and MECES will further support the strengthening of learning outcomes at all education and qualification levels to make qualifications more readable and easier to compare. A new Organic Law 8/2013 has recently been adopted (Government of Spain, 2013), aiming to improve quality and promote lifelong learning, mobility and coherence of the nation system in line with international standards. Framework curricula should include 'the standard and measurable learning outcomes'.

To develop a common approach, the Ministry of Education and Science has established in the legislation national core curricula for the various levels of education: pre-primary,

primary, lower secondary, upper secondary and vocational training. These are determined by central government,[169] though schools can take responsibility for developing part of their own curriculum. 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 VET qualification system is defined by the Law on Qualifications and Vocational Training (Government of Spain, 2002). Professional modules for each qualification gather the learning outcomes and the corresponding assessment criteria that show that the qualification holder knows, understands and is able to do as expected on completion of the programme. Learning outcomes are closely related to work activities and required professional competences.

New study programmes in higher education 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.

Validation of non-formal and informal learning and links to the NQF[170]

Spain does not have a comprehensive national strategy for validation; different laws frame validation, targeting different education sectors. The Organic Law of Education and the Organic Law of Universities incorporate actions to validate non-formal and informal learning, such as access exams to VET and university studies aimed at those people who do not have the required qualifications. Royal Decree 1224/2009 (Government of Spain, 2009) established recognition of skills acquired through work experience. This decree provides the possibility of evaluating professional competences through non-traditional assessment methods; this is common to gaining qualifications from the employment administration (*certificados de profesionalidad*) and the education administration (IVET programmes) through specific calls for validation. The procedure only validates professional competences acquired through work experience or non-formal learning pertaining to specific units of competences registered in the national catalogue of professional qualifications. The calls for validation and accreditation of professional competences are usually restricted to selected economic sectors, depending on available financial resources and sector needs.

Other degrees regulate access to formal qualifications through tests. Since the 1970s, those over 25 can access university upon satisfactory performance of 'over-25' access exams, but without a qualification in post-compulsory upper secondary education. Adults can also gain the diploma of compulsory secondary education and the baccalaureate diploma (post-compulsory upper secondary education) through examinations, without having undertaken the corresponding formal studies.

Referencing to regional frameworks

The draft referencing report is expected to be prepared by mid-2015. The self-certification report has been drafted. Spain has not yet decided whether there will be one joint report prepared to reference to the EQF and self-certify to the QH-EHEA.

Important lessons and future plans

There are challenges at different levels.

First, dialogue and interaction with, and developing trust among, different stakeholders from education and employment is considered a cornerstone and key success factor for the development and implementation of a comprehensive NQF.

Second, including VET qualifications, especially at levels 3 and 4, seems to be a challenge because VET qualifications at these levels are not only awarded by different bodies (Ministry of Education and Ministry of Labour), but differ in terms of their nature, the work required, and the delivery and quality-assurance mechanisms used, with some of them less regulated. There seem to be less confidence and trust in the ways these qualifications can be mapped together. Putting the framework into the lifelong learning perspective and including non-formal and informal aspects of learning in the framework is regarded as complex. Including qualifications resulting from non-formal or informal learning uses recognition and validation processes widely implemented only in recent years.

169 Central government is responsible for designing 65 per cent of the curriculum (55 per cent in those autonomous communities which have their own language); the additional curriculum at regional level differs between autonomous communities.

170 This section draws mainly on input from European Commission et al., 2014.

NQF development in Spain also shows the importance of political processes and cycles on the implementation of European tools, such as the EQF. Adoption of the royal decree on MECU is an important step towards the MECU implementation.

Main sources of information

[URLs accessed 16.10.2014]

The Ministry of Education is the main source of information on NQF development (MECU and MECES), and 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.
The MECU website: www.mecd.gob.es/mecu

List of abbreviations

EQF	European Qualifications Framework
ESQF	Spanish Qualifications Framework for Lifelong Learning
IVET	initial vocational education and training
NQF	national qualifications framework
MECU	Marco Español de Cualificaciones [Spanish Qualifications Framework]
MECES	Marco Español de Cualificaciones para la Educación Superior [qualifications framework for higher education]
QF-EHEA	qualifications frameworks in the European Higher Education Area
VET	vocational education and training

References

[URLs accessed 16.10.2014]

Cedefop (forthcoming). *The application of learning outcomes approaches across Europe.*

European Commission. 2013. *Education and training monitor: Country reports.* http://bit.ly/1P779Zz

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Spain.* http://libserver.cedefop.europa.eu/vetelib/2014/87056_ES.pdf

Government of Spain. 2002. Ley Orgánica 5/2002, de 19 de junio, de las Cualificaciones y de la Formación Profesional [Organic Law 5/2002 on qualifications and vocational training]. *Boletín oficial del estado*, No 147. https://www.boe.es/boe/dias/2002/06/20/pdfs/A22437-22442.pdf

Government of Spain. 2009. Real Decreto 1224/2009, de 17 de julio, de reconocimiento de las competencias profesionales adquiridas por experiencia laboral [Royal Decree 1224/2009, of 17 July, on the recognition of professional competences acquired through working experience]. *Boletín oficial del estado*, No 205. http://www.boe.es/boe/dias/2009/08/25/pdfs/BOE-A-2009-13781.pdf

Government of Spain. 2013. Ley Orgánica 8/2013, de 9 de diciembre, para la mejora de la calidad educativa [Organic Law 8/2013, of 9 December, for the improvement on the quality of education]. *Boletín oficial del estado*, No 295. http://www.boe.es/boe/dias/2013/12/10/pdfs/BOE-A-2013-12886.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

SRI LANKA

Introduction

Established in 2005, the Sri Lankan National Vocational Qualifications Framework (NVQF) is 'a unified national system established by statute, covering all agencies providing vocational and tertiary level education and training except for religious education, occult sciences, sports and recreation, dancing, music, performing arts or any other form of aesthetics and education or training in leadership' (ILO, 2010*a*, p. 25).

In 2012 Sri Lanka established the Sri Lankan Qualifications Framework (SLQF), which is a nationally consistent framework for all higher education qualifications offered in Sri Lanka. SLQF also integrates the NVQF developed by the Tertiary and Vocational Education Commission.

The socio-economic challenges facing Sri Lanka include high youth unemployment and a lack of career development opportunities for young people. Most learning takes place in non-formal and informal settings, yet there are no mechanisms in place for the recognition of such learning. The formal education and training system, meanwhile, is limited in both capacity and relevance, so much so that some certificates do not even get accepted within the education system itself. Courses are out of touch with both the demands of industry and the learning needs and socio-economic circumstances of young people.

In the past, technical and vocational education and training (TVET) was often seen as a dead end. Few secondary school leavers opted for TVET courses, which created excessive pressure on university admissions. Raising the profile of TVET is therefore a priority for the Sri Lankan Government.

In line with the 2009 National Policy on Higher Education and TVET, the government plans to take measures to make TVET a more attractive and clear alternative to university education and thus to combat the widespread perception that TVET is an inferior option. Efforts will be made to encourage private-sector training providers to take a more active role in both training and employing TVET graduates.

Main policy objectives

The government sees the NVQF as a tool for:

- coordinating the multiplicity of TVET training providers currently operating under different ministries;
- providing quality-assured qualifications with clearly described competency levels and learning demands, enabling trainees to make informed decisions about which qualifications to choose and employers to understand the level of attainment of their prospective employees;
- ensuring high standards in both acquisition and assessment of competencies;
- aligning TVET to national development goals, with an eye towards fulfilling the skills needs of emerging economic sectors;
- fostering stronger linkages with industry and commerce through greater stakeholder participation in the development of skills standards, assessment processes and curricula;
- making training more responsive to industry needs by bringing industry's use of skills standards and competency-based training into the educational sphere;
- streamlining application and assessment processes in order to increase access to competency-based training for potential trainers;
- developing a competency-based curriculum;
- fostering better links between workplaces and TVET centres;
- providing recognized certificates for Sri Lankans wishing to work or study abroad, thus improving international links for the Sri Lankan TVET sector;
- increasing collaboration between well-resourced and less well-equipped training centres through student and trainer transfers and resource sharing;
- enhancing quality, relevance, effectiveness, efficiency and transparency.

With the establishment of the SLQF in 2012, the thrust of SLQF shifted from TVET system towards:

- enhancing quality, access and equity in higher education, training and employment opportunities, at all levels;
- helping employers to understand the levels of knowledge, skills and competences of qualification holders;
- developing positive attitudes and all-round personal development of qualification holders;
- facilitating lateral and vertical mobility, and progression within higher education and career pathways;
- Making qualifications offered by different institutions comparable to each other;
- Promoting the development of higher education and vocational training programmes appropriate to the different qualification levels;
- recognizing prior learning and promote lifelong learning.

Stakeholder involvement

The development of SLQF was initiated in 2009 with assistance from the World Bank funded Improvement of Relevance and Quality of Undergraduate Education (IRQUE) project and continued with the funding from the Higher Education for the Twenty-first Century (HETC) project. Preparatory work for the development of SLQF A was undertaken by a National Committee comprising:

- a representative of the Ministry of Higher Education, nominated by the Minister of Higher Education;
- a representative of the University Grants Commission, nominated by its chair;
- the Director General of the Sri Lanka Institute of Advanced Technological Education (SLIATE) or his nominee;
- the Director General of the Tertiary and Vocational Education Commission of Sri Lanka;
- a representative of the Quality Assurance and Accreditation Council;
- a representative of the Committee of Vice-Chancellors and Directors.

The NVQF initiative in Sri Lanka was implemented in 2005 through two skills development projects supported by the Asian Development Bank (ILO, 2010*b*). The main goal of the first project, the Skills Development Project, which ran from 2001, to 2007, was 'developing NVQF infrastructure and capacity'. Its other aims included 'the development of an accreditation system, assessor training and certification, the expansion of the National Trade Testing Programme and the establishment of a quality management system' (ILO, 2010*a*, p. 25). The second project, called the Technical Education Development Project (2006–2010), aimed to 'set up review systems for the skill standards developed in the earlier project' (ibid.).

While no new bodies were established for the purpose of implementing the NVQF, the mandates of existing bodies have been modified slightly. The bodies concerned are:

- The Tertiary and Vocational Education Commission (TVEC), a statutory organization responsible for managing the NVQF, determining occupations for skills standards development, developing national skills standards, awarding certificates to trainees and registering assessors' certifications.
- The Registration Division of the TVEC, which oversees the registration of public and private training providers, the accreditation of courses, quality assurance systems (QASs), and monitoring and auditing. QAS holds regular audits to review NVQF quality assurance mechanisms, registration and accreditation. It is certified under the International Organization for Standardisation (ISO) 9001:2008 certification.
- The National NVQ Steering and Coordination Committee of the TVEC, which is responsible for the implementation of the NVQF. All issues connected with the administration of the NVQF are discussed and decided on by the steering committee.

Other organizations involved in the development of standards, training of assessors and testing of applicants are the National Apprentice and Industrial Training Authority (NAITA) and the Department of Technical Education and Training (technical colleges division). NAITA assists the TVEC with regard to competency standards and assessment resource development. The University of Vocational Technology (Univotec) assists the TVEC with regard to curriculum and learning resource development and assessor training.

While there is a strong emphasis on public education and training providers, private and non-governmental organizations and training centres have also been registered and accredited to provide NVQF courses (ILO, 2010*b*). Training institutions acknowledge the benefits of the NVQF, since it allows them to award their trainees nationally valid certificates, thereby enhancing their own reputation and image at the national level.

Trade unions have been involved in the development and implementation of the NVQF in the past but their involvement in this regard has diminished, with more focus being given to union members' 'bread and butter' issues such as salaries and working conditions (ILO, 2010*a*, p. 27).

Level descriptors and learning outcomes

NVQF qualifications are based on national competency standards which are identified by industry stakeholders. The Sri Lankan NVQF currently has seven levels and competency standards for 45 qualifications. The competency standards are further divided into 63 smaller unit standards. Curricula are centrally developed and are based on specified learning outcomes. Levels are assigned to units of competency standards according to the complexity of learning demands and degree of responsibility that the learner is obliged to take on.

National competency standards are designed to be effective for performance in a particular industry sector or occupation. Competency standards focus on what is expected from a worker in the workplace rather than on the learning process. Emphasis is placed on the ability to carry out a task within a given context and to transfer and apply skills, knowledge and attitudes to new situations and environments.

The following four components comprise a competency unit:

- Task operation;
- Task management;
- Problem solving;
- Job, role or work environment handling application of competencies to different environments.

Competency units at levels 1–4 are clustered into occupation-specific packages in accordance with industry requirements. The units are expected to also include learning content and not just learning outcomes.

Levels 5 and 6 include sector-specific core competency units. Competency units at levels 5 and 6 carry a credit value as well as a level. The credit system used is the European Credit Transfer and Accumulation System (ECTS).

Level 7 leads to a degree which is based on curricula prepared in terms of learning outcomes.

SLQF comprises ten levels and the descriptors of each of these levels are stated in a comprehensive manner, including intellectual abilities and cognitive and soft skills. The demands and complexity of learning outcomes increase with each level. The purposes and characteristics of each qualification, as well as the minimum admission requirements, are also stated in the SLQF.

Except for higher education, the levels are not directly related to the years of study; rather, the volume of learning at each level is described in terms of credits. Two or more qualifications at the same level indicates that the qualifications are broadly comparable in terms of general levels of complexity. However, each qualification at the same SLQF level does not have the same purpose or specific learning outcomes. The SLQF levels and comparable NVQF levels are given in Table 54 below.

Table 56 Sri Lankan Qualifications Framework levels and National Vocational Qualifications Framework levels

Level	Qualification awarded	
SLQL 10	Doctoral degree, MD with board certification	
SLQL 9	Master of Philosophy, master's by full-time research, DM	
SLQF 8	Master's with course work and a research component	
SLQL 7	Postgraduate certificate, postgraduate diploma, Master's with course work	
SLQL 6	Honours bachelor's, bachelor's in professional disciplines	
SLQL 5	Bachelor's degree, Bachelor of Technology, Bachelor's double major degree, Pundit, Royal, Pundit, Nipun	NVQL 7
SLQL 4	Higher diploma	NVQL 6
SLQL 3	Diploma	NVQL 5
SLQL 2	Advanced certificate	NVQL4
SLQL 1	Certificate	NVQL 3 NVQL 2

Source: Sri Lanka Qualifications Framework, Ministry of Higher Education, 2012

Recognition and validation of non-formal and informal learning and links to the NQF

Sri Lanka's NVQF has been developed with a view towards integrating technical and/or vocational and higher education (further levels may be added in future). All three sectors of the education system – general education, higher education and TVET – have been subject to reforms in order to accommodate the formation of progression pathways across the various sectors. The framework allows for an interface with secondary education and provides pathways for holders of TVET qualifications to proceed to higher education. NVQF qualifications are designed to allow trainees to enter and exit the system at different stages with qualifications at different levels.

Vertical mobility through the system is based on the principle of seamless progression. Access to qualifications at levels 1–4 is possible both directly and progressively through an accredited course or through the recognition of prior learning. The prerequisite for access to Level 5 diploma courses is NVQF Level 3 plus academic ability equivalent to General Certificate of Education (GCE) Ordinary Level. The entry qualification for Level 7, the degree programme, is NVQF Level 5. In order to maintain links between the lower and higher levels, the occupations at levels 1–4 and the fields of study at levels 5–7 are clustered to provide the necessary upgrading of qualifications and competencies. The creation of industry-linked courses at NVQF levels 5–7 is costly due to the extensive equipment and infrastructure required (ADB, 2011).

The University of Vocational Technology (Univotec) was established to provide pathways to higher education for TVET students who are unable to enter conventional universities. Students who have achieved the relevant qualifications at levels 5 and 6 can proceed from national diploma to degree programmes. Those with Level 6 qualifications are eligible to receive appropriate credit transfers towards a degree programme determined by Univotec.

Assessment is conducted using two methods, one for levels 1–4 and the other for Level 5 and above. At levels 1–4, competency-based assessments focus on the performance criteria specified in the respective competency units. For learning outcomes-based modular qualifications at levels 5 and 6, assessment is conducted in two stages: formative and summative. Formative assessment comprises the identification and documentation of existing skills and assessors being able to interpret these skills against some level of the NVQF. The summative part includes an assessment panel consisting of three members, with at least one representing the industry that deals with the particular area of technology concerned. The final outcome of the assessment is determined by the assessment panel.

Recognition of prior learning (RPL) is defined as the process whereby competencies acquired through industry practice or previous training are recognized, allowing them to be put towards a certificate or credits. RPL is an important instrument for promoting NVQF-aligned certification, particularly in occupations for which demand is high.

So far, the largest number of certificates issued through RPL have been awarded to beauticians, hairdressers and bakers. RPL is also especially important for people who want to work or study in other countries. There is no difference between certifications resulting from accredited courses and those achieved through RPL. However, the award of a full qualification through RPL is limited to NVQF Level 4. Accredited courses are expected to issue a separate certificate of participation as proof of attendance.

Two institutions are authorized to conduct RPL: NAITA and the Vocational Training Authority (VTA). Established under Sri Lanka Act No. 12 in 1995, the VTA consists of six national vocational training institutes, twenty-two district vocational training centres and 232 vocational training centres. The VTA operates under the Ministry of Youth Affairs and Skills Development and provides rural youth with skills training combined with workshops on information technology and entrepreneurship.

To avoid corruption in RPL (attempting assessment without the necessary preparation, exerting influence over the assessors, etc.) the government has stipulated one to five years of experience as a requirement for NVQF levels 2 and 3 and a further two years for NVQF Level 4. However, craftspersons with a minimum of five years' experience may be considered for assessment at Level 4 directly.

The integration of the NVQF into the SLQF has further strengthened the pathways of lateral mobility between the vocational education sector and the higher education sector. To facilitate vertical mobility within the higher education system, SLQF includes the recognition of accredited prior learning.

The Sri Lanka Qualifications Framework helps qualification holders to know the level of their qualification. In addition, the SLQF helps potential

employers to know the level of learning and the attributes of a particular qualification holder. SLQF is useful to higher education institutions (both state and non-state) in designing their courses in terms of the minimum level of learning effort and the number of credits that should be earned by a qualification holder. In this way, SLQF contributes to strengthening the quality of higher education qualifications offered in universities and higher education institutions in Sri Lanka.

Referencing to regional frameworks

The SLQF provides a clear system to develop links with higher education institutions abroad. With the globalization of higher education, national qualification frameworks developed in several other countries have helped to evaluate the higher educational qualifications obtained in different countries.

Sri Lanka is part of the South Asian Association for Regional Cooperation (SAARC), which cooperates in the areas of education, training and human resource development. SAARC has established a South Asian University with a Centre of Excellence to provide world-class facilities and a professional faculty for students and researchers drawn from every country of the region.

Important lessons and future plans

Sri Lanka's efforts in developing its NVQF are receiving increasing attention in and beyond neighbouring countries. The Asian Development Bank (ADB) report on *The National Qualifications Framework for Skills Training Reform in Sri Lanka* offers general recommendations for other countries, as well as outlining a way forward for Sri Lanka (ADB, 2011).

The general lessons to be drawn from the ADB report are the following:

- Considering the ad hoc development of vocational courses in many countries and the resulting multitude of qualifications, an NVQF will help to systematize the training system and offer unified qualifications.
- NQVFs developed in different countries may be similar. However, competency standards should be designed to suit a country's own education system, labour market and society.
- Political commitment, a well-functioning administrative system, and a core team of dedicated professionals are essential for the successful development and implementation of an NVQF and of large-scale TVET reforms in general. Local professionals must lead the development and implementation processes.
- The development and implementation of an NVQF should be pursued until it becomes sustainable and the reforms are strongly rooted in the implementing agencies. Public acceptance of the system will then be the driving force.

The recommendations specifically for Sri Lanka include:

- Further development of the NVQF and related training courses must take into account emerging labour-market needs and environmentally friendly technologies.
- Efficient and reliable processes of assessment are vital in order to maintain industry stakeholders' confidence in the system.
- The NVQF must cater not only to lower levels but also to higher and diploma levels. Public and private providers should be encouraged to establish courses at these levels.
- Univotec should embark on a strong staff development programme and establish links with industry and higher education institutions in order to develop degree-level courses incorporating mandatory workplace-based learning.

SLQF offers a transparent and coherent framework for the learner to optimize his/her objective of learning throughout life, while at the same time improving many vital aspects of learning and assessment of learning processes.

References

Asian Development Bank. 2011. *The National Qualifications Framework for Skills Training Reform in Sri Lanka.* Philippines, ADB.

ILO. 2010*a. Qualifications Frameworks: Implementation and Impact. Background Case Study on Sri Lanka.* Geneva, International Labour Office

ILO. 2010*b. The implementation and impact of National Qualification Frameworks: Report of a study in 16 countries.* Geneva, International Labour Office.

ILO. 2010*c. Qualifications Frameworks: Implementation and Impact: Background Case Study on Sri Lanka.* G.A.K. Gajaweera, independent researcher, Skills and Employability Department, ILO.

Ministry of Higher Education. 2012. *Sri Lanka Qualifications Framework.* Colombo, Ministry of Higher Education

South-Asian Association for Regional Cooperation (SAARC): http://bit.ly/1KTpmEw

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

SWEDEN

Introduction

A formal decision of the Swedish government adopting a comprehensive Swedish national qualification framework (SEQF) is expected in 2015 in the form of a decree (*förordning*). A report on referencing the SEQF to the European Qualifications Framework (EQF) will be presented to the EQF advisory group in autumn 2015. While the overall technical design of the framework was finalized by 2012, preparation of the national qualifications framework (NQF) decree has proved time-consuming, involving formal consultation with all stakeholders. The final stage of this consultation – in the form of a referral memorandum (*remisspromemorian*) – was expected to be finalized by end 2014. The delays are related to the decision to open up the NQF to qualifications awarded outside the public sector, for example by private organizations and companies. Successful adoption of the NQF decree in 2015 would allow the SEQF to move into early operation, building on the extensive technical work carried out since 2009. Separate self-certification of Swedish higher education to the European higher education area has been carried out.

Main policy objectives

The December 2009 decision to initiate work on a comprehensive NQF was primarily presented as a way to aid referencing to the EQF; the framework should make it easier for individuals and employers to compare Swedish qualifications with those in other EU member states. While this European objective still stands, the NQF is now increasingly playing a national role.

The aim is to develop an inclusive framework open to qualifications awarded outside the public system, in particular in adult/popular education and in the labour market. This focus on the inclusive character of the framework is a response to particular features of Swedish education and training. First, adult and popular education is generally very strong, largely explaining why Sweden consistently scores high in all international comparisons on adult and lifelong learning. Courses are offered by a wide range of stakeholders and institutions, both public and private. However, 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 (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 sometimes require additional training and certification at work. This extensive system of labour market-based education and training is diverse and, in some cases, difficult to survey. Linking this 'non-formal' sector to the NQF is seen as crucial to increasing overall transparency. A first outline of how to manage this 'opening up' of the framework was developed by the Swedish National Agency for Higher Vocational Education during 2011. This proposal suggests establishing a National Council for Qualifications to act as the 'gatekeeper' of the NQF. The council – and stakeholders – would make sure that qualifications proposed for inclusion in the framework meet nationally established quality criteria and requirements. Separate work aimed at developing quality criteria for inclusion was launched in 2012 and a final proposal was presented on 16 November. These criteria specify how to apply the learning-outcomes approach when describing and allocating qualifications to NQF levels, and indicate requirements on quality assurance and transparency to the awarding institution.

The NQF proposal presented to the government in October 2010 states that all eight levels of the NQF – including levels 6 to 8 – should be open to all types of qualification, academic and non-academic. Not only is this seen as being in line with the spirit of EQF, it also reflects the existence of high-level qualifications awarded outside universities and academic institutions. A consultation carried out in spring 2011 revealed different opinions on this question. While most universities and academic institutions were in favour of restricting levels 6 to 8 to qualifications

covered by the Bologna Process, public authorities, social partners and regional bodies were in favour of opening these levels to all types of qualification. Everybody agreed, however, that an opening of levels 6 to 8 requires robust and visible quality-assurance mechanisms, making sure that the overall level of Swedish higher education is not negatively affected. The quality criteria proposed in 2012 for the inclusion of qualifications into the framework (Swedish National Agency for Higher Vocational Education, 2012) will provide a basis for developing practical solutions.

Stakeholder involvement

The Ministry of Education and Research has overall responsibility for work on the NQF and referencing to the EQF. The National Agency for Higher Vocational Education (Myndigheten för yrkeshögskolan) has been given the mandate to coordinate framework technical development and is also (as of 1 July 2009) the Swedish national coordination point for the EQF. A number of expert and working groups were formally established following the December 2009 decision.[171]

Development of the SEQF since 2009 has involved a broad group of stakeholders, from education and training and the labour market. This reflects the objective of the ministry to open up the framework to qualifications offered outside the public sector. Discussion on the opening up of levels 6 to 8 to non-academic qualifications has also contributed to raising interest in the proposal.

While still not formally adopted, a number of stakeholders have signalled interest in using it as a reference for their work, as in the sports-sector (*svenska riksidrottsforbundet*) where the NQF is seen as an instrument for better structuring existing education and training offers. Another example is provided by the twenty-six institutions responsible for the qualifications of teachers and trainers in VET, which have used the NQF as an instrument to identify available pathways into teacher-training and to indicate minimum prior learning and qualifications requirements. A third example is provided by the construction sector, where the framework is being used to indicate alternative progression routes for those wanting to qualify as construction site managers. This approach shows that the traditional higher education pathway (civil engineer) is not the only option; several combinations of work experience and formal education (both upper-secondary and post-secondary VET) are possible. A fourth example is provided by the financial sector where the framework is seen as an opportunity to make visible the training activities taking place within the sector, in most cases independent of public education and training.

Framework implementation

Given delays in formal adoption, the SEQF will at best move into an early operational stage in mid-2015. The following factors may influence implementation of the framework.

The National Agency for Higher Vocational Education has coordinated development of the NQF and will also play a key role in its implementation. The agency was set up as late as 2009 with the responsibility of administering what is a new strand of Swedish higher education and training. Providing high-level VET directly relevant to the labour market, higher vocational education (*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 5 to 6. This could prove both positive and negative for the forthcoming framework implementation.

The National Agency for Higher Vocational Education is well placed to administer the opening up of the framework to the non-formal and private sector. Extensive dialogue with a wide range of stakeholders has already taken place and the gradual inclusion of private qualifications could start from 2015. However, it is questionable whether the National Agency for Higher Vocational Education is well placed to ensure the commitment of higher education institutions to the SEQF. Sweden has decided to develop a separate qualifications framework for higher education and a separate self-certification to EHEA has been carried out. While the character of levels 6 to 8 in the NQF is extensively discussed in the proposal for the SEQF, future interaction with the SEQF for higher education is not addressed explicitly, apart from the general decision, in line with EQF, that academic qualifications will be placed automatically at levels 6 to 8. The consultation carried out in spring 2011 on opening up levels 6 to 8 shows that there are differences in opinion between the (academic) higher education sector and others

171 See http://bit.ly/1QMwO84 (in Swedish) [accessed 31.10.2014].

involved in developing the NQF. Some universities fear that the creation of a comprehensive NQF may come to threaten the overall quality and status of Swedish higher education. For the SEQF to be able to operate as a comprehensive NQF the relationship to the higher education framework will require further clarification and continuous dialogue.

Level descriptors and learning outcomes

The SEQF is based on an eight-level structure where each level is described through knowledge (*kunskap*), skills (*färdigheter*) and competence (*kompetens*). The explicit objective has been to develop a set of descriptors as closely aligned with the EQF as possible. While the influence of the original EQF descriptors is apparent, the level of detail has been increased. The difference from the EQF can be seen in the term 'competence', which is defined as the ability to take responsibility, to decide and act independently and to cooperate; the EQF speaks about taking responsibility and acting independently.

The learning-outcomes perspective is an important and mostly implemented feature of Swedish education and training. It is closely linked at political level to the 'objective-based governance' in use since the early 1990s. While the term learning outcomes is not commonly used (the term 'knowledge objectives' is used for compulsory education), the principles behind it are well known and accepted. The core curricula for compulsory education have recently been revised, further strengthening and refining the learning outcomes-based approach.

Universities follow national regulations on examinations, requiring the use of learning outcomes, though how these learning outcomes are translated by individual institutions varies. These are autonomous institutions where national authorities have less direct influence. The Bologna Process has been influential, as have a number of local initiatives.

A particular challenge faced is the extent to which the learning outcomes perspective influences assessment practices. Professionals may have problems seeing that assessment methods and criteria have to relate directly to objectives expressed in the curricula. This is a continuing process illustrating the long-term challenge involved in the shift to learning outcomes.

Validation of non-formal and informal learning and links to the NQF[172]

Development of the SEQF is seen as an opportunity to promote the work on validating non-formal and informal learning.

The government gave the Swedish National Agency for Higher Vocational Education the task of coordinating and supporting the national approach to validation of prior learning. Cooperating with relevant parties, including the National Agency for Education (responsible for validation in adult education), from 2010 to 2012 the agency developed criteria for validation and guidelines for quality assurance and documentation of validation processes. The criteria and guidelines also define future areas of development on validation, among which linking to the SEQF is mentioned. While the formal status of these criteria and their subsequent implementation at national level is uncertain, progress is being made and qualifications and standards that will be included in the SEQF will also be open to validation of non-formal and informal learning.

The procedures described in the criteria and guidelines are applicable to adult education, higher vocational education, higher education, folk high schools (civic education) and different sectors of the labour market. Formal education providers at all levels, along with sector organizations, have the opportunity to adapt the national criteria and guidelines to their needs and contexts. Different sectors in the labour market are developing their own models for validation. Standards developed by different business sector organizations are used as trade-specific frameworks for validating vocational knowledge, skills and competences. These are mainly occupational standards focusing on an outcome-based evaluation of the extent to which an individual knows a certain occupation or trade. The sector models have been developed in cooperation with business sector organizations, such as the Swedish Trade Federation (Svensk Handel), the Swedish Construction Industry Training Board (Byggnadsindustrins Yrkesnämnd) and the Vocational Training and Working Environment Council-Transport Trades, with part funding and support from national public agencies. These are also planned to be included in the SEQF.

172 This section draws mainly on input from European Commission et al., 2014.

Referencing to regional frameworks

Assuming the SEQF is adopted in spring 2015, referencing to the EQF will take place in autumn 2015. The eight SEQF levels mirror the eight levels of the EQF. The ministry has made the following proposal for correspondence between the SEQF and EQF (March 2014).

Table 57 Level correspondences between the SEQF and the EQF

SEQF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 4
Level 3	Level 3
Level 2	Level 2
Level 1	Level 1

Source: http://bit.ly/1QMwO84 [accessed 31.10.2014].

An NQF for HE has been developed separately and already self-certified agianst QF-EHEA in 2011.

Important lessons and future plans

Adoption of a decree in 2015 will provide the SEQF with the necessary political mandate to move into operation. There is a danger, if there are further delays, that momentum and interest – for example in the private sector – will be lost.

Compared to other countries, Sweden has, from the start, emphasized the need to open up to non-formal education and training and make it possible to establish links to the diverse and extensive field of continuing and popular education and training run by the private sector and non-governmental organizations. The overall success of the framework will partly depend on the extent to which it is seen as relevant to stakeholders outside formal, initial education and training. For this reason, it is particularly important to make practical progress and move from intention to concrete action.

While involvement of stakeholders has been systematic and extensive, the continued separate qualifications framework for higher education – and the separate self-certification of this to the qualifications framework in the European Higher Education Area – points to the need for closer dialogue between the university sector and the remaining parts of education and training.

Main sources of information

[URLs accessed 31.10.2014]

The Swedish National Agency for Higher Vocational Education is designated as national coordination point: http://www.yhmyndigheten.se/hem/higher-vocational-education--hve/
The Swedish NQF for lifelong learning: https://www.seqf.se/sv/Sa-funkar-det/Ramverken/NQF-LLL/

List of abbreviations

EQF	European Qualifications Framework
NQF	national qualifications framework
SEQF	Swedish National Qualification Framework
VET	vocational education and training

References

[URLs accessed 22.10.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Sweden.* http://libserver.cedefop.europa.eu/vetelib/2014/87075_SE.pdf

Swedish National Agency for Higher Vocational Education. 2012. *Återrapportering av regeringsuppdrag 2012 avseende utveckling av nationella kvalitetskriterier, som måste uppfyllas om en kvalifi kation ska få anslutas till den nationella referensramen för kvalifikationer, NQF* [Feedback on the government commission of 2012 for the development of national quality criteria that must be met if a qualification is to be approved by the national qualifications framework NQF]. https://www.myh.se/Documents/Publikationer/Aterrapporteringar/Redovisning-nationella-kvalkrit.pdf

Prepared by:
European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

SWITZERLAND

Introduction

While Swiss education and training is generally considered to be of high quality, many of its qualifications are relatively unknown in other countries, potentially hindering Swiss citizens seeking employment abroad. Switzerland sees the link to European cooperation on qualifications frameworks, both the European Qualifications Framework (EQF) and the qualifications framework in the European Higher Education Area, as an opportunity to strengthen the transparency and comparability of its national qualifications in a European and wider international context. In 2009, Switzerland adopted a national qualifications framework (NQF) for higher education (qualifications framework for the Swiss Higher Education Area [Qualifikationsrahmen für den schweizerischen Hochschulbereich] [NQF CH-HS]),[173] in line with the Bologna Process, including qualifications awarded by universities, universities of applied science (*fachhochschulen*) and university colleges for teacher education (*pädagogische hochschulen*). A Swiss NQF (Nationaler Qualifikationsrahmen Schweiz) (NQR-CH) for vocational and professional qualifications[174] was adopted on 27 August 2014 (Government of Switzerland, 2014) and put in force from 1 October 2014.[175] This latter framework is explicitly oriented to the EQF and introduces an eight-level structure defined through knowledge, skills and competence. Switzerland sees future referencing to the EQF as important and as a way to increase (in particular) the transparency of its vocational and professional qualifications abroad. Following recent reorganization at federal level, it is possible that some form of linkage between the two framework initiatives will be created.

Main policy objectives

The proposal for the NQR-CH-BB (VET/PET) was presented in February 2012. The framework consists of eight learning outcomes-based levels described through knowledge, skills and competence, as in the EQF. While limited to vocationally and professionally-oriented qualifications, it could be argued that the current proposal is modelled as a comprehensive NQF for lifelong learning. Moving in this direction will require a political decision and whether such development is possible is not clear. The recent reorganizations at ministerial level, bringing the responsible departments closer together, could provide a closer link between the two initiatives. Even in a case where the two frameworks are taken forward separately there will be a need to clarify the relationship between professional qualifications at levels 5 to 8 of the NQR-CH-BB and the three levels (cycles) of higher education covered by the NQF CH-HS.

Stakeholder involvement

The development of the NQR-CH-BB has been rapid and was initiated in 2009/10. During 2011 the responsible ministry (the federal department of economic affairs) (Eidgenössisches Volkswirtschaftdepartement) organized a series of round tables with representatives of cantons, trade associations and the social partners. Based on oral and written comments received on the proposal during these gatherings, the documents forming the basis for the spring 2012 consultation[176] were amended.

173 Information on the NQF for higher education can be found at: www.crus.ch/information-programme/qualifikation-srahmen-nqfch-hs.html [accessed 23.10.2014].

174 Following feedback in the consultation, the name of the NQR-CH has been changed to National Qualifications Framework for Vocational and Professional Education and Training (Nationaler Qualifikationsrahmen für Abschlüsse der Berufsbildung) (NQR-CH-BB), indicating that it is not an over-arching framework, but rather one for vocational education and training (VET) and professional education and training (PET) (BB = Berufsbildung). The new name will be used in this chapter.

175 Information regarding the adoption of the framework is published on: http://www.sbfi.admin.ch/hbb/ [accessed 23.10.2014].

176 Reactions to the consultation are available at: http://bit.ly/1WA5pdm [accessed 23.10.2014].

The proposal has received support from stakeholders (cantons, trade associations and social partners), linked to two particular issues. First, the NQF is seen as a precondition for increasing the visibility and value of Swiss qualifications abroad and supporting employment opportunities for Swiss citizens. Second, the NQF builds directly on the shift to learning outcomes initiated by the 2004 reform of the federal act on vocational and professional education and training. This reform introduces a more outcome-oriented approach to defining VET programmes and qualifications. More than 600 different qualifications have been redefined in dialogue between trade associations and public authorities, preparing the ground for the overarching learning outcomes approach now taken forward by the NQR-CH-BB. The NQF for higher education, in contrast, has weaker links to stakeholders outside education itself. However, in their responses to the consultation, most participating stakeholders point to the problem caused by the limited scope (VET and PET) of the NQR-CH-BB as well as to the lack of clarity caused by the existence of two framework initiatives in Switzerland. A message from the stakeholders is to develop one comprehensive framework covering all qualifications.

Framework implementation

The NQR-CH-BB became formally operational on 1 October 2014. While the legal basis is now in place, the actual implementation of the framework is just starting. The responsible State Secretariat for Education, Research and Innovation (Staatssekretariat für Bildung, Forschung und Innovation) (SERI), within the federal department of economic affairs, education and research (EAER), is currently (October 2014) preparing a set of guidelines to be used by education and training stakeholders and others when placing qualifications at levels and when using the NQF levels as reference points for curriculum and programme development.

Implementation of the NQF is closely related to a national strategy, initiated in 2013, aiming at the further strengthening vocationally oriented education and training at higher (NQR-CH-BB 5 to 8) levels. There is overall agreement among Swiss stakeholders that tertiary VET is a particular strength of Swiss education and training and that its future development is essential to meeting the needs of the national labour market: in 2014 it was estimated that more than 25,000 certificates and diplomas were awarded at these levels. For this further development to take place, however, a number of challenges have to be addressed:

- Further development of tertiary VET requires that the position of the most important VET providers (for example, *fachhochschulen*) is clarified (relative to the position of other institutions operating at tertiary level, notably universities);
- Titles awarded for tertiary VET must attract the same societal recognition as titles awarded by academic institutions;
- Differences in financing different types of tertiary education and training must be clarified.

The NQF is seen as an important instrument for addressing the first two points, providing a reference point for positioning and comparison. By supporting that national strategy in this area, the NQR-CH-BB takes on a reforming role, going beyond a restricted transparency function.

Level descriptors and learning outcomes

The shift to learning outcomes has been fundamental to reforming Swiss vocational and professional qualifications in recent years, with work leading to gradual development of methods for writing learning outcomes.[177] The use of learning outcomes for general and higher education is more limited, but can be observed in these areas as well.

The level descriptors of the NQR-CH-BB build on the main categories of the EQF, but also reflect extensive national experience in using learning outcomes for describing and defining qualifications. Staying close to the knowledge and skills categories, the main elements of the descriptors are presented in Table 56.

Validation of non-formal and informal learning and links to the NQF[178]

A number of key national factors should be taken into account when considering the Swiss perspective on validation: the federalism, the quadrilinguism and the complex articulation of the Swiss education area. Since January 2013, all matters relating to education, research and innovation at federal level have been brought together in the EAER. The State Secretariat for Education and Research (SER) has been combined

177 For information on the method for writing learning outcomes and examples of profiles, consult: http://bit.ly/1j2C658[accessed 23.10.2014].

178 This section draws mainly on input from European Commission et al., 2014.

Table 58 The main elements of the descriptors in the Swiss NQF		
Knowledge	**Declarative knowledge**	
	Understanding	
Skills	**Procedural skills**	
	Senso-motoric skills	
Competences	**Vocational or professional competence**	
	Personal competence	**Self-competence**
		Social competence
		Leadership competence

Source: Adapted from Government of Switzerland, 2014.

with the Federal Office for Professional Education and Technology (OPET) to form the SERI: both are now part of the EAER. SERI has overall governance of validation projects throughout Switzerland, supporting or checking the pilot projects implemented in cooperation with the specific services, and coordinating the processes in the different education and training degrees and sectors. It is also the organization in charge of development of the NQF, in a first stage only for VET qualifications, and it will maintain existing validation practices.

Switzerland has defined validation procedures mainly for VET and further professional training. In other sectors there are no binding rules; instead, various official documents include indications for development and diffusion of validation procedures. Access to validation is considered an individual right, and validation practices are optional.

Validation is formally referred to as one of the four possible ways of obtaining a qualification in upper-secondary VET.[179] Full qualifications, as well as exemptions and provision of access, can be also obtained for higher VET and PET. The OPET (now integrated in SERI) developed national validation guidelines in 2010.[180] These specify five different phases for validation: information and advising, self-evaluation, assessment, accreditation (or partial certification) and certification. These phases, although referring specifically to the upper-secondary level of VET, also act as a general indicator of other Swiss validation practices.

In higher education, regulation is normally decentralized to the institutional level; depending on the type of university (cantonal universities, universities of applied science, university colleges for teacher education), procedures and regulations might differ. There are options for admission into a programme without a baccalaureate and the possibility of validating, partially or completely, a higher education degree.

Validation procedures, both in VET and higher education, use the standards of formal qualification/programmes as reference.

The Labour Market and Unemployment Insurance, part of the State Secretariat of Economic Affairs, has set up skills assessment centres that carry out personal *bilans* (skills audits) to identify skills and know-how acquired in formal, non-formal and informal contexts, and aid development of a personal or professional portfolio. There are other initiatives of this nature in Switzerland, normally integrated into career guidance practices though it is not clear how these are connected to formal qualification standards.

Referencing to regional frameworks

Referencing to the EQF is planned for 2015.

179 The other ways are: (a) structured curriculum of study (classical formal way); (b) admission of adults to professional exams without having participated in a formal curriculum of study; (c) shortened initial vocational training if the adult is able to demonstrate his or her knowledge within the desired professional domain.

180 See validation instruments (*validierungsinstrumente*) [accessed 23.10.2014].

Main sources of information

SERI: http://bit.ly/1zQMTkq [accessed 23.10.2014].

List of abbreviations

EAER	federal department of economic affairs, education and research
EQF	European Qualifications Framework
NQF	national qualifications framework
NQR-CH	Nationaler Qualifikationsrahmen Schweiz [Swiss National Qualifications Framework]
NQR-CH-BB	Nationaler Qualifikationsrahmen für Abschlüsse der Berufsbildung [national qualifications framework for vocational and professional education and training]
NQF CH-HS	Qualifikationsrahmen für den schweizerischen Hochschulbereich [qualifications framework for the Swiss Higher Education Area]
OPET	Federal Office for Professional Education and Technology
PET	professional education and training
SER	Staatssekretariat für Bildung und Forschung [State Secretariat for Education and Research]
SERI	Staatssekretariat für Bildung, Forschung und Innovation [State Secretariat for Education, Research and Innovation]
VET	vocational education and training

References

[URLs accessed 22.10.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report Switzerland.* http://libserver.cedefop.europa.eu/vetelib/2014/87051_CH.pdf

Government of Switzerland. 2014. *Verordnung über den nationalen Qualifikationsrahmen für Abschlüsse der Berufsbildung (V-NQR-BB)* [Regulation on the NQF for VET qualifications]. http://www.admin.ch/opc/de/classified-compilation/20140910/index.html

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TAJIKISTAN

Introduction

The population of Tajikistan has been growing steadily in recent years, reaching 8 million in 2014, from 6.25 m in 2000. Its population is predominantly rural, with 73.7 per cent living in the countryside. The country has a very young population with 60.5 per cent below 25 years-old; 32.4 per cent between 25 and 54; and 7.2 per cent over 55. This shows that there is a challenge in accommodating the large number of young people within the education system as well as in the local labour market. Youth unemployment (ages 15–29) has been increasing in recent years: in 2009, the latest year for which figures are available, 15.4 per cent of young people were out of work.

Unemployment is the result of a lack of jobs in the domestic labour market and limited economic development and business growth, especially in rural and remote areas. Therefore, migration is officially recognized as a tool to maintain social equilibrium and to support skills development not provided by the VET system.

In addition to the migration factor, the increase of the working-age population has particularly affected the informal sector, which is mainly made up of household-based enterprises or corporate enterprises owned by households producing goods and services. In 2009, informal employment accounted for 51 per cent of all employed people, excluding the agricultural sector.

The Tajik labour market lacks qualified people in most branches of industry. It is not sufficiently structured and 70 per cent of employment is rural. The labour market is characterized by high unemployment and low salaries. Young people with traditional vocational qualifications, such as those provided by initial VET, experience considerable difficulties in finding employment in the country, and most of them become migrants. Estimates of the number of migrants vary from one eighth to one third of the workforce. On the other hand, every year many vacancies remain unfilled due to lack of relevant competencies.

There is a strong need to revitalise skills development and to improve transparency and efficiency through streamlining numerous specializations into a manageable number of broad occupations or career paths. Additionally, the quality and relevance of programmes of studies needs to be improved in order to target gaps in the labour market, and to make vocational, professional and higher education institutions more accountable for quality results. Key elements of this process are the strengthening of quality-assurance mechanisms and the recognition of qualifications at national level.

Tajikistan's National Education Development Strategy aims at addressing these challenges, including via establishing an NQF.

Main policy objectives

Implementing an NQF in Tajikistan would contribute to better matching between the wider VET system and the current and future needs of the labour market.

There is not yet a legal basis for an NQF in Tajikistan, and the framework remains in the ad-hoc stage, so while there has been some NQF-related piloting and policy discussion, no decision to adopt an NQF has been taken, and no implementation plans have been made.

Stakeholder involvement

Discussion of NQF development and implementation goes back to an European Training Foundation (ETF) project in 2005. This project raised awareness among the key ministries and sectoral stakeholders (tourism and the hotel business) in Tajikistan of the benefits of NQFs and contributed to the creation of representative sectoral bodies such as the National Tourism Association.

Subsequently, the Tajik working group on the project developed a policy paper to lay a foundation for a legal basis for an NQF. NQF development has

been considered only within the National Action on System Development for VET 2006–15, but not in the country's other VET-related initiatives, such as those on adult training or reforming secondary schooling.

Additionally, the Ministry of Labour and Social Protection is developing provision for adult learning and plans to establish a mechanism for qualifications recognition so that labour migrants, both external and internal, can have their acquired skills and qualifications recognized. However, some of these qualifications are not recognized officially and their portability is not guaranteed. Therefore, the Ministry of Labour is now working on establishing this mechanism, which will be another support for labour migrants, thus increasing their income and living standards.

Level descriptors and learning outcomes

Tajikistan has not yet opened a discussion about the number of levels, descriptors and referencing of existing qualifications in an NQF. However, the National Job Classifier (NJC), adopted in 2013, links occupations to qualifications. It provides for four levels of qualifications which respectively cater to primary and general secondary education, initial VET, secondary VET and higher education, plus postgraduate professional education.

The NJC serves to support providers such as educational institutions in developing qualifications characteristics, which are akin to qualifications standards.

The Ministry of Education approves occupational standards. GIZ, the federal German agency for VET development, worked with national authorities to produce four standards, using the DACUM (developing a curriculum) methodology, for the tourism sector. Twenty-five occupational standards for tourism were also developed with the assistance of COLO (the association of the Dutch Centres of Expertise on vocational education) in the ETF project. Three different methodologies for occupational analysis have been in use so far and the Tajik authorities still have to decide on the most appropriate one.

Currently, GIZ and the European Commission are two donors planning to develop standards in VET; other donor initiatives are the Asian Development Bank's short VET courses.

Validation of non-formal and informal learning and links to the NQF

There is no regulatory framework for recognition and validation of non-formal and informal learning. The Ministry of Labour in 2010/2011, through the centres for adult education, was actively engaged in the certification of skills for unemployed people. However, this has been done in an experimental way and it has not entailed the setting up of a legal framework.

Important lessons and future plans

While the National Education Development Strategy recognizes the need for an NQF, there have been no new formal steps in this direction. While institutions seem to increasingly grasp the necessity of developing the elements of a modern VET system, such as educational standards, professional standards, and the importance of social dialogue and social partnership, ministries and labour market actors still lack the competences to proceed with an NQF.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

THAILAND

Introduction

The establishment of a Thai National Qualifications Framework (NQF) was proposed by the Office of Education Council (OEC) of the Ministry of Education as part of the National Manpower Production and Development initiative during the Second Decade of Education Reform, 2009–2018. The Thai NQF builds on the existing Thai Qualifications Framework for Higher Education (TQF) and Thai Qualifications Framework for Vocational Education (TVQF) (OEC, 2013). It was approved by the Cabinet on 21 December 2010.

Thailand's economy has attained high levels of growth in recent years. However, a study by the Thailand Development Research Institute (TDRI) on the qualifications of workers in the manufacturing and services sectors revealed that between 7 million and 10 million workers in these sectors had no qualifications, 21.66 million had only primary education, and 5.94 million only lower-secondary education (TDRI, 2010). Many workers had acquired competences on the job yet remained without qualifications.

The Thai NQF is intended to address this situation. The government sees the NQF as a tool for increasing manpower capabilities and competitiveness in order to meet the demands of production and services in today's rapidly changing economic climate. The NQF is thus designed to benefit both individuals and industry. By setting out unified standards for qualifications and clear learning outcomes, it will enable individuals to clearly visualize their own learning trajectories. Workers already in the labour market will be able to access learning pathways previously barred to them, and to have their previous experiences and learning validated, whether formal, non-formal or informal. This will in turn benefit industries by providing them with a better-qualified workforce.

A number of measures are envisaged to improve the quality of education and training in Thailand. These include improving the quality of content, inputs and standards, introducing assessment based on learning outcomes, and ensuring internal and external assessment of educational institutions at every qualification level (Choomnoom, 2011). The capacities of educational institutions and of public and private sector training providers to implement the NQF will be strengthened, making them better able to meet the needs of production and services. Training will also be introduced to raise the calibre of educational personnel.

The Thai NQF is designed to facilitate regional worker and student mobility, which is expected to increase in the imminent future. The Thai government has signed an agreement with ten countries with the aim to integrate into the ASEAN Economic Community (AEC) by 2015. Making Thai and foreign qualifications mutually recognizable, although crucial, will not be an easy task, and will entail harmonizing at all levels.

Main policy objectives

The Thai NQF is intended to:

- make educational qualifications more relevant to industry needs, thus raising the quality of manpower in the manufacturing and services sectors;
- raise the standard of Thai qualifications to international level;
- make qualifications transparent and comparable across national borders;
- enhance the competitiveness of both domestic and regional labour markets.

Stakeholder involvement

The OEC has been responsible for various NQF-related activities, including:

1. Working closely with the Thailand Professional Qualifications Institute (TPQI) to communicate information about the skills required by industries to educational institutions.

2. Appointing a working team comprising representatives from various education and training sectors and relevant agencies to begin drafting the NQF, based on the already

existing design of the TQF and TVQF. Bodies represented include the National Education Quality Assessment and Assurance Office and the National Testing Office.

3. Undertaking research studies. One study, undertaken in collaboration with King Mongkut University of Technology during 2010/2011 (OEC, 2011), aimed to develop linkages between the skills standards required by key industry clusters and the learning outcomes of educational qualifications at secondary, vocational and higher levels. Employers, employees, educators and teachers were involved in the consultation process, providing in-depth analysis and synthesis. Key stakeholders from six industrial clusters[181] first identified core competences at each qualification level. A further nine industrial clusters were then identified to review the reliability of the comparisons made between occupational standards and educational qualifications.

4. Organizing three international conferences:
   a. The International Conference on the Implementation of National Qualifications Frameworks: Policies and Strategies, held on 28 April 2011, which was jointly organized by UNESCO, Australian Education International (AEI) and the German Agency for International Cooperation (GIZ);
   b. A meeting between ASEAN member countries as prescribed in the Economic Cooperation Work Programme (ECWP) and ASEAN-Australia-New Zealand Free Trade Area (AANZFTA), held in April 2011 in Bangkok, Thailand;
   c. A National Workshop on ASEAN Regional Qualifications Frameworks in cooperation with ECWP and AANZFTA, held in September 2011 in Bangkok, Thailand.

5. Appointing the NQF and ASEAN Qualifications Framework Development Working Group to study criteria for referencing the Thai NQF to the ASEAN Regional Qualifications Framework and propose NQF development guidelines accordingly.

6. Organizing four public hearings on NQF development, attended by representatives of the Federation of Thai Industries, the Thai Chamber of Commerce and Board of Trade of Thailand, and commissions of Higher Education and Vocational Education.

7. Organizing four regional conferences in May, June and July 2012, before presenting the framework to the OEC and the cabinet for approval and implementation.

Overall responsibility for implementing the NQF is in the hands of the ministries of Education, Labour and Industries, together with the Federation of Thai Industries and the Thai Chamber of Commerce and Board of Trade of Thailand. A national committee composed of qualified experts from educational institutions, workplaces and professional associations will be in charge of implementing the NQF in accordance with the principles and guidelines approved by the cabinet. Also involved are the Office for National Educational Standards and Quality Assessment, the Ministry of Education, and the National Institute of Education Testing Service.

Four implementation strategies are planned:

Strategy one involves the development of systematic cooperation between workplaces, professional associations, professional and/or occupational groups and educational institutions in order to produce manpower equipped with the requisite skills, knowledge and attitudes according to NQF guidelines.

Strategy two concerns curriculum development in line with NQF level descriptors. Advocacy campaigns will be held to encourage workplaces, professional associations and educational institutions to work together to design curricula integrating formal, non-formal and informal education systems, and to determine learning outcomes and performance standards at each qualification level. A system will also be established for monitoring, evaluating and accrediting educational institutions in accordance with NQF levels.

Strategy three involves developing systems for the assessment and evaluation of learning achievement, incorporating mechanisms for the recognition of prior learning and for credit accumulation and transfer.

Strategy four involves strengthening educational institutions in their efforts to link education to the manpower demanded by the labour market.

Level descriptors and learning outcomes

The Thai NQF has nine levels. Each level is described by a level descriptor based on learning

181 Food processing, petrochemicals, fisheries, tourism and hospitality, logistics, and jewellery making.

Table 59 Thai National Qualifications Framework

Qualification levels (QLs)	Connecting/filling-up mechanisms	Work experiences	Learning outcome srt educational qualification levels (EQLs)
Level 9	Testing, measuring and evaluating transferred experiences from work. Accumulating learning units for raising EQL (Credit Bank).	Acquisition of additional knowledge from formal, non-formal and informal education. Promoting practical training and actual work performance for improving craftsmanship and level of occupational skills.	Doctoral degree
Level 8			Advanced graduate certificate
Level 7			Master's degree
Level 6			Graduate certificate
Level 5			Bachelor degree
Level 4			Higher vocational certificate
Level 3			Vocatinal certificate
Level 2			Upper secondary
Level 1			Lower secondary

Source: OEC, 2013.

outcomes. The level descriptors were arrived at by linking educational qualification levels (secondary, vocational and higher) with the competence levels required by various industry clusters, thus ensuring the closest possible fit between educational content and industry demands.

Recognition and validation of non-formal and informal learning and links with the NQF

One of the key aims of the Thai NQF is to give Thai citizens greater understanding of and control over their own education by enabling them to match formal educational provision with the learning outcomes and competences described in the NQF. Special attention will be paid to developing mechanisms of assessment which will allow workers to put their existing learning towards a full qualification in combination with other measures such as additional education and training or workplace-based learning.

Referencing to regional frameworks

Thailand's goal of integration into the ASEAN Economic Community (AEC) by 2015 provides a strong motivation for the timely and efficient development of the Thai NQF (Choomnoom, 2011). The launch of the AEC will turn the ASEAN region into a single market with a free flow of commodities, services, investment and labour. This is expected to boost regional competitiveness as well as cooperation, facilitating the sharing of educational resources and the development of common educational standards. The introduction of a single system for credit recognition and transfer throughout the ASEAN region will create opportunities for people wishing to work and study in other countries in the region. Regional referencing will also accelerate the process of bringing Thailand's own qualifications system up to international standards.

Important lessons and future plans

The government has identified a number of conditions for the successful implementation of the Thai NQF. These are:

1. The presence of a central agency to coordinate the work plans of the ministry's key organizations and conduct public relations campaigns.

2. Clear presentation of information about the NQF to representatives from stakeholder agencies.

3. Close cooperation with key educational providers, both classroom- and workplace-based, allowing them to share in the leadership of the NQF.

4. Support for the NQF's activities from all stakeholders.

5. Serious and concerted efforts to link the Thai NQF with the NQFs of other countries.

6. Targeting first and foremost the occupations and industry clusters which are of greatest strategic importance for national development.

7. Promoting decentralized collaborative partnerships between educational institutions and representatives of specific industries and/or professions.

8. Establishing a system of coherent and continuous monitoring, evaluation, research and development at national, regional and international levels.

9. Systematically enforcing ministerial regulations for the implementation of the NQF.

10. Making educational and training provision more outcomes-based by developing active learning methodologies such as combining work with education, and project- and problem-based learning (OEC, 2011). These methodologies can be adapted to suit various settings, including on-the-job training programmes and internship or placement programmes.

References

Choomnoom, S. 2011. *Establishment of National Qualification Framework (NQF) and Planning for Manpower Production and Development according to NQF.* (Presented at the International conference on implementation of National Qualifications Framework, April 27–28, 2011, Bangkok, Office of Education Council, Ministry of Education.

The Office of Education Council and King Mongkut University of Technology. 2012. *Establishment of NQF and Planning for Manpower Production and Development 2010–2011.* Bangkok, Office of Education Council and King Mongkut University of Technology.

Ministry of Education. 2013. *National Qualifications Framework* (Thailand NQF). Bangkok, Office of the Education Council, Ministry of Education.

Thailand Development Research Institute (TDRI). 2010. *A Study on Requirements for Manpower Production and Development Planning of the Nation* (a study for the Education Council Office), Bangkok, Prigwan Graphic Printing.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Introduction

The country was granted candidate status by the European Council in December 2005.

A small improvement was registered in the Human Development Index between 2010 (index: 0.728) and 2013 (0.732), and the country ranks 84th (out of 187 countries). Improvement in terms of 'doing business' has been continuous, and in 2014 the country ranked 25 (from 36 in 2013). According to the Global Competitiveness Index, the country's competitiveness improved in 2013, with a leap from 80th to 73rd place (of 148 countries).

Education and labour market policies are confronted with issues related to the ageing of the population, rather than with high demographic pressure. According to demographic data published by the State Statistical Office in July 2014, the total population was estimated at 2,065,769 (31/12/2013), of which 1,030,928 were women. The last census (2002) registered a total of 2,022,547 persons.

The distribution by age groups has substantially changed since the 2002 census. The weight of the cohort aged up to 14 years shrank from over 21 per cent to 16.9 per cent (31/12/2013). The eldest group (65 and over), on the other hand, grew from approximately 10.5 per cent to 12.36 per cent in the same period. The territorial distribution of the population is more urban (58 per cent of total) than rural.

Economic growth, sectors and labour market indicators

Growth accelerated to 3.1 per cent in 2013 and has been more job-friendly than in the past. After a good performance at 3.9 per cent in the first quarter 2014, baseline growth is expected to broaden further. Analysed by sector, positive signals were mostly associated with agriculture, transport, storage and communications, as well as construction, as sectors that comprise a significant number of employees who directly or indirectly were the focus of fiscal incentives and economic policies that simultaneously encouraged economic and employment growth.

In 2013 and 2014, labour market indicators pointed to further positive trends, but challenges persist.

Labour market indicators in the second quarter 2014, % (age group 15–64)

Rate (%)	Total (%)	Women
Activity rate	65.2	52.9
Employment rate	4.8	37.5
Unemployment rate	28.3	29.1

Source: SSO (2014).

In 2013 the total active population grew by 1.4 per cent and reached the level of 64.9% per cent (age group 15–64), on average, for 2013. However, women are much less active than men (with a 24 percentage-point lower activity rate).

The faster growth of labour demand relative to the growth of labour supply caused a fall in unemployment. Consequently, in 2013, the unemployment rate averaged 29 per cent, and reached its lowest level, historically. The low-educated population and young people are particularly prone to unemployment. There is no gender gap in unemployment.

An increase was registered also in the employment rate, which in 2013 averaged 46 per cent (15–64). The gender difference is substantial (over 17 percentage points, in favour of men).

Favorable developments were observed in terms of age groups: in 2013, unemployment tended to decrease in the most vulnerable age groups, i.e. those aged between 15 and 24 and between 50 and 64 years of age. This is to a significant extent associated with the profile of the active measures in the labour market, in terms of their focus on job creation while increasing social inclusion.

Despite these positive trends, the country's labour market faces persisting challenges, including low activity and high informal employment, important gender differences, high youth inactivity and unemployment, including an elevated share of long-term unemployment. Issues to do with the relevance of skills and qualifications acquired in education and training for the labour force are among the causes of this dire situation.

The NEET rate (not in employment, education or training) computed for the age group 15–29, for the period 2006–2013, shows visible improvement over time. However, even the most recent figures (2013) signal a severe situation (a rate of more than 31 per cent), accentuated by female disadvantage (over six percentage points in 2013). Both sides of the problem are coherent with the features of the country's labour market indicators. The difference from the average EU-28 NEET rate is more than double. In the last four years, the NEET rate has shown no signs of progress.

Educational attainment of the working-age population

The overall structure of educational attainment of the population has improved in the last five years (labour force survey data, 2013). Thanks to education policies in the last decade (extension of compulsory education to upper-secondary education and support to increased participation in higher education), there has been a reduction in the share of the population with lower levels of education and significant growth in higher education attainment. However, the proportion of the population with lower levels of education (lower secondary or less) is still high, comprising almost 40 per cent of the total working-age population, and approximately 23 per cent of the employed population. On the other hand, among the employed, 18.9 per cent have higher education, while the largest group (43.7 per cent) reached four years of secondary education (Figure 7), highlighting the slightly better educational attainment of the employed population against the total working-age population.

The country, government and social partners, gained experience, improved processes of policy dialogue, and in 2012–2014 adopted new medium-term strategies to address some of the important policy areas. Important progress registered in the development (and adoption) of key strategies and programmes to address the issues faced by the country as regards its human capital and socio-economic future include the following areas:

- Youth unemployment: through the National Youth Action Plan 2012–2015;
- Overall employment policy: Employment Strategy 2015;
- Enhancement of employability of the population towards effective and quality employment and self-employment: Operational Plan for Active Labour Market Measures;
- Skills for employment and lifelong learning: VET Strategy 2013–2020 – Better Skills for a Better Tomorrow;
- Entrepreneurial attitude and skills: Entrepreneurial Learning Strategy 2014–2020;
- Social inclusion from an ethnic perspective: Steps towards integrated education;
- Strategy for Innovations 2012–2020.

In 2015 the country developed a concept and roadmap for non-formal adult education and a concept for formal adult education (primary level).

Challenges and policies

EU benchmarks

The country is a participant in the EU Education and Training (ET) 2020 strategic framework, in the Copenhagen Process (VET) and in the Bologna Process (higher education). Performance as regards the ET 2020 benchmarks, and the headline indicators of Europe 2020, are monitored and data updated on the websites of the State Statistical Office, and discussed in various platforms.

Performance as regards the ET 2020 benchmarks has been mixed: visible leaps forward as regards the two headline indicators (early leavers from education and higher education attainment of the population); but slow progress in respect of two indicators: participation of adults in lifelong learning (3.5 per cent against 10.5 per cent EU28 average) and participation in early childhood education and care (31.3 per cent against 93.9 per cent in the EU28 average). The distance to catch up with the average of the EU28 is very significant in these two indicators, and shows that sustained reforms are to be continued.

The fifth EU target concerns pupils' performance in reading, science and maths (the share of 15-year-olds with insufficient abilities in reading, mathematics and science should be less than 15%), and the measure is based on PISA results, which the country will have after the round of 2015.

Quality of education and training outcomes

Education and employment policies will face many challenges in the coming years as the country undergoes further economic restructuring and deals with the combined influences of an emerging services economy, new forms of work organization in small and medium enterprises, an ageing

population, issues with the current skills mix of the working-age population and ongoing social vulnerabilities.

Results of external students' assessment show substantial challenges. In international students' assessment studies, which provide a measure of quality in education, the country has revealed continuing decline in performance. The country's results in TIMSS (Trends in International Mathematics and Science Study) 2011 (for eighth-grade students) were very disappointing, as they showed the continuation of declining performance, reflecting substantial gaps in the key areas of mathematics and science.

The State Examinations Centre (SEC) was established as an independent body to develop student assessment. The centre launched external assessment in the form of normative tests for pupils in primary and lower-secondary education in a way that seeks to demonstrate the degree of objectivity in teacher assessment of students. The country has just returned to PISA, after a long absence since 2000: pilot participation took place in 2014, in preparation for full participation in PISA 2015. The country results for PISA 2000 were very low. The country does not participate in PIAAC as yet.

The education reforms of 2007–2009 effectively extended the number of years of mandatory schooling, with a consequent increase of the transition rates from lower to upper-secondary education. However, enrolment rates in pre-primary, primary and lower-secondary education continued to fall in a way that challenged the effectiveness of social inclusion and quality of education policies.

Skills mismatches

The results of empirical analysis by the National Bank of the Republic of Macedonia (2013) contribute to estimating the skills mismatch index of the country. The analysis indicates that after controlling the business cycle, this mismatch between supply and demand of skills significantly affects unemployment. The estimated coefficient of 0.65 indicates that nearly two-thirds of the movements in the mismatch between supply and demand of skills are transferring into changes in the unemployment rate.

Other analysis (HERMAC-model long-term forecast, at the Ministry of Labour) shows a substantial proportion of under-qualified employed in certain sectors (e.g. construction, healthcare, manufacturing and others). Over-qualification also occurs, with highest prominence in agriculture, financial services and public administration.

Despite the inherent high levels of unemployment, modern enterprises often experience difficulties in recruiting personnel with the right skills, identifying inadequate levels of transversal and 'soft' skills among candidates as one of the key problems. This persistent problem will hamper the modernization process and limit economic productivity, if not addressed more systematically through wider supply of relevant continuing training, and reformed qualifications in initial VET and higher education.

Matching demand and supply for skills

The secondary VET system plays a major role in training the workforce: in 2013 more than 60 per cent of the graduates from secondary education came from VET, with 90 per cent of this slice represented by graduates from VET who have four years (VET-4) of education (10 per cent have three years of VET [VET-3]). General education (gymnasium) contributed with 37 per cent of graduates, and the remainder were from arts schools.

Official data on the distribution of VET graduates by qualification clusters (sectors) shows another side of the influence of VET in shaping the labour force. Two qualification clusters together represent over 40 per cent of all secondary VET graduates, notably: a) economics, law and trade; and b) health care. The qualifications of the clusters of mechanical and electrical engineering, together, represent the second group in number of graduates, albeit far from the first. Somewhat surprisingly, the qualifications associated with branches and sectors of substantial importance for growth and employment (manufacturing, transport and warehousing, construction) have a minor share of graduates.

A third dimension of the potential of VET to influence the labour market should be measured by the relative effectiveness of VET graduates in their transition to further paths after school: to other options in education and training, or to economic activity and employment. However, the country does not carry out systematic tracer studies of VET graduates. It is known that the majority of VET-4 graduates directly continue studies in higher education: the group represents a share of not less than 60 per cent of graduates, according to the indicative data available.

Graduates from VET-4 have only very limited further training alternatives other than higher education, since the systems of post-secondary education and training and short-cycle higher education are still in the development stage. 'Vocational higher education' (an old type of qualification) is marginal, by offered qualification

profiles (mostly in the medical sector) and number of students.

Responding to targeted public policies, participation in higher education has visibly increased. Enrolment of first-year students in public universities grew by over 200 per cent between 2000 and 2008 and by 40 per cent between 2005/06 and 2010/11. Annual growth in tertiary education graduates was 8.9 per cent in the 2000 to 2008 period, a figure substantially exceeding the EU-27 average of 4.5 per cent.

However, this rise is disproportionately high in humanities and social sciences, fields that captured almost three-quarters of all graduates of first cycle (bachelor) degrees in the last decade. This pro-humanities tendency may even aggravate the existing jobs-skills mismatch. In contrast, OECD and EU-21 data for 2009 give the joint share of students enrolled in 'humanities, arts and education' and 'social sciences, business and law' as no higher than 53 per cent in OECD countries (OECD, 2011). Moreover, higher vocational education remains an unattractive option. New (short-cycle) programmes in higher education are still in development.

Labour market indicators (employment, unemployment) are better for those holding higher education qualifications than for those with medium-level qualifications (VET-4 and VET-3) or those with lower-level or no qualifications. However, in the last three years this advantage of higher education is shrinking.

Bridging across the variety of forms and levels of education and training

Education policy recognizes the importance of a lifelong learning approach. In this context, an adult learning law was adopted in 2008 and the Centre for Adult Education was established to address the training needs of an increasingly aging workforce. CAE has developed and is implementing a quality assurance approach for learning programmes for adults. A new concept of non-formal adult education (and roadmap) had been finalized for approval in 2015.

The NQF is inclusive of qualifications of the type called 'professional', which can be acquired through non-formal and informal pathways, and represent the attainment of parts of the set of learning outcomes of accredited programmes or of the professional competences from one or more standards of occupation. Qualifications of the non-formal pillar can be recognized with levels 1 to 5B of the NQF structure.

Main policy objectives

The basic concept of the NQF – *Macedonian Qualifications Framework: Starting bases* – was adopted in spring 2013 and the Law on the National Qualifications Framework for LLL (NQF) was passed in October 2013. The NQF Law will enter into force in September 2015.

The NQF Law defines principles and goals as follows:

Principles:

- Learning outcomes are expressed through knowledge, skills and competencies;
- Classification of qualifications at levels and sub-levels;
- Transferability of credits;
- Comparability with the European Qualifications Framework (EQF);
- Quality assurance in the process of acquisition and development of qualifications;
- Providing conditions for equal access to education throughout the whole life for the acquisition and recognition of qualifications;
- Strengthening the competitiveness of the Macedonian economy, which is based on human potential;
- Establishing a coordinated system of quality assurance for existing and new qualifications;
- Building a system of evaluation of non-formal and informal learning.

Goals

- To clearly define learning outcomes;
- To establish a system of valuing different qualifications within the overall system of qualifications;
- To encourage and promote learning throughout a lifetime (lifelong learning);
- To demonstrate the clear links between different parts of the education system;
- To indicate the transfer and progression (horizontally and vertically) through and within all types of education and training (formal, non-formal and informal);
- To enable international comparability of qualifications;
- To promote the importance of key and professional competencies,
- To ensure the mobility of participants in the process of education and training, and inclusion in the labour market at the national and international levels;
- To create a single system for quality management;
- To balance the quality of service providers;
- To ensure the cooperation of all stakeholders;

- To ensure harmonization with economic, social and cultural needs of the country;
- To be part of the system correlated with the development of the activities of the European Qualifications Framework.

Stakeholder involvement

The former Yugoslav Republic of Macedonia was one of the first countries in the region, after Croatia and Turkey, to embrace the NQF concept. A first working group, established with ETF support, drafted the initial NQF concept in 2005. This was also the time that it developed its National Programme for the Development of Education 2005–2015, which attempted to bring coherence between the education reforms that were planned at the time. But following a series of political changes, the NQF work did not progress beyond the initial conceptual stages.

Later, in 2008, a national commission was set up, and another in 2009, this time as a component of the adult education project providing technical assistance to the Ministry of Education and Sciences on lifelong learning. The task of the group was to develop the NQF concept, structure, criteria and quality-assurance processes and develop the capacity of key agencies. The NQF should include all education and training areas and sectors, as its new draft concept, from January 2013, demonstrates.

The refreshed working group of 2012 includes members from all relevant bodies, as well as some representatives of employers' organizations (Chamber of Crafts and Economic Chamber). The Ministry of Education and Science is represented by departments of higher education and of primary and secondary education. The Bureau for Development of Education, in charge of curriculum for primary and secondary education, has an important role, to ensure reformed curricula and programmes will be aligned with learning outcomes. The VET Centre and Centre of Adult Education shall provide important contributions in aligning qualifications with the NQF, with standards of occupation as well as social inclusion considerations. The State Employment Agency participates actively, given the growth of awards of non-formal qualifications through training programmes under active labour market programmes. The Ministry of Labour and Social Policy should have a more substantial role in the working group, given the important mandate as regards standards of occupation foreseen in the NQF Law. Local authorities, which have been assigned an important role in governance of education and training, have limited representation.

As well as submitting the draft NQF concept (of January 2013) to public consultation, the authorities involved relevant international organizations and experts to comment on the document.

In June 2014, the Ministry of Education and Science established a special working group tasked with coordinating and advising on the referencing process of the NQF to the EQF. The ministry assumed the role of national coordination point (NCP) for the EQF, but, due to capacity issues, it has not yet applied for any of the dedicated grants.

Levels descriptors and learning outcomes

The NQF has eight reference levels and three categories of level descriptors defined in terms of knowledge and understanding, skills and competence. Levels 5, 6 and 7 have two sub-levels each. The sub-levels are intended to differentiate between types of qualifications, and to accommodate differences between academic and specialist studies expressed in size (credits). For example: at Level 5, sub-level 5B applies to post-secondary education (specialist education and craftsman exam), and the participants receive a diploma for specialist education and a diploma for the craftsman exam. Level 5, sub-level 5 A applies to short vocational study programmes (in higher education, 60–120 credits) and the graduates receive a credential.

The NQF law (Article 6) defines the following requirements for a qualification: 'The qualification standard referred to in Article 5 of this Law shall comprise the following:

1. Title of the qualification;
2. Type of the qualification;
3. Level or sub-level of the qualification;
4. Code of the qualification;
5. Credit value of the qualification;
6. Description of the qualification;
7. Contents of the qualification (entry requirements, number of mandatory and optional subjects, that is, modules, method of verification and criteria for verification of the learning outcomes). '

The Glossary of the NQF clarifies that 'descriptions of qualifications' are 'measurable indicators of learning outcomes relating to acquired knowledge, skills and competencies'. Article 6 of the Law explicitly refers to inclusion of the assessment methods and criteria in the standard of qualification.

Do the existing VET and non-formal qualifications meet these requirements?

The inventory of all qualifications and the analysis of selected cases – carried out in 2014 with ETF support – to establish an updated and systematized evidence base for the EQF referencing process, found that some of the VET and verified non-formal qualifications practically meet these requirements. These are:

- Twelve VET-3 qualifications developed by the EU Twinning project (with Slovenia) in 2013, and based on occupational standards and learning outcomes. Of these, ten programmes are currently in implementation in a number of VET schools.
- One VET-2 qualification designed under the same project (no enrolment in 2013/14).
- Out of fifty-eight verified programmes of non-formal learning, approximately fifty are based on occupational standards. These programmes and qualifications were verified from 2012. In the last quarter of 2014 and mid-March 2015 the number of verified non-formal programmes almost doubled, and now exceeds 105.

The inventory of qualifications took stock of a total of fifty-one active VET-4 qualifications, which can be allocated in fourteen (of the sixteen) sectors of the NQF. The majority of these programmes were adopted in 2007. Fourteen were elaborated between 2010 and 2013. As these programmes are not based on occupational standards and learning outcomes, the evident conclusion is that the respective qualifications do not fully meet the requirement for qualifications laid down in the NQF law (Art. 6).

The new VET-3 qualifications comprise the following documentation: occupational standard; qualification standard; training programme curriculum (overview of subject teaching hours across years) and subject curricula; examination programme for the practical training part of the final exam; and the standard for students' achivements – documents to be used by teachers for student assessment.

To date, the country has a total of sixty-five occupational standards in fourteen sectors (out of sixteen of the NQF) and twenty-five qualification standards in the same sectors. Two sectors of the NQF have no occupational or qualification standards: sport and recreation and arts. The totality of the qualification standards were elaborated under the Twinning project (with Slovenia, 2013). Fifty occupational standards were designed under the same project. Other occupational standards had been developed years before.

Plans are in place for complete revision of the qualifications and programmes in line with level descriptors. It can be expected that the country institutions and social partners could engage in revision of qualifications and curricula for a wider range of occupations in demand, following the new tested approach and methodology. Such an endeavour will depend on the leadership capacity of the VET Centre and demand from market players. A new project, funded by the World Bank, and launched in 2014, includes a component that will address the reform of VET-4 programmes. The concept proposed by the VET Centre targets wide profiles. Moreover, the advisers expect to modularize part of these programmes, but this process will require closer coordination with the Bureau for Development of Education, which has the leading role in national curriculum.

The comprehensive inventory of qualifications can be a first step towards a national register of qualifications. A national register of higher education qualifications had already been prepared with Tempus assistance, but was never published for wider information and guidance of various users.

Validation of non-formal and informal learning and links to NQF

The education system has a relatively high level of permeability, as it shown by the fact that more than 60 per cent of graduates of VET-4 programmes continue to higher education. The large general education workload in the VET curriculum facilitates progression. The future development of a credit system in VET is also expected to play a large underpinning role in the NQF and should facilitate transfer and accumulation. In this context, the country just started an ECVET (European Credit System for Vocational Education and Training) project under Erasmus+.

There is progress towards preparation of the grounds for the validation of non-formal and informal learning (VNFIL), with the more active work being done in reinforcing adult education and non-formal learning, in particular in establishing quality assurance for providers and programmes, combined with the new developments in designing learning outcomes-based qualification standards. The NQF concept includes all the basic concepts for assessment, but does not make a distinction between the providers and assessors of learning, which are supposed to be accredited training

providers (institutions). For now, public institutions are in charge of developing qualifications, although sectoral committees can develop occupational standards which are an input for qualifications. In spite of these developments, the formal route to qualifications remains the main option for learners and the central focus of policies.

Referencing to regional frameworks

In early 2013, the country became a member of the EQF advisory group and in 2014 it started the EQF referencing process. A roadmap towards EQF referencing has been prepared and ETF, in co-operation with the Ministry of Education, facilitated three multi-day workshops for the EQF referencing working group. The aim is to present the report to the EQF advisory group in 2015.

The referencing processs includes self-certification to the framework of EHEA. The country has reformed its higher education in line with Bologna principles, and adopted the three-degree cycle, and the European Credit Transfer and Accumulation System (ECTS). By linking the reaccreditation of higher education institutions with the obligation to reform programmes following the learning-outcomes approach, the country has and the European Credit Transfer and Accumulation System (ECTS) a step to generalization of the new paradigm. Quality assurance in higher education is not yet fully independent – it it under the responsibility of the National Board for Evaluation and Accreditation of Higher Education.

Important lessons and future plans

In 2012, inspired by the finding of the Bruges Process (review of progress in VET), the government decided to relaunch the activity of the working group to give new impetus to the finalization of the comprehensive national qualifications framework (NQF). The draft NQF concept, completed in January 2013, underwent a preliminary rapid review with ETF support in February.

The EQF referencing process drew attention to the need to establish a dedicated unit at ministerial level (Ministry of Education) to coordinate all relevant NQF activities, build knowledge and capacity, and enhance the pace of implementation. As a result of the negotiations, in 2014 the ministry revised its systematization, that includes such a dedicated unit. The challenge now is to recruit relevant staff and organize operations.

At the same time, with support from the British Council, the Ministry of Education and other NQF stakeholders have reflected on more effective involvement of employers in the NQF implementation, including in levelling of qualifications. Under this cooperation, a techncial proposal was elaborated on sector committees (sector skills councils).

The inventory and analysis of qualifications carried out to support the EQF referencing shows evidence for transparent levelling of a number of qualifications, and challenges that persist regarding a large part of VET qualifications (VET-4). The findings of this analysis need to be considered to ensure the effectiveness of the planned reforms.

At the same time, the inventory and analysis of qualifications and the EQF referencing debates have highlighted areas for improvement, in particular:

- The need to communicate the NQF and its purposes: to the wider public, employers and learners, but also among the state bodies in charge of education and training.
  - The NQF contains many innovations and non-traditional principles and concepts and the relevant stakeholders are called to fully understand the structure, descriptors, types of qualifications, quality assurance, governance and the overall objectives of the NQF;
  - There is a need to clarify certain concepts, e.g. skills, modules, credit, assessment.

- The need to identify/define the level descriptors underlying the various sub-levels (so far, there is no differentiation expressed in level descriptors). This debate could lead to decisions regarding changes in the sub-levels.

- The need to debate the role and place of non-formal qualifications, their purpose for employment and inclusion – in comparison with initial formal VET qualifications. Currently, there is a poor understanding of complementarities and differences, and a sense of competition between the two types. Stakeholders (employers, chambers, providers, methodologists and policy-makers) need to engage in this debate towards a more systematic coordination of the roles of the qualifications types.

- VET is classified to a maximum Level 5B, which anticipates discontinuity and academic bias against the trend to open up all levels for vocationally or professionally oriented qualifications in most European countries.

- The concept of quality assurance is mostly linked to the perspective of institutional programme accreditation; further work could embrace the planned and the acquired learning outcomes.

- Governanance: the architecture foreseen in the NQF law is complex and might be resource-intensive, which could hamper the construction and sustainability of the whole setting. Building on existing capacities and knowledge will be an important starting point to develop an operational structure at government level. Another success factor will be the effective cooperation between the key ministries on operational matters (such as timely validation and registration of occupational standards). A better-organized involvement of enterprises/employers needs to include also representatives of workers (trade unions) from the relevant economic sectors.

- The future database of qualifications should be aligned with the specifications proposed for similar databases of EQF members, for compatibility with the European Learning Opportunities and Qualifications portal.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

TRINIDAD AND TOBAGO

Introduction

Trinidad and Tobago has a seven-level qualifications framework for the tertiary and vocational education sectors. The seven-level qualifications framework represents the first step towards formalizing Trinidad and Tobago's hitherto disparate education system. The aim is to create a unified structure in which learners can use credit transfer to move seamlessly from one programme or institution to another. The qualifications framework in the vocational sector is referred to as the Trinidad and Tobago National Vocational Qualifications Framework (TTNVQ). The seven-level qualifications framework is currently operational.

The Government of Trinidad and Tobago's framework for sustainable development is based on seven interconnected pillars. One of these pillars is to develop 'A More Diversified, Knowledge Intensive Economy – Building on the Native Genius of Our People' (Ministry of Science, Technology and Tertiary Education [MSTTE], 2010). The government recognizes that a number of challenges must be overcome in order to meet this goal. First among these challenges is the need to reform the education and training landscape. Education and training at all levels, including lifelong learning, is in need of rationalization, expansion and integration if Trinidad and Tobago is to equip its citizens with the entrepreneurial, ethical and critical-thinking skills demanded by today's labour market.

The MSTTE aims to develop policies that are internationally benchmarked and driven by labour-market needs. It understands that human capital development is a major contributor to economic growth and sustainable wealth creation. Its principal strategy, therefore, is to expand tertiary education to a 60 per cent participation rate, a target which it holds to be attainable thanks to the introduction in 2000 of increased public sector incentives such as scholarships and long-term technical assistance awards for proceeding to tertiary education.

The government plans to strengthen connections between TVET and academic higher education in order to facilitate the transfer of learning and skills between the two. This will ultimately create a more competent workforce, thus supporting industrial development.

The MSTTE envisages a number of innovative policies to encourage more members of at-risk groups such as youth and low-skilled workers to participate in tertiary education. These include rationalizing the post-secondary sector to improve efficiency and accountability and to avoid duplication. In the long run, the ministry aims to develop an overarching system to guide the management and operation of all forms of education (tertiary education, TVET and lifelong learning) in Trinidad and Tobago.

Main policy objectives

The government is committed to:

- creating a holistic and integrated system of education and training from early childhood through primary, secondary and tertiary education to lifelong learning at all levels, including home-based, community-based and workplace-based education;
- facilitating student mobility between secondary and post-secondary/tertiary levels, within TVET, and between TVET and other forms of learning;
- facilitating the transfer of credits from one educational institution to another;
- making education and training more responsive to changing labour-market demands, thus increasing education and career opportunities for Trinidad and Tobago's citizens;
- making Trinidad and Tobago's qualifications internationally comparable.

Stakeholder involvement

The Accreditation Council of Trinidad and Tobago (ACTT) is the regulatory body for quality assurance in post-secondary and tertiary education. It provides the following services: accreditation, registration, recognition, conferment of institutional

titles, programme approval, equivalence assessment and quality enhancement.

Learning standards are also set by ACTT, which encourages institutions to shift to curricula based on learning outcomes expressed in terms of competences gained. Quality-assurance measures have been introduced to standardize learning outcomes and allow for accountability. Various institutions have identified a profile of their ideal graduate based on the government's Vision 2020 statement (National Institute of Higher Education Research Science and Technology [NIHERST], 2004).

The National Training Agency of Trinidad and Tobago (NTATT) is the body responsible for overseeing TVET in Trinidad and Tobago. Its mission is to establish a national system to coordinate, harmonize and evaluate all TVET provision in the country. The NTATT laid the foundations for the five-level TTNVQ framework. Cabinet Minute 736 of 27 March 2008 mandated the NTATT to develop a world-class labour force that is competent, innovative and entrepreneurial. In order to enable institutions to deliver the quality of training required to produce such a labour force, the NTATT has developed standardized curricula which provide all training institutions with regional and international accreditation.

Trinidad and Tobago follows a national curriculum with an internationally approved design which incorporates the latest theories on teaching and learning associated with competency-based education and training (CBET). Assessment is performance-based, and is conducted according to rigorous criteria designed to reveal a candidate's knowledge, skills and attitudes.

The Caribbean Examination Council (CXC) is the official certifying body which quality-assures and awards Caribbean Vocational Qualification (CVQ) units at levels 1 and 2 to students who have met the requirements stipulated in regional occupational standards. The CXC is authorized by heads of state in the region to carry out regional certification at secondary level. The existence of an external awarding body at this level makes assessment more objective and thus encourages stakeholders' acceptance of outcomes-based learning.

Level descriptors and learning outcomes

The qualifications framework for the tertiary sector is divided into seven levels from the certificate at Level 1 to the doctorate at Level 7. The levels are differentiated according to the following parameters:

- Complexity of subject matter;
- Breadth of competences required;
- Degree of specialization;
- Transferability of competences;
- Ability to innovate and to cope with non-routine activities;
- Ability to plan and organize work and to supervise others.

As a result, similar jobs are supported by similar qualifications.

Table 60 Trinidad and Tobago: Qualifications framework for the tertiary and vocational sectors

Level	Type of certification	Skills achieved
1	Certificate	Candidate demonstrates knowledge of the tasks required to accomplish a routine job and the practical skills to perform those tasks effectively. Can apply learned responses to straightforward problems.
2	Certificate	Candidate demonstrates knowledge of the main problems in his/her field of study and the practical skills necessary for employment in that field. Can solve some practical problems in the area by applying learned principles.
3	Diploma	Candidate demonstrates knowledge of the underlying principles in his/her field of study and the practical skills necessary to interpret and evaluate these principles in a related field of employment. Candidate is able to present, interpret and evaluate qualitative and quantitative data, to develop lines of argument, and to make sound judgements in accordance with the basic principles of the field.

Level	Type of certification	Skills achieved
4	Associate degree or higher diploma	Candidate demonstrates knowledge and critical understanding of the established principles in his/her field of study, and of the way in which those principles have developed. Can apply principles outside the context in which they were first studied and in an employment context. Demonstrates knowledge of the main methods of enquiry in the field and is able to critically evaluate different approaches to solving problems in the field and related employment fields. Understands the limits of his/her knowledge and how these impact on analyses and interpretations based on that knowledge.
5	Baccalaureate, bachelor's degree, honours degree, graduate diploma	Candidate demonstrates a systematic understanding of the key principles of his/her field of study. Shows coherent and detailed knowledge, at least some of which is at or informed by the cutting edge of research in the field. Can devise and defend arguments and/or solve problems by accurately deploying ideas and techniques, some of which are at the forefront of the field. Understands how these techniques can be used in employment. Can describe and comment on aspects of current research or equivalent advanced scholarship in the field. Shows an appreciation of the uncertainty, ambiguity and limits of knowledge. Candidate can manage his/her own learning and make use of scholarly reviews and primary sources.
6	Master's degree, postgraduate diploma, professional qualifications	Candidate demonstrates a systematic understanding and critical awareness of current problems and/or new insights, much of which is at, or informed by, the cutting edge of his/her field of study or professional practice. Shows a comprehensive knowledge of techniques applicable to his/her own research or professional practice, and applies this knowledge in original ways. Demonstrates a practical understanding of how established research techniques are used to create and interpret knowledge in the field. Can critically evaluate current research and advanced scholarship in the field. Can evaluate and critique methodologies and, where appropriate, propose new hypotheses.
7	Doctoral degree	Candidate demonstrates a systematic acquisition and understanding of a substantial body of knowledge and advanced research techniques at the cutting edge of an academic discipline or area of professional practice. Through original research or other advanced scholarship, candidate creates and interprets new knowledge of a quality to satisfy peer review, extend the forefront of the discipline and merit publication. Demonstrates an ability to conceptualize, design and implement a project for the generation of new knowledge and to adjust the design in the light of unforeseen problems.

Source: ACTT, 2007.

Vocational qualifications programmes are designed to impart the practical skills required in specific job roles or sectors. Courses tend to be classroom-based with assessment by written and practical examinations. There is tension between performance-based assessment and assessment by written and practical examinations.

TTNVQs are based on national occupational standards. Industry experts come together to define the standards for top performance in their industries. These standards are then translated to the curriculum and assessment procedures developed to encompass them. All TTNVQs are represented on the five-level TTNVQ framework, which ranges from Level 1 (Semi-Skilled) to Level 5 (Chartered and Advanced Professional Level).

Table 61 TTNVQ framework

Level 5	Chartered and Advanced Professional
Level 4	Professional
Level 3	Technician
Level 2	Craft
Level 1	Pre-Craft (Semi-Skilled)

Source: ACTT, 2007.

Recognition and validation of non-formal and informal learning and links to the NQF

At present, no national policy on the recognition of prior learning (RPL) exists in Trinidad and Tobago, although there are national policies intended to broaden access to higher education. In the past two years some tertiary education providers have begun to award credit for prior learning. These providers also evaluate the impact of informal and non-formal learning on the progress of adult learners, whose enrolment in these institutions has substantially increased. So far, however, few institutions have formalized their policies for RPL.

This slow progress is largely attributable to the difficulty educational providers face in convincing employers of the value of non-formal and informal learning. The concept of RPL is new to the Caribbean, and a traditionalist approach to education has been paramount for many years. Many therefore resist what they see as a radical departure from cherished ideals. Even within tertiary education institutions there is substantial resistance to the RPL initiative. This makes it difficult for the government to achieve its aim of integrating graduates into a permeable lifelong learning system.

In the institutions that do practise RPL to some degree, learners' competences are measured via portfolios and interviews. Candidates are accepted for RPL assessment following an initial interview during the admissions process. Various documents may be submitted as evidence of competences, including letters from employers, samples of work, and critical reflective statements. Mentors assist candidates in developing their portfolio and presenting the information contained therein to the assessor, who then examines the evidence in order to ascertain whether the candidate has achieved 70 per cent or more of the competences required for completion of a course. If this is judged to be the case, exemption is granted, which means that the candidate is exempted from parts of the study programme or is required to do a shorter training period in preparation for an examination for a full qualification. The introduction of effective systems of quality assurance and accreditation ensures that the quality of learning outcomes from RPL meets or exceeds internationally accepted standards.

In the TVET sector, the situation with regard to RPL is somewhat more promising. Trinidad and Tobago's TVET qualifications framework gives all candidates the opportunity to attain progressively higher qualifications in their selected occupation. Candidates are able to transfer credits between programmes from one level to another. Moreover, the Prior Learning Assessment and Recognition (PLAR) system allows TVET learners to have their skills and knowledge validated, no matter how, when or where they were acquired. In PLAR, assessment of an individual's skills and knowledge against approved occupational standards may lead to the award of a full or partial occupational or professional qualification (TTNVQ or CVQ). Where necessary, further training in specific areas is recommended. Trinidad and Tobago is currently experiencing heightened demand for trained, competent and certified workers. Increased use of the PLAR system will help to fulfil this need by providing industries with a pool of certified workers who meet required occupational standards.

Referencing to regional frameworks

In 1972, Commonwealth Caribbean leaders at the Seventh Heads of Government Conference decided to transform the Caribbean Free Trade Association (CARIFTA) into a common market and

establish the Caribbean Community (CARICOM), of which the common market would be an integral part.

CVQ levels are consistent with the levels in the regional qualifications framework (ACTT, 2007) and are recognized and portable within CARICOM and the wider world. The CVQ is a broad-based preparation for employment which aims to produce workers able to meet the varied demands of the modern workplace. The award of a CVQ represents the achievement of a set of competences that define the core work of an occupational area. CVQs have parallel standing with academic qualifications at the same level and can provide access to higher education.

Over the past two decades, the post-secondary and tertiary education sectors in Trinidad and Tobago have become a great deal more international. At first, only indigenous programmes were provided at local public institutions, but recent arrangements such as franchises have enabled foreign universities and professional bodies to provide courses in the country. This applies in particular to tertiary education. TVET, on the other hand, remains almost totally regional.

The descriptors in Trinidad and Tobago's qualifications frameworks are derived from those in other countries' NQFs and represent internationally recognized standards. Levels 1 to 3 of the ACTT framework for tertiary education equate broadly to the first three levels of the five-level General Framework for Occupational Levels proposed by the Caribbean Association of National Training Agencies (CANTA). The ACTT framework has more levels than CANTA, however, because it covers academic as well as occupational qualifications. CANTA Level 4 corresponds to ACCT Level 4 or 5; CANTA Level 5 is equivalent to ACCT Level 5 or 6, whilst ACCT Level 7 is reserved for doctoral qualifications.

ACTT is responsible for the free movement of skills within the Caribbean Single Market and Economy (CSME) through the recognition of foreign and local qualifications.

Important lessons and future plans

The ACTT, which designs the Trinidad and Tobago Qualifications Framework, has been a key player in the development of a quality tertiary education sector in Trinidad and Tobago. Since launching its operations in November 2005, ACTT has registered 81 institutions, recognized 14 foreign awarding bodies/institutions, recognized 612 transnational programmes, issued 8,005 statements of recognition, approved 45 locally developed higher education programmes, granted candidacy for accreditation to 11 institutions and accredited 3 institutions.

References

Accreditation Council of Trinidad and Tobago. 2007. *Draft document of Tertiary Qualifications Framework.* Port of Spain, Accreditation Council of Trinidad and Tobago.

Commonwealth Ministers. 2011. I*mplementing the Regional Qualifications Framework: Challenges, strategies, successes.* Chaguanas, Government of the Republic of Trinidad and Tobago. http://bit.ly/1O9ZdHQ (Accessed 08 July 2011.)

Karim, F. 2011*a*. *Feature Address*. Caribbean Tertiary Level Personnel Association's 14th Annual Conference. Port of Spain. Government of the Republic of Trinidad and Tobago. http://www.news.gov.tt/index.php?news=8337 (Accessed 6 January 2012.)

Karim, F. 2011*b*. *Policy on the Tertiary Education, Technical and Vocational Education and Training, and Lifelong Learning in Trinidad and Tobago*. Port of Spain, Government of the Republic of Trinidad and Tobago.

National Institute of Higher Education Research Science and Technology (NIHERST). 2004. *Design of a Seamless System of Education and Training in Trinidad and Tobago*. St Clair, National Institute Of Higher Education Research Science And Technology. http://www.niherst.gov.tt/publications/report-of-seamless-system-committee.pdf (Accessed 6 January 2012.)

Trinidad and Tobago Ministry of Education. 2004. *National Report on the Development of Education in Trinidad and Tobago 2004*. Port of Spain, Ministry of Education. http://www.ibe.unesco.org/International/ICE47/English/Natreps/reports/ttobago_ scan.pdf (Accessed 6 January 2012.)

Trinidad and Tobago Ministry of Education. 2008. Secondary Education Modernization Programme Secondary School Curriculum. Curriculum Planning and Development Division, Ministry of Education. http://www.moe.gov.tt/Curriculum_pdfs/English_Curriculum.pdf (Accessed 6 January 2012.)

Trinidad and Tobago Ministry of Science, Technology and Tertiary Education (MSTTE). 2010. *Policy on Tertiary Education, Technical Vocational Education and Training, Lifelong Learning in Trinidad and Tobago.* Port of Spain, The Ministry of Science, Technology and Tertiary Education. http://www.stte.gov.tt/Portals/0/Policies/ TEWhitePaper.pdf (Accessed 6 January 2012.)

National Training Agency. (n.d). *Trinidad and Tobago National Report on Technical and Vocational Education and Training (TVET). A contribution to the regional discussion on reforming TVET institutions and accreditation systems for improved skills and enhanced employability in Caribbean labour markets.* St Claire, National Training Agency.

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

TUNISIA

Introduction

Tunisia's population is in the region of 10.7 million. The average annual population growth rate was around 1 per cent in 2012. More than half of the Tunisian population is under the age of 29 years. In this category, half (or a quarter of the total population) is of working age, i.e. 15–29. Such findings raise fundamental concerns about education and training and employment, as unemployment tends to increase faster than population growth in this age group. The annual growth rate of the population 15 years and over is 1.97 per cent , against an annual rise of 3.54 per cent in unemployment of this cohort. Unemployment by education level shows that educated young people and women in general are more affected. It varies substantially between the regions (from 12.4 per cent in eastern central area around Tunis to 26.1 per cent in the south-east).

The active population reached 3.9 million in May 2013, up from 3.35 million in May 2005, representing 47.4 per cent of the population, with a wide gap between men (70%) and women (25.6 per cent). The level of education of the active population has improved over the last eight years if we consider that the rate of the illiterate active population has diminished from 19.4 per cent to 12.7 per cent and the active population with higher education has increased from 13.3 per cent to 19.4 per cent.

The current structure of employment in Tunisia is in line with pre-revolution trends: agriculture occupies 17.5 per cent of the labour force (15 years and over, but represents only 8 per cent of gross domestic product (GDP), industry (including construction) 32 per cent of the labour force (32.3 per cent of GDP) and services 49.3 per cent (58 per cent of GDP). The size of the informal economy as a percentage of GDP is estimated at 39.2 per cent.

Main policy objectives

The Tunisian Qualification Framework is called the '*Classification nationale des qualifications (CNQ)*' and builds on a number of reform processes introduced by the government, starting in 1996, following the signature of the free trade zone agreement between the EU and Tunisia. Two main reforms can be mentioned here. One is related to the upgrading of the national economy to meet the challenges of globalization, with a particular focus on the partnership agreement with the EU. The second, known as MANFORME (meaning up-grading of vocational training and employment), focused more on VET/labour market reform, and was supported by the World Bank, the EU, and French, Canadian and German aid.

Officially, the CNQ was created by law in 2009, but the implementation of the CNQ remains embryonic. One of the main reasons is the reluctance of the social partners to take part in the process, as they argue that they are under-represented in the commission set up to follow up the implementation (most of its members represent various ministries) and challenge the consultative role of this commission. Another reason is the lack of a juridical act to provide guidance on how the law can be put in practice (*decret d'execution*).

Broad ownership of and participation in the CNQ still remains, therefore, a key challenge for the success of this reform.

The Tunisian NQF has several objectives:

- To contribute to a better readability of competences;
- To bridge the gap between the economy and training;
- To provide common references to foster geographical, sectoral and professional mobility;
- To take into account all modes of learning in a lifelong learning perspective;
- To limit dead ends in learning routes.

In the recently adopted strategic document (November 2013 : *Reforme du dispositive national de la formation professionnelle*) one of the key objectives mentioned is the implementation of a Tunisian NQF. The revision and the implementation

of an NQF is explicitly mentioned as instrument to be integrated in the national human resources development strategy.

Stakeholder involvement

During the design phase, stakeholders were involved at two levels in a process steered by the former Ministry of Education and Vocational Training (now, there are the respective ministries of Vocational Education and Employment and of Education). It created two working groups:

- A technical team, comprised of managers from the directorate general in charge of standards and assessment (Direction Générale de la Normalisation et de l'Evaluation) and from the national centre for trainers and the training of engineers (Centre National des Formateurs et de l'Ingénierie de Formation), coordinating various technical works.

- A national technical group, comprised of representatives of the Ministry of Education and Training, the Prime Minister's Office, the social partners (employers and employees), the Building Federation and the Tourism Federation, ensured the steering of the whole process.

Social partners have not been involved as much as they would have liked and meetings were often held internally in the Ministry of Education and Vocational Training without external stakeholder's participation.

For these reasons, social partners are still reluctant to take an active role in the implementation. The new focus on the NQF mentioned in the strategic document may re-launch the involvement of the social partners, since they are mentioned as partners of the strategic document.

Level descriptors and learning outcomes

For the moment, the Tunisian NQF is designed as a classification of qualifications (hence the name CNQ), based on previous classifications of occupations, public services labour regulation and sectoral collective agreements. The CNQ has an overarching character covering general education, VET and higher education; it is a seven-level grid with six descriptors: knowledge, skills and wider competences (complexity, autonomy, responsibility, adaptability, knowledge and know-how). A decree was passed in 2009 specifying the NQF's detailed design, including its governance.

The National Commission for Management of the CNQ, under the Council for Human Resources Development, in charge of the implementation and monitoring of the NQF, was established but has never met. As already mentioned, this may change in the envisaged implementation of the new strategy 2014–2018. In recent years, the sectoral federations have taken the lead in developing occupational standards (*repertoire des emplois et des competences*). These occupational standards should act as terms of reference for the training providers to develop qualifications and curricula, for example the agriculture sector has contributed to developing occupational standards for its industry.

Validation of non-formal and informal learning and links to the NQF

The ongoing EU-funded PEFESE programme (*éducation*/formation-enseignement supérieur/*employabilité des diplomes* or education/VET/higher education/employability of graduates) aims to reinforce links between education and industry and employment. One of the specific aims is piloting a system of validation of informal and non-formal learning based on a standards-based qualifications system in three sectors (agriculture, tourism and construction).

Previously, pilot initiatives, such as a project supported by the AFPA, the national association for adult vocational training in France, in the ready-made garment and automotive sectors, were carried out. However, subsequent to this pilot, no decision has been taken to develop a national VPL/RPL system.

The Tunisian education and training system is hampered by a lack of pathways, for instance between vocational training, general education and higher education. A law in 2008 set out plans to link these qualifications, but has not been applied since. The plans in the strategy 2014–2018 and envisaged implementation of a revised NQF should facilitate progression pathways.

Referencing to regional frameworks

The Bologna Process is a key influence towards the reform of higher education in Tunisia. A decree was issued in September 2012 setting up a national authority for evaluation, quality assurance, and accreditation under the auspices of the Ministry of Higher Education. This new authority will be composed of two departments: one in charge of evaluation and accreditation of higher education institutions and the second in charge of the curricula.

This would build on recent reforms in higher education which introduced quality assurance. The work on the NQF is partially mainstreamed in higher education through the development of a professional bachelor course and the design of the diploma supplement in partnership with employers' organisations.

A theoretical exercise of comparison with the European Qualifications Framework was made by the Ministry of Education and Vocational Training but has no official status at European level, as the EQF recommendation contains no provision for countries which are not participating in the EU's Education and Training 2020 process to reference to the EQF.

Tunisia is participating in a regional project on qualifications (Qualification for the Mediterranean) launched by the ETF in 2010, which aims to enhance regional and Euro-Mediterranean partnerships on issues related to qualifications. Seven other countries are participating in this project: Egypt, Morocco, Algeria, Jordan, France, Italy and Spain. The project is organized around three dimensions:

- Networking and sharing among the countries involved in the project on issues related to NQF design and implementation with a focus on governance and quality assurance.
- Increasing regional transparency and mutual understanding of qualifications in two economic sectors (tourism and construction).
- Integrating and cross-fertilising the developments in the regional sectoral component with national developments in the setting up and implementation of qualification frameworks.

As part of the activities of the project, a technical team from Tunisia involving the major stakeholders was invited to present four occupations (two from each sector) using the EQF descriptors: knowledge, skills and competences. This was an opportunity for the Tunisians to use this new approach based on learning outcomes to describe qualifications.
The project has to date produced common profiles for occupations in the key sectors of construction and tourism based on EQF concepts.

The Q4M project is also linked to the EU-supported Pefese programme, where, as in Q4M, tourism and construction are pilot sectors. Additionally, both seek to develop tools for transparency such as the EU VET Certificate Supplement.

Important lessons and future plans

The agreed strategy for VET 2014–2018 should accelerate the implementation of an NQF if resources are made available. The international dimension, quality, the labour market relevance, the opportunities for all types of learners, the governance and funding of VET are explicitly mentioned as objectives in this strategy. In order to revive the existing NQF, stakeholders and government need to activate the dialogue again and apply the law. The lessons learned within the Q4M project and Pefese programme are important to ensure effective implementation of an operational Tunisian NQF.

Further, ten EU countries and Tunisia have signed a Mobility Partnership, which includes skills and qualifications components. Mobility partnership agreements are a framework to regulate legal migration of skilled labour between EU countries and non-EU countries. Tunisia's agreement explicitly mentions relevant qualifications projects. An operational NQF would contribute to a better understanding and trust by other countries in Tunisian qualifications.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

TURKEY

Introduction

Turkey is a large middle-income country with a growing population of 76.6 million inhabitants, with important regional and social disparities and a growing economy. Turkey is also a candidate country for membership of the European Union and a participant in the EQF advisory group. The country is a participant in the same EU Education and Training 2020 process as the EU 28 member states and so seeks to meet the same strategic objectives set by the EU framework. These objectives are supported by a series of reference levels of European average performance, or the five 'European benchmarks', which set goals to be achieved by 2020.

Latest figures show that Turkey is still lagging far behind in its performance compared to the five EU benchmarks in education and training, but is making rapid improvements. Early school-leaving is still substantially above the EU benchmark of 10 per cent at 37.5 per cent (2013), but has improved from 46.9 per cent in 2007. Moreover, these figures do not yet include the full effect of extending compulsory education to twelve years of schooling, which was introduced in the 2012/2013 school year. Turkey records a figure of 21.5 per cent who have attained tertiary education level against the EU target of 40 per cent (improved from 12.3 per cent in 2007); it has a 4 per cent participation rate in lifelong learning against the EU goal of 15 per cent (up from 1.5 per cent in 2007). Turkey has defined its own 2020 target of 8 per cent by 2020; and 19.2 per cent of its four-year-olds participate in the education system against the EU benchmark of 95 per cent. The fifth EU target concerns pupils' performances in reading, science and maths – Turkey's performance in the Programme for International Student Assessment (PISA) shows that the country needs to make further efforts to improve basic skills, but has seen clear improvements since 2003.

The Turkish economy has performed much better during the economic crisis than the Eurozone, with steady growth during the last years. Turkey has set itself the ambition to become the tenth global economic power in 2023, one hundred years after the foundation of the Turkish Republic, but this requires very high growth levels. Employment levels remain structurally below the EU average (at 49.5 per cent of the working-age population), especially among women. At the same time, growth sectors are increasingly in need of qualified labour to be more competitive internationally. The employment situation and the need for skilled labour have led to close cooperation between ISKUR, the employment service, and economic sectors since the early nineties, in their shared desire to ensure more relevant adult qualifications. Since 1992, these have included a series of initiatives to develop occupational standards, but only since 2006 has this become a regulated system of national occupational standards and qualifications under the responsibility of the tripartite Vocational Qualifications Authority. This National Vocational Qualifications System is developing into a parallel system to the existing formal education system under the Ministry of National Education and the Council of Higher Education. The main challenge of the NQF is to link these qualifications systems.

The overall educational attainment levels of the working population are low compared to the EU28 or other candidate countries. Education reforms are progressing steadily, improving participation at all levels of education, but many challenges remain.

The initial VET system has been brought under a single management within the Ministry of National Education (MoNE) but still bears the consequences of a system that was previously divided into different sub-systems. Initial and continuing VET have been under reform, with substantial EU support, introducing modular, competence-based curricula in initial VET as well as developing the above-mentioned Vocational Qualifications Authority for CVET. Further reforms address strengthening the system of pre-service and in-service vocational education and training (IVET) teacher training. Schools are gradually gaining responsibilities. Graduates still receive school diplomas rather than national VET qualifications.

The growing population of young people puts pressure not only on the labour market but also on the higher education system. The HE sector is expanding with new state and foundation (NGO-based) universities being opened every year. A diverse HE sector is the result. In order to meet the requirements of the Bologna Process, there is a need for both quality improvement and quality-assurance processes.

There are not enough places within the current HE system, and a strict selection is made through a national entrance exam. Many young people end up involuntarily in post-secondary education (MYOs). These MYOs are under reform to make them more labour market-oriented. All MYO graduates need to undertake internships and colleges can be closed down if they fail to find meaningful internships.

The government has taken many measures to increase participation rates in education. In 2012, it extended compulsory education to a duration of twelve years, divided iinto three blocks of four years each, after which choices can be made for different pathways.

The concept paper for the Turkish Qualifications Framework (TQF) contains five concrete challenges, to respond to the situation explained above.

1. There is a need to modernize the qualifications system in line with international standards and practices.
2. Participation and attainment rates have to be further increased, with more people obtaining qualifications of value for career development.
3. The qualifications system needs to capitalize on the education reforms that are ongoing in order to produce appropriate qualifications and clear qualification types which are based on learning outcomes.
4. Qualifications need to respond to changes in the labour market.
5. There is a need to increase employment rates at the same time as the workforce is growing, by creating closer links between education and the labour market.

Main policy objectives

The development of a qualifications framework is closely linked with the long-term objective of developing an internationally competitive skilled workforce, supporting economic and employment growth, which are important in creating a stable future for Turkey's growing population and to facilitate European integration.

The following sub-objectives are identified: (a) to strengthen the relationship between education and training and the world of work; (b) to develop national qualifications based on learning outcomes; (c) to encourage quality assurance; (d) to provide qualifications for progression and mobility and to facilitate national and international comparison; (e) to ensure access to learning, development and recognition; and (f) to support lifelong learning.

The concept paper for the TQF identifies four objectives. The TQF will be:

1. A clear and consistent tool for describing and comparing qualifications.
2. An integrated framework for developing qualifications of all types
3. An instrument for reforming the Turkish Qualifications System that facilitates the recognition of formal, non-formal and informal learning.
4. A benchmark for the recognition of foreign qualifications

A key statement in the TQF concept paper is that 'all quality-assured qualifications shall be included in the TQF'.

Stakeholder involvement

Through Law 5544 adopted on 21 September 2006, the Vocational Qualifications Authority (VQA) was established in early 2007, under the coordination of the Ministry of Labour and Social Security, to develop a strategy for implementing the national vocational qualifications system, with a link to the EQF. When the law was being prepared, a framework with a wider coverage was originally foreseen, including all national qualifications, but during the negotiations on the law stakeholders seemed hesitant to transfer too many responsibilities to the new tripartite body and refocused the discussions on a National Vocational Qualifications System based on national occupational standards, with a strong role for sectors and reinforced quality-assurance arrangements for assessment and certification. This system has been developing as a new parallel initiative focused on adults and is not integrated with initial vocational education, which remains the responsibility of the Ministry of National Education.

VQA is governed by an assembly with around forty-four paying members, meeting annually, including different ministries, state institutions, chambers, employers' organizations and unions, including sector bodies. The assembly elects the six-person executive board for a period of three years. The executive board meets monthly and the

chair of the executive board is also the president and chief executive officer of the VQA secretariat. According to the amendments to the VQA law, currently before parliament, it is planned that this secretariat will grow into an approximately 200-member strong organization and has both important developmental and coordinating functions. The VQA became operational in 2007 and has developed secondary legislation on national occupational standards. The 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. The period 2009–2011 saw a surge in the establishment of occupational standards-setting bodies, which develop standards using the VQA methodology on a voluntary basis. VQA signs a protocol with them for the development of national occupational standards. These standards are reviewed by sectoral committees before they are approved by the VQA executive board. They are then published in the *Official Gazette*. To date (March 2015), 585 occupational standards have been published. These standards inform national vocational qualifications that are also developed by sectors on a voluntary basis, generally following the same process as national occupational standards, with the exception that they are not published in the *Official Gazette*. Their number had reached 262 national vocational qualifications at the time of writing.

Some 157 of them are actually in use for certificating workers in the sectors through the validation of non-formal and informal learning in authorized certification bodies. These sectoral-authorized certification bodies need to be formally approved by the national accreditation organisation, Türkak, or another accreditation body, in accordance with a multilateral recognition agreement under the European Accreditation Union (on the basis of the ISO 17024 standard for personnel certification). After accreditation, they need to be authorized by VQA before they can perform their assessment functions. So far, thirty-five bodies have been accredited and authorized and it is expected that their number will grow in 2015 as there is legislation under preparation to make VQA certification for a number of occupations compulsory. An EU grant scheme has been launched to support the development of new certified accreditation bodies. In a big country like Turkey, hundreds of authorised certification bodies are probably needed, with branches all over the country, although real demand has been disappointing so far. At the end of 2014 only 22,003 VQA certificates had been awarded to individuals, much lower than the 120,000 target in the VQA strategic plan.

It is expected that vocational qualification certificates for approximately 100 dangerous occupations, including many VQA qualification certificates, and some certificates of MoNE and higher education, will become compulsory by 2016, requiring millions of workers to seek certification in the coming years. The role of VQA has constantly evolved. In 2011, the legislation on VQA was amended giving the organization new responsibilities in developing the Turkish Qualifications Framework and in quality-assuring vocational training. VQA is expected to start the authorization of training accreditation bodies that will accredit individual providers in 2015 or 2016. VQA has become the Europass centre, and the EQF national coordination point of Turkey. According to Law 5544, VQA is also responsible for the verification of vocational qualification certificates held by foreigners intending to work in Turkey. Additionally, VQA is participating in planning the implementation of Directive 36/2005 on regulated professions under the coordination of the Ministry of EU Affairs. Whether the authority will implement the directive has not yet been officially decided.

Beyond the National Vocational Qualifications System, which was legislated for with law 5544 in 2006, Turkey is now moving towards an integrated Turkish Qualifications Framework. The idea of a Turkish Qualifications Framework that brings together different types of qualifications for general education, for initial and continuing vocational education and training, for adult learning and higher education, and for those gained through non-formal and informal learning, has been mentioned by a number of policy documents. The Ninth Development Plan 2007–2013 emphasized the need for a professional qualifications system. The first lifelong learning strategy paper and action plan that the Ministry of National Education published, in July 2009, treated the 'Vocational Competency System' (i.e. NVQS) as a specific part of the lifelong learning strategy which needed to be implemented under the coordination of VQA. But this strategic document was overtaken by developments in 2010, which have actually moved attention beyond the implementation of the National Vocational Qualifications System towards a more integrated comprehensive NQF. In the framework of a new 'Action Plan for Strengthening the Relationship between Employment and Vocational Education' (IMEIGEP), which is part of the employment strategy to 2023, VQA has supported a national NQF committee in developing an NQF.

An NQF Committee was established in 2010 and received technical support between 2010 and 2013 in the framework of the EU project to

support VQA. Moreover, Law 5544 was revised in 2011, through amended Decree Law 665/41, which mentioned an NQF in line with the EQF, including vocational, general, academic and other qualifications. The amended law nominated VQA as the responsible body for preparing, developing and updating the NQF. Moreover, the law stated that VQA would be responsible for quality-assuring all vocational qualifications that will be allocated into the TQF. The NQF Committee was supported by a working group that started in October 2010, and was extended to include the social partners in 2011. Moreover, a larger group of interested parties was invited to join an NQF feedback forum to discuss proposals from the working group. Different concept papers were integrated into a draft report which was completed in 2013, when it was disseminated for consultation. A final version of the TQF regulations and TQF concept paper was adopted by the VQA Executive Board in July 2014 and presented to the Prime Minister's office for adoption in September 2014. Legislation on the TQF is expected to be adopted in 2015.

According to the TQF concept paper, apart from VQA, the Ministry of National Education and universities coordinated by the Council for Higher Education will be awarding bodies under the TQF, with considerable delegated responsibilities. Common quality-assurance guidelines for developing qualification types and qualifications, for approving qualifications which will be included in the TQF register, and for the assessment, certification and provision of qualifications, are going to be developed with the support of a new EU project to strengthen VQA and implement the TQF, which is expected to start in the first half of 2016.

The TQF is seen as a key instrument for recognizing and quality-assuring lifelong learning. New policy initiatives like the tenth development plan for the period 2014–2018, the Lifelong Learning Strategy 2014–2018, the Action Plan for Strengthening the Relationship between Employment and Vocational Education, the National Employment Strategy, and the VET Strategy 2014-2018, all mention the TQF. Targets have been set in the National Employment Strategy for the numbers of qualified workers for specific sectors.

Level descriptors and learning outcomes

The development and implementation of an NQF for HE by the Council of Higher Education (CoHE) has also progressed in the meantime along with the principles of the Bologna Process and the Lisbon Strategy. Initial work was started after Bergen Communiqué in 2005. To organise the process, a national committee was established by the CoHE on 28 April, 2006. Since then, there has been a great interest in continuing work for the development of the NQF by HE institutions, as well as other stakeholders. At the initial stage of development, it was agreed that the Dublin descriptors would be integrally adopted for the HE levels. After the EQF consultation process with all relevant stakeholders (all universities, the Ministry of National Education, national student union, the business world including employers and employees, NGOs, etc.) it was decided to adopt and adapt the level descriptors proposed in the EQF 2005 consultation document, to ensure a better link with the EQF. Since then, these have been the level descriptors for higher education, which were officially adopted on 21 January 2010. In 2010, a new structure was proposed, which had a wider description of competence than that in the EQF definition. However, the NQF Committee changed these again into a structure that is closer to the EQF level descriptors, based on knowledge, skills and competences. The definition used for 'qualification' has also come close to the EQF definition, as a qualification is defined as the knowledge, skills and competences possessed by an individual and recognized by a competent authority.

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 sub-systems of education and training supported by main stakeholders.

A format for national occupational standards (NOSs) exists, which describes labour-market needs in terms of duties and tasks with corresponding performance criteria. Qualifications developed from national occupational standards are also to be described in terms of learning outcomes and should be unit-based, describing learning outcomes and corresponding assessment criteria.

The Ministry of National Education has launched a curriculum reform in secondary education (for both general and vocational/technical schools). Vocational curricula are modularized and the Ministry of National Education has a database of more than 4,000 modules that are also used for the licensing and certification of adult learning. There are also plans to establish a national credit system for VET. Although curricula are advanced, most initial vocational qualifications are not yet unitized and fully learning outcomes-based. Modules based on learning outcomes are used for learning, but they are not separately assessed and often lack an assessment component. In higher education, the

implementation of the learning-outcomes approach is an essential part of the implementation of the NQF for higher education. However, current arrangements inhibit the validation of non-formal and informal learning in higher education.

Validation of non-formal and informal learning and links to the NQF

VQA and the lifelong learning department of the Ministry of National Education are actively working to widen the validation of non-formal and informal learning. In addition to the thirty-five authorized certification bodies that function under the responsibility of VQA, three pilots in validation of non-formal and informal learning have been undertaken by the Ministry of National Education and their number is currently expanding with eight new pilots. Validation of non-formal and informal learning is one of the six priorities for the lifelong learning strategy 2014–2018. A national RPL framework and operational guidelines for RPL have been adopted by the Ministry of National Education.

Apart from the level descriptors, the TQF concept proposes to develop clear qualification type descriptors (twenty types were identified in an earlier version of the concept paper), which are based on learning outcomes. Individual qualifications need to be in line with level and qualification type descriptors.

For the higher education qualifications framework, which is a sub-framework within the TQF that is already functioning, for different fields of learning national working groups have been established that define common outcomes as a guideline for qualification and curriculum developers and links to specific programmes have been established that can be explored through a common register on the HE QF website http://tyyc.yok.gov.tr/.

Referencing to EQF and other regional frameworks

A draft referencing report for relating the Turkish Qualifications Framework to the EQF is being prepared and is expected to be adopted in 2015.

Important lessons and future plans

The development of the TQF as an integrated structure is a huge step forward from the National Vocational Qualifications System, which was developed as a parallel structure focusing on the certification of adults. The responsibilities between VQA, MoNE and CoHE are becoming clearer, but quality-assurance issues will be decisive in the ultimate division of responsibilities. Sectors have been actively involved in developing national occupational standards and qualifications and are also volunteering to become authorized certification bodies, but there is a need to support and facilitate the establishment of these bodies, to allow the system to grow fast enough to meet the expectations. Training which can lead to qualifications is a next challenge. The role of the sectors in initial VET and post-secondary VET (MYOs), and possibly HE, also has to be clarified. There is definitely an interest from the private sector in using the TQF to make qualifications more relevant. There is a huge number of training providers in Turkey whose current provision falls outside the qualifications that are planned to be part of the TQF. In particular, for adult learning these courses are very important, for example, the Istanbul municipality is offering hundreds of courses free to more than one million participants. Bringing these types of course into the TQF by mapping them against the outcomes of units of VQA or MoNE qualifications is one of the processes that is currently considered to quality-assure and certificate them within the framework of the TQF.

The institutional arrangements for the TQF are very much focused on and around the VQA. The coordination of the TQF will be shared between the stakeholders, in a very similar way as the executive board of the VQA has been functioning. In this respect, the VQA experience has greatly contributed to the developments so far, but it is expected that MoNE and CoHE will start to play a more prominent role in the phase that will start now. VQA is supporting the implementation of the TQF, but is also one of the three regulating bodies under the TQF and is going to establish a system for the quality assurance of the provision. The accumulation of these different tasks within a single institution is not easy to manage and implement, in particular if the system is starting to grow more rapidly, and the number of authorized certification bodies, providers and qualifications is increasing, while for a number of qualifications the VQA certification is becoming compulsory.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

UGANDA

Introduction

The Ugandan Vocational Qualifications Framework (UVQF) was officially introduced through the Business, Technical and Vocational Training (BTVET) Act of 2008 as a part of its overarching ten-year strategic plan, Skilling Uganda (Ministry of Education and Sports, 2011).

The most important sub-sectors of the Ugandan labour market are the informal economy and the agricultural sector. Some 70 per cent of the Ugandan workforce continues to work in agriculture. Employment in the non-agricultural informal sector (comprising mainly micro-enterprises, own account workers and unpaid family workers) accounts for 18 per cent of total employment and 58 per cent of non-agricultural employment.

Technical and vocational education and training (TVET) in Uganda is beset with problems. Chief among these is the irrelevance of TVET programmes, which mars the productivity and employment chances of an estimated 800,000 school leavers annually (Heitmann, 2012). Less than 40 per cent of large and medium-sized firms regard the course content and methodologies of BTVET institutions as relevant. At the level of advanced technical qualifications, the limited coverage of practical skills as well as soft skills (such as communication, computer literacy, customer care, problem solving, work attitudes and ethics) in training programmes makes for low performance in modern work environments (Ministry of Education and Sports, 2011).

Furthermore, only a narrow range of occupations are covered in BTVET programmes. Programmes do not address the skills requirements of modern and emerging sectors such as hospitality, ICT, business management and finance, mining and engineering, oil and gas, and environmental technologies. Employers are rarely represented in the rigidly supply-oriented BTVET system. The lack of a systematic labour market information system further decreases the system's responsiveness to demand.

Main policy objectives

The UVQF's objectives are to:

- align BTVET programmes and qualifications with the needs of the labour market, so as to produce graduates with employable skills;
- allow employers and industry experts to play a significant role in defining occupational standards and training content;
- safeguard against the institutionalization of supply-driven, academically-focused formal training programmes, which in the past failed to equip graduates with skills relevant to the needs of the labour market;
- develop formal and (where possible and appropriate) non-formal programmes based on UVQF standards in order to facilitate progression within the BTVET system (Ministry of Education and Sports, 2011).

Section 3 (5) of the 2008 BTVET Act highlights the following aims:

- to improve the relevance, accessibility, quality and affordability of BTVET for the purposes of progression and employment;
- to enhance workers' capabilities for employment and self-employment;
- to monitor gaps between supply of and demand for skills;
- to establish financial sustainability and funding mechanisms.

Section 3 (3) of the BTVET Act defines the aims of the UVQF as:

- to determine the scope and levels of BTVET programmes and the roles of the different stakeholders in designing programme content;
- to separate training and delivery from quality-assurance functions;
- to establish an institutional framework for the coordination of BTVET;
- to establish an authority to regulate qualifications (standards, assessment and certification) and training delivery in formal and non-formal institutions.

Stakeholder involvement

Work towards a comprehensive qualifications framework for Uganda was started in 2000 by a task force set up by the BTVET department in the Ministry of Education and Sports (MoES). However, when the German-supported Promotion of Vocational Education and Training (PEVOT) programme was requested by the Government of Uganda, the focus was shifted to the development of a sub-sector framework for vocational qualifications only. The original idea to establish an autonomous qualifications authority for vocational qualifications had to be abandoned due to resistance from parliament and the MoES (Heitmann, 2012). Nevertheless, the development of occupational profiles, test item banks and modular curricula started in 2003 in a number of pilot projects.

The BTVET Act revitalized the Directorate of Industrial Training (DIT) which became dysfunctional in 1998 when all education and training functions were transferred from line ministries to the MoES. The DIT is now the body in charge of quality assurance and assessment. Learners with employable skills are encouraged to apply to the DIT for assessment, irrespective of the duration and form of their learning (formal, informal or non-formal) or of their gender and social background. The DIT started issuing UVQF qualification certificates with effect from 2009, phasing out the award of trade test certificates. It assures employers that every UVQF-certified individual is able to perform the relevant occupational tasks to the level of competence indicated on the qualification certificate.

The DIT is supervised by the Industrial Training Council (ITC), which is also the new policy-making organ for technical and vocational skills development (TVSD) with representation from industry.

Level descriptors and learning outcomes

The UVQF has five levels. The level descriptors form a continuum in which the preceding levels are subsumed within those that follow.

Table 62 Uganda: Generic descriptors of competence levels

UGANDA VOCATIONAL QUALIFICATIONS FRAMEWORK (UVQF) SUMMARY OF GENERIC LEVEL DESCRIPTORS

Level	Level descriptor	Comparable qualifications
Level 5	Candidate can apply a broad range of specialized knowledge and skills to interpret technical information, modify concepts, practices and procedures, and perform complex technical operations in unpredictable contexts. Can undertake activities with a high degree of autonomy when results are checked on by superiors. Shows a high degree of control of resources and managerial performance.	Higher diploma (HD)
Level 4	Candidate can apply a substantial range of specialized knowledge and skills to interpret technical information and perform and modify complex operations in a variety of contexts. Can undertake activities with a substantial degree of autonomy when results are checked on by superiors. Shows a substantial degree of control of resources and managerial performance.	Ordinary diploma (OD)
Level 3	Candidate can apply a broad range of knowledge and skills to perform complex work in varied contexts. Can undertake activities as a 'working supervisor' with a substantial degree of autonomy when results are checked on by superiors. Can find technical solutions and make proposals to modify technical operations. Shows a moderate degree of control of resources and managerial performance.	Certificate III
Level 2	Candidate can apply a moderate range of knowledge and skills to perform less complex work in non-routine and occasionally varied contexts. Can undertake directed activities with some degree of autonomy while working in a team, and can find simple technical solutions unaided. Shows a limited degree of control of resources.	Certificate II
Level 1	Candidate can apply a basic range of knowledge and skills to perform simple work in routine contexts. Can work with others under direct supervision. If self-employed, shows a limited ability to find technical solutions.	Certificate I
Elementary/ Entry level (partial qualification)	Candidate can apply a limited range of knowledge and skills to perform specific and simple tasks in routine contexts. Can work with others under direct supervision. If self-employed, shows a limited ability to find technical solutions. Note: Elementary/entry level abilities will be awarded a partial qualification based on modular assessment and certification.	Worker's PASS transcript

Source: Ministry of Education and Sports, 2011.

Recognition and validation of non-formal and informal learning and links with the NQF

The BTVET Act of 2008 makes provision for the assessment of prior learning (APL). Regulations to facilitate APL are supported by both stakeholders and TVET graduates, who have expressed a wish to be granted access to higher education via APL. This is catered for by Section 20 (5) of the UVQF, under which graduates of community polytechnics, vocational schools and training centres are offered the opportunity to progress to the next level of learning. Individuals are encouraged to undergo evidence-based assessments to determine the appropriate level for them. In this way, learners who have acquired skills in the informal economy will have the chance to re-join the formal system. In order to meet the needs of APL learners, occupational qualifications programmes on the UVQF are characterized by competence-based education and training (CBET) and flexible learning modules delivered in the form of assessment and training packages (ATPs).

In 2009, the DIT was able to assess roughly 2,000 applicants on the basis of the old trade testing regulations, and has since gradually introduced a test item bank developed under the UVQF. However, these numbers must be seen in relation to the much larger numbers of students (18,000 annually) who appear for examinations in formal TVET schools (Heitmann, 2012, p. 22).

Referencing to regional frameworks

A technical paper on the harmonization of education systems and training curricula in East Africa (East African Community [EAC] Secretariat, April 2012) made several recommendations regarding the proposed overarching qualifications framework for the region. The most important of these as regards the UVQF are as follows:

- A regional qualifications framework for TVET should be developed. It should feature guidelines and regulations for instruction, curriculum management, and examination and assessment in the regional TVET sub-sector.
- A regulatory body should be established to accredit institutions and programmes, set and control standards, standardize awards, and ensure the quality and relevance of TVET programmes and assessment centres in the region.
- An inter-governmental body should be created to deal with TVET-related issues in the region. The East African Community Secretariat should schedule regular meetings of TVET experts to develop guidelines for harmonization of the regional TVET sub-sector.

Important lessons and future plans

The Ugandan Government's vision for the future is to give all learners the opportunity to further their education up to tertiary level via an overarching national qualifications framework (NQF) covering general and higher education as well as TVET. The UVQF is seen as a forerunner of this framework, which will make education and training in Uganda truly democratic.The first step towards this goal in the immediate future will be to expand the UVQF up to diploma level. This responds to the urgent request of employers to produce more diploma-level BTVET graduates with relevant practical skills. Curriculum development will be accelerated based on UVQF standards (Ministry of Education and Sports, 2011). The government also plans to raise the quality and profile of vocational training by strengthening links between TVET and the private sector.

References

BTVET. (n.d). BTVET. Kampala, Ministry of Education and Sport. http://www.btvet-uganda.org/legal-framework/btvet (Accessed 27 July 2011.)

BTVET Uganda. (n.d.). PEVOT. http://www.btvet-uganda.org/partners/pevot/ (accessed 18 February 2013).

East African Community (EAC). 2011. *Regional Report: Harmonisation of the East African Education Systems and Training Curricula*. Arusha, East African Community Secretariat. http://bit.ly/1O9Zz0R (Accessed 27 July 2011.)

Heitmann, W. 2012. *Lessons learned from selected National Qualifications Frameworks in Sub-Saharan Africa.* Triennale on Education and Training in Africa, Ouagadougou, Burkina Faso, 12–17 February, 2012. Tunis, Association for the Development of Education in Africa.

Ministry of Education and Sports. 2008. *Revised Education Sector Strategic Plan 2007–2015.* Kampala, Ministry of Education and Sports.
Ministry of Education and Sports. 2011. *Skilling Uganda: BTVET Strategic Plan 2011–2020.* Kampala, Ministry of Education and Sports. http://bit.ly/1L6lweT (Accessed 18 February 2013.)

Prepared by:
UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts.

UKRAINE

Introduction

On 23 November 2011, the Cabinet of Ministers of Ukraine adopted resolution No.1341 on the approval of the national qualifications framework. Ukraine became thus the second country in Eastern Europe after Georgia to legislate for NQF and the first to adopt an overarching framework. The resolution was the result of constructive cooperation between stakeholders from the world of work, and from vocational and higher education, under the leadership of the Ministry of Education, Science, Youth and Sports, and with an active role for the Federation of Employers.

The NQF aims to introduce European standards and principles of quality assurance for specialists' competences, in line with the requirements of the labour market. It is a tool to improve the interaction between the labour market and the education system and aims to support harmonization of education and labour legislation and promote national and international recognition of Ukrainian qualifications.

The NQF describes ten levels based on learning outcomes and is inspired by the EQF and the ISCED 2011 classification, starting from level zero, and with an additional ninth level to accommodate the Doctor of Sciences degree. The decree determines the NQF as a quality-assurance instrument, but it is not clear whether and how the NQF interacts with existing classifiers for occupations and specializations. The NQF decree does not identify the qualification types that would be part of the NQF.

A concept paper on the national qualifications system, developed in 2012 by the national NQF working group, addressed which qualifications should be part of the framework, how the NQF can be used to ensure quality, and which bodies would be responsible for the implementation of the NQF, but it was never adopted. Provisions in the Law on Higher Education (2014) have now superseded this concept paper. A plan for the implementation of the NQF was adopted in 2012.

Even before the adoption of the NQF, the use of learning outcomes was increasing. In the past five years, more than 300 modern vocational education standards were developed on the basis of learning outcomes and validated by employers. In higher education, progress in standard setting is less visible and less centralized but a number of pilot subject area descriptors are now available (environmental protection, ICT, etc.) and in 2013 the Ministry of Education proposed descriptors for all HE qualification types.

With the change of government in 2014, the status of the adopted NQF implementation plan is not clear. On one hand, there seems to be a readiness for more radical reforms, but, on the other hand, the economy is seriously affected by the conflict in the east of the Ukraine, limiting the perspective for long-term educational reforms and fast-tracking reforms that may reduce public expenditures. There is progress in legislating the use of the NQF. The Law on Higher Education (2014) explicitly refers to the NQF and identifies which higher education qualification types will be part of the NQF, and there are on-going discussions on new education and labour laws. Consultations have started on new laws on education and vocational education, on the initiative of the Parliamentary Committee on Education and Science. Despite these important steps the NQF seems to have lost its central position for education and labour reforms, becoming a sub-set of VET reforms (see Coalition Agreement and article 432 of the Association Agreement with the European Union [May 2014] on cooperation in VET). The latter states that Ukraine should establish an NQF to improve the transparency and recognition of qualifications and skills, drawing, where possible, on the EU experience, and makes thus a link to the EQF.

Ukraine faces major socio-economic challenges. Big enterprises play an important role in the economy and in employment, which still has a very sizeable industrial and mining sector, next to a large number of small and medium enterprises. There are significant economic, social and cultural regional differences in the country that are aggravated by the current conflict. Over-

education has become a widespread phenomenon and recently participation in higher education has started to drop. According to the labour force survey, the increasing demand for qualified labour is one of the main challenges, which may negatively affect the economic outlook in the long term.

Employers' participation in initial VET is very low, although they are generally more satisfied with VET graduates. Uncontrolled enrolment in higher education has resulted in an enormous number of lawyers, finance specialists and economists with higher education diplomas but with limited employment prospects relative to their qualifications. At the same time, employers cannot find enough specialists with intermediate professional skills. The new law on higher education is trying to address this and has led to a reclassification of higher education institutions. The junior specialist degree has been abolished in higher education. A new junior bachelor degree has been introduced. A new, independent quality assurance agency for higher education has been established to accredit and externally quality-assure higher education institutions as providers and awarding bodies.

There is some progress in facilitating lifelong learning in VET. A new system for the validation of non-formal and informal learning has been designed, although it is not operational. Moreover, with a steadily growing group of learners that want to enter vocational education after completing other programmes, an input assessment system has been put into place that allows people to enter programmes at different stages, by assessing the knowledge, skills and competencies of the applicants, depending on their personal background.

In spite of these changes, the education system of Ukraine has maintained many of its Soviet characteristics, according to employers. Further progress of vocational education and training in Ukraine will be seriously constrained without essential changes in policy, governance and system. In particular, the lack of appropriate institutional and legal arrangements have inhibited more progress. Qualifications remain a prerogative of the education sector. Professional qualifications developed from occupational standards are still not legislated for.

It is for these reasons that the Federation of Employers has taken the initiative and established the Institute of Professional Qualifications (IPQ). Under the coordination of the institute, five sector skills councils have so far been established. The sectors are the metal industry, chemical industry, energy generation, coal mining and agricultural mechanical engineering. Members of these sector skills councils are big companies. The sector skills council functions as a clearinghouse and forum for discussion, to ensure that occupational standards are shared between the companies. As a rule, big companies using a commonly agreed methodology develop occupational standards voluntarily. An interesting discussion has started between sector skills council members whether to focus on existing or new occupations.

The existing occupations are included in the list of occupations, which is also used for labour registration. However, some employers are convinced that standards for new occupations are needed more in order to support innovation in their companies. Within the metal industry sector, steel company Acelor Mittal has started to develop a new occupational standard for the roll of *mechatronician*, which is not part of the list of existing occupations.

Since the standards are mainly driven by the voluntary work undertaken by the companies, there does not seem to be any real validation process in place to ensure the quality of the standards. To date, eighteen occupational standards have been developed under the umbrella of IPQ and this number is expected to double by the end of 2016. Funding for standard development remains a major obstacle for producing larger numbers. There is not yet a perspective of budget funding for this type of activities, although a number of official government instruments have started to mention occupational standards as part of the system.

The employers see the occupational standards very much as the core of the professional qualifications that they want to use to certificate their own staff, in line with the VQA qualifications system and the system implemented under Kutsekoda, the Estonian qualifications authority.

Beyond the development of new professional qualifications, the NQF should be a tool for the reform of existing qualifications. Most vocational qualifications lack transparency and relevance. They are not yet based on occupational standards, although a growing number are based on learning outcomes and validated by employers.

There are tensions between existing labour-market mechanisms and classifiers of occupations and specialities and the realities in enterprises. The current terminology is confusing. The classifier of professions has as many as 8,725 entries divided into in *professii, zanjatija* and *dolzhnosti,* leaving still approximately 1,000 occupations. Professional

characteristics have been identified for occupations that are out of date. These numbers need to be reviewed to achieve a more manageable system, which can be kept up to date with changing needs. The relationship between the classifiers and the newly adopted NQF needs clarification. The NQF cannot just be an additional classification instrument. The implications of the NQF for the labour market need to be understood as well as its implications internationally.

The priority for the HE sector and the Ministry of Education now is the implementation of the law on higher education. The law rationalises HE qualifications: the specialist qualification is abolished, bachelor, master's, Ph.D. and Doctor of Science degrees are maintained and reinforced. The junior specialist is replaced by the new qualification of junior bachelor. The HE law also includes articles regulating the autonomy of universities, a diversification of university types, and the introduction of an independent quality assurance agency (QAA) for higher education. This QAA should start its operations in September 2015. A charter for the agency has been published on the MoE website for consultation, but has not generated many reactions. There are a number of issues in the charter that should be amended to make the agency more in line with the revised European standards and guidelines that give more importance to learning outcomes. There are many aspects of the law that directly concern the NQF. The law on HE established a close link between qualifications and credits. The bachelor degree will be 180–240 credits. This is a move away from the traditional measure of teaching hours and could mean a reduction in hours taught. The quality of the bachelor degree, as indicated in the law on HE, needs to be enhanced, beyond what existing four-year programmes offer. With the disappearance of the specialist degree it is important to rethink the bachelor as a meaningful qualification, and indicate how better results can be achieved in less time. New fields of education are being defined. New commissions are planned to develop new standards for higher education. The Doctor of Sciences degree was not abolished but it is not yet fully clarified what to do with it and how to address it in the self-certification process. It is expected that self-certification can only start once the major changes in the law are introduced. This would mean at least two or three years.

The adopted NQF shows that there are different objectives for different stakeholders. There is a need to follow up the NQF proposal with additional legislation and strategy about how it should be implemented. A qualifications authority or agency having a sufficient technical competence to quality-assure and steer the development processes and qualifications at national level is a critical step for Ukraine to consider, but is unlikely to be established soon given the current budgetary constraints of the government. Employers feel that with their initiative to establish the Institute of Professional Qualifications they are occupying a temporary role that should be fulfilled by government.

Main policy objectives

The NQF is intended to support reform of qualifications, including making them more relevant to labour-market needs; to clarify the standing and relationship of qualifications compared to each other. It is also intended to link Ukraine's education and training system to the qualifications framework for the European Higher Education Area, i.e. the Bologna Framework.

The national qualifications framework is intended for use by executive agencies and organizations which implement public policy in the sphere of education, employment and social-labour relations, educational institutions, employers and other entities and individuals, to develop, identify, correlate, recognize, plan and develop qualifications.

Stakeholder involvement

The Federation of Employers has been actively promoting the idea of an NQF for several years and has looked for alliances with other stakeholders to develop legislation. However, legislative proposals developed on the initiative of employers have been rejected four times. The last attempt was a draft law on a professional qualifications system (No.9625) (2012) which addressed the need for qualifications for people who are already proficient in their field, rather than for labour market entrants. In spite of the support of the Ministry of Education, the law was not adopted in parliament.

The law 'on organization of employers, their organisations, rights, guarantees and activities', (22.06.12) and the methodological recommendation for the elaboration of occupational standards on the basis of competences (Ministry of Social Policy January 2012) have created a legal foundation for the establishment of sector skill councils on a voluntary basis.

The NQF legislation itself was adopted because the government took the initiative through the Ministry of Education, rather than the employers. An NQF Commission was established in December

2010, consisting of high-level officials from different ministries and the social partners. An operational working group developed technical proposals. This group initially comprised officials from the Ministry of Education, the National Academy of Pedagogical Science and other representatives from the education sector, but was extended to involve employers in the spring of 2011. The ETF and the Council of Europe jointly provided technical expertise to the national working group through a series of targeted seminars in cooperation with the Ministry of Education.

Since the NQF is meant to be an instrument for regulating the quality and relevance of qualifications, the NQF Decree was only a first step in a legislative process. One important law adopted in January 2012 was the Law on Professional Development of Employees (Law No. 4312), which stipulates that the State Employment Service will establish recognition centres for the validation of non-formal and informal learning.

The higher education law has already been mentioned and the Law on Education is going to be particularly critical in outlining to what extent non-formal, or professional, qualifications will be considered as part of the NQF. Is the Law on Education only going to create a new framework for the formal public education provision, or will it be a forward-looking framework law on lifelong learning that will address adult learning, and quality assurance of non-formal provision and qualifications, including learning offered by international providers and via the internet? With Ukraine in crisis and a growing priority given to employability, the case for professional qualifications is becoming stronger and stronger. The law on professional development of employees (January 2012) aims to regulate continuing training for professional purposes. Although this law states that certification should be based on (existing) educational standards, the type of certification is still to be clarified further.

Legislation is in the process of formulation and the legislative basis is growing. The Law 'on Professional Development', the Cabinet of Ministers' resolution on the NQF, the Law 'on the employers' organizations and associations', the Cabinet of Ministers' resolution 'on confirmation of the results of the informal vocational training for working professions', the Law 'on Higher Education', the Law 'on Employment', the Charter on the Quality Assurance Agency for Higher Education, the Law on Education and the Law on Vocational Education and Training are all contributing to the legal foundation for a reformed qualifications system. The new Law on Education and the Law on Vocational Education and Training will need to confirm how existing qualification types are allocated.

The institutional set-up for the new NQF is far from complete yet. Sector skills councils exist only as voluntary organizations. The new Law on Higher Education clearly identifies higher education institutions as competent awarding organizations, but also creates ambiguities around professional qualifications that could be associated with degrees. The competences of the QAA for higher education in regulating HE qualifications are not yet fixed. The Scientific Research Institute of Labour, under the Ministry of Social Policy in Lugansk, has been evacuated from the conflict zone and is no longer functional. It was leading the revision of the classifier of occupations, which has an important function in the regulation of the labour market, including salaries and pensions. The Ministry of Education is struggling with capacity problems and is now focusing its resources in implementing the law on higher education and preparing further decentralization. The Ministry of Social Policy has the policy lead on validation of non-formal and informal learning piloted with support of ETF, but there is no clear initiative to move to a more system-wide implementation, in spite of a new regulatory framework. The ambiguous position of the government to the NQF is clear from the fact that nobody seems to be in charge and following the dossier of the NQF implementation. The Federation of Employers is actively involved at many levels and has stepped in with the Institute of Professional Qualifications but would like a central body to coordinate the processes. Since the occupational standards are mainly driven by the voluntary work undertaken by companies, there does not seem to be any real validation process in place to assure the quality of the standards. There is a group of a hundred stakeholders from different organizations around the country that have been following the development of the NQF for a number of years with a keen interest to move things forward. New outcome-based qualifications and curricula are being developed but it is not yet clear how they can become part of the NQF. With the support of the EU Twinning Project for Vocational Education Reform guidelines have been develop to reference existing qualifications to the NQF, but there is not yet a central register for qualifications.

Level descriptors and learning outcomes

The ten-level framework presented by the Ministry of Education is seen as a framework for recognizing lifelong learning from the level of pre-school education up to Doctor of Sciences.

Levels 0 and 9 were preserved in spite of critical comments of the Council of Europe and ETF. The NQF starts more from an educational than an employment orientation, although the latter has been strengthened since employers joined the working group on the NQF in March 2011. The inclusion of Level 0 and Level 9 seem to be more ideological than practical. Level 9 is seen as essential for enhancing the scientific and research leadership in the country, building on a strong academic tradition that goes back to the Soviet period, and is seen as important to innovation and scientific discoveries. Level 0 is the first stage in the lifelong learning system and should ensure basic values on which the education system is built. The descriptors for knowledge, skills, communication, and authority and responsibility are complemented by integrating professional competences, bringing the essence of the different categories together. Among the other essential social dimensions of the NQF are the need to enhance democratization and social partnership in education.

Learning outcomes have been introduced on a pilot basis through occupational standards, and education standards for vocational and higher education. The Ministry of Education has supported the development of a new generation of 306 vocational education standards. These were agreed with the Federation of Employers of Ukraine and the Ministry of Social Policy, and approved by regulations from the Ministry of Education, 83 over the last two years. In 2013, fourteen standards for manufacturing industry, two standards for agriculture and processing industry, five standards for transport, thirteen standards for trade and services, five standards for construction, one standard for communications, two standards for the mining industry, and three standards for energy were developed.

There is a need to establish an NQF register and populate it with existing qualifications and accredit them. The NQF register should become a database of approved qualifications that are periodically reviewed, with new qualifications coming on the register continuously, while outdated qualifications are being taken off the register. The register would be a database available on the internet and therefore always up to date. The NQF register would be a logical tool for regulating provision and making sure it is up to date with the approved qualifications.

The identification of clear qualification types with unique descriptors expressed in their purpose, broad learning outcomes and credit ranges are seen as a useful tool to support the development of individual qualifications. For higher education, where many HEIs can act as awarding bodies, subject area benchmarks can in addition guide the development of institutional qualifications in line with the NQF.

Recognition of non-formal and informal learning and links to the NQF

The Law on Professional Development of Employees (Law No. 4312/January 2012) introduced the establishment of recognition centres by the State Employment Service. In order to verify the employee's professional qualification, the recognition centres should work with training centres of the State Employment Service, VET institutions, enterprises, and other providers licensed to carry out educational activities for certain occupations. The certificate to be awarded could be a certificate for specific professional skills or for improvement. The procedure for evaluation is determined by the central executive authority in the sphere of social policy in consultation with the central executive authority in the sphere of education.

The same year, a new Law on Employment was adopted that stated that unemployed people are entitled to have their skills assessed. This legislation was followed by other regulations providing further guidance for implementation.

- In May 2013, the Cabinet of Ministers adopted a resolution 'on the procedure for validation of blue-collar occupations, non-formal and informal learning outcomes' No. 340. This was followed in December 2013 by Ministry of Social Policy order 875/1776, which sets criteria for (private) assessment centres, and the ministerial order 886, which sets list of occupations for assessment.
- During 2013/14 a first pilot in Validation of Non-Formal and Informal Learning for Cooks was undertaken with support from ETF. The pilot showed that legislation alone is not enough to kick-start a system of validation and that there are there are still many aspects related to the preparation of candidates, assessors, the availability of standards and the appropriate certification processes that need additional work.
- Order No. 695 of the Ministry of Social Policy asked for the establishment of an inter-agency working group to address how enterprises, institutions and organizations could become compliant with the needs for the validation of non-formal and informal learning of blue-collar occupations.

In order to address the lack of appropriate standards, the Ministry of Labour and Social

Policy pledged to support the development of 200 occupational standards by August 2017. Using existing standards better is also an option. The existing system of assessing against welding standards could be used to start validation as all elements are already in place.

Beyond these very specific pilots, ETF has recommended the Ministry of Social Policy take account of the EU Recommendation on Validation (2012) that clearly identifies separate stages for identification, documentation, assessment and certification, rather than aiming just at certification. A rough road map has been developed to help to integrate the validation of non-formal and informal learning into other policy areas, including VET and lifelong guidance, rather than seeing it as a separate activity. The supply of validation of non-formal and informal learning (VNFIL) could be expanded gradually, based on a structured plan for a VNFIL system, working with sectoral and regional communities of practice. In the expansion, there needs to be a stronger focus on potential clients of the system, putting individuals at the centre rather than potential providers. Quality-assurance mechanisms and monitoring of VNFIL practices need to be strong to ensure that VNFIL develops a strong reputation and systematic training should start of VNFIL providers and practitioners.

In terms of progression between levels of the NQF, there is a need for further analysis of existing pathways in order to open up the system. The current qualifications are mainly aimed at young people and partial recognition, and transfer is not facilitated. Access to qualifications is still very much determined by formal entry qualifications. For vocational education, an amendment to the law on VET was adopted in November 2012 (Law No. 5498-VI [5498-17]) introducing the concept of 'input control' based on an assessment of learning outcomes. This should allow, for example, higher education graduates to get access to those courses of secondary VET that will give them additional knowledge, skills and competences, while providing exemption from those parts of the qualification and the curriculum that they have already covered. Introduction of this system is on-going and depends very much on the availability of appropriate VET standards based on learning outcomes, and modular provision.

Referencing to regional frameworks

One of the aims of the NQF is to connect Ukrainian qualifications internationally through the qualifications framework for the European Higher Education Area (the Bologna Framework) and the European Qualifications Framework for Lifelong Learning (EQF). This means that Ukraine will have to start preparing for the Bologna self-certification and, subsequently, whenever it becomes eligible for EQF referencing. The latter is not yet agreed. However, there is a reference to the EQF in the Association Agreement between the EU and Ukraine. The criteria for both processes are similar and the preparations for the self-certification process will inform the referencing process at a later stage. In order to identify the actions which are necessary to meet the requirements for self-certification, a first step can already be made through a critical self-assessment against the criteria. This could proceed and facilitate self-certification in two to three years' time.

In Ukraine, the use of qualifications in the labour market and in the education system is more strictly regulated than in the European Union. Referencing to the transnational frameworks will not lead to automatic recognition of Ukrainian qualifications abroad. Ukraine is a signatory of the Lisbon Convention and already a member of the ENIC/NARIC network for academic recognition and it is important to involve recognition colleagues in the NQF developments to ensure that the NQF will become a structurally-used tool for recognition.

Important lessons and future plans

This country chapter clearly shows that there has been a lot of progress in the Ukraine since 2013. The purpose of the NQF is becoming clearer and there is a stronger link with qualifications and how they are delivered. The next phase will focus on to what extent the NQF can move beyond the existing qualifications for formal public provision and how it will address professional qualifications, i.e. qualifications with a practical function in the labour market. The laws on education and on vocational education and training should clarify these issues. These laws will also affect the relationship between the NQF and existing classifiers of occupations and specializations. The institutional arrangements around the NQF are not resolved. There is some progress with the establishment of the QAA for higher education, with the Federation of Employers' initiative of the Institute of Professional Qualifications and with the growing number of sector skills councils, but these are just pieces of the puzzle and there is a serious issue of coordination.

Government is preoccupied with burning priorities and seems to have moved the NQF down the list of priorities. In this situation in particular, developments in higher education for which there is now a clear agenda with the new law on HE risk developing their own logic. All stakeholders are

aware of this and it is to be hoped the discussions on the laws on education and on VET will put these in the right perspective. Many stakeholders from higher education, from VET and from the private sector are active in actually developing initiatives, but there is very little international support available to guide them.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

A total of five different qualifications frameworks currently operate in the UK. England and Northern Ireland have the Framework for Higher Education Qualifications (FHEQ), established in 2001, the Qualifications and Credit Framework (QCF), established during 2006–2008, and the National Qualifications Framework (NQF) established in 2003. The Scottish Qualifications Framework (SCQF) has operated since 2001. In Wales, the Credit and Qualifications Framework of Wales (CQFW) has been in place since 2003. This multitude of frameworks is partly explained by the gradual devolution of powers to the UK nations, in particular giving more autonomy to Scotland and Wales. The many frameworks also reflect the needs and interests of sub-systems of education and training, explaining the existence of a separate FHEQ in England and Northern Ireland and the continued coexistence of the QCF and NQF. In contrast, Scotland and Wales have chosen to develop comprehensive frameworks covering all levels and types of qualifications. While these developments show that frameworks develop and change continuously, they also show that the visibility and overall impact of frameworks depends on the political context in which they operate. This is particularly visible in England where the original ambitions on behalf of the QCF (as a comprehensive framework) seem to be under pressure. An evaluation of the QCF will, it is hoped, help to clarify the future role of this framework. From the perspective of the new and emerging frameworks introduced throughout Europe following the European Qualifications Framework (EQF), the Scottish and Welsh frameworks are important learning cases. Both are comprehensive and have set themselves ambitious targets for lifelong learning. The evaluation of the Welsh framework, published in July 2014, points to the importance of integrating the NQF into mainstream education and training policies. While the CQFW is considered a useful tool, it tends to operate on the margins of the education and training system, not as a central entry and focal point. The Scottish framework, on the other hand, is considered a key tool for all stakeholders and is increasingly emerging as the most visible and consistent of the UK frameworks.

The relative complexity of the UK situation has led to the publishing of a brochure (Quality Assurance Agency for Higher Education et al., 2014) explaining to users how the frameworks interact, as well as how they link to the Irish framework.

England and Northern Ireland

Introduction

There is no single comprehensive NQF covering all levels and types of qualification in England and Northern Ireland. The QCF mainly addresses vocational and pre-vocational education and training (VET) areas; it does not include secondary general education (school leaving certificates) or higher education, qualifications which are covered by the framework for higher education (FHEQ). The QCF was referenced to the EQF in 2009 and the FHEQ to the European Higher Education Area framework in 2008. There is currently no formal link between these two frameworks, but comparison is aided by use of parallel level approaches supporting transparency.

The QCF is a regulatory credit and qualifications framework for England, Wales and Northern Ireland. It is presented as a reforming framework (Ofqual, 2014) covering all levels and types of qualification, although with the important exception of secondary and (most) higher education qualifications. The QCF recognizes 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; it was formally adopted – after a two-year trial period – in autumn 2008. The Office of Qualifications and Examinations Regulation (Ofqual) is responsible for the daily running of the framework (taking over from the now disbanded Qualifications and Curriculum Authority [QCA]). The FHEQ is not a regulatory framework but introduces some common objectives (benchmarks) to be pursued voluntarily and provides a language of

communication supporting transparency and the positioning of qualifications to each other.

Main policy objectives of the QCF and the FHEQ

While the policy objectives of the QCF and the FHEQ may be seen to complement each other, they also differ in important respects.

QCF

The QCF can be traced back to the framework for national vocational qualifications (NVQs) established in 1987. This framework – operating with five levels – was set up to deal with a diverse national VET system. As stated by Lester (Lester, 2011), 'the NVQ framework was developed to impose some order in this apparent chaos and classify qualifications according to their level and occupational sector' (Lester, 2011, p. 206). The NVQ framework was heavily criticized as being too rigid in its application and too narrow in its scope, mainly addressing work-based awards. In 2003, it was replaced by the 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 broader scope, addressing both work and school-based (vocational) awards. The QCF was designed, from 2003 and onwards, to replace the NQF and cover all publicly funded qualifications, including general and vocational education, but excluding degree-awarding institutions (higher education).[182] The QCF (tested between 2006 and 2008) has the same number of levels as the NQF (number of levels) but departs significantly by using (Lester, 2011, 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'.

The QCF sets out a series of strategic benefits of the new framework:

- The framework is simple to understand, flexible to use and easy to navigate;
- The framework is responsive, so 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 is characterized by:

- Introducing a regulatory and reforming approach;
- Integrating not only qualifications, but also units, placed on levels;
- Integration of credits;
- A direct link to individual learners (the learner achievement record).

When introduced, the framework was embedded in a wider political and institutional context and seen as an instrument directly supporting national education and training policy reform. In this respect, the framework can be described as 'tight' or 'strong', as it has been by some commentators (Tuck, 2007). The change of government policies since 2011 has directly influenced the role of the QCF. The 2014 evaluation of QCF raises questions on the regulating role of the framework and it is expected that a wide-ranging review will take place in the next year. The scope of the QCF also seems to be under review: while the framework was originally designed to include 'all publicly funded qualifications', Ofqual refers now (Ofqual, 2014) to adult vocational qualifications.

FHEQ

A separate FHEQ has been established for England, Northern Ireland and Wales. This framework has five levels and is based on the concept that qualification is awarded for demonstrated achievement. These levels are comparable to levels 4 to 8 of the QCF, although a different approach (descriptors) is used to describe them. 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 qualifications framework in the European Higher Education Area (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

182 By the end of 2010 all vocational qualifications were to be accredited to the QCF. At this point the QCF should have replaced the NQF for vocational qualifications. This has not happened. General educational qualifications – principally the general certificate of secondary education (GCSE) and the general certificate of education at advanced level (A levels) – continue to be located in the NQF. The NQF uses the same system of levels (three entry levels and eight qualifications levels).

and the EQF, concluding that, while they support the lifelong learning goals of the EQF, the group was not aware of any additional benefits which might accrue to the higher education sector at present by referencing the FHEQ to it. The group recommends that the position can be reviewed, taking into account development of the EQF and the Bologna Process and monitoring of levels of interest expressed by professional, statutory and regulatory bodies.

Stakeholder involvement

Responsibilities for regulating the QCF and NQF are distributed between the Office of Qualifications and Examinations (Ofqual) in England and the Council for Curriculum, Examinations and Assessment in Northern Ireland. The QCF was originally developed, tested and implemented by the QCA. When this body was disbanded following the change of government in 2011, Ofqual took over main responsibility for implementing the framework.

The responsibility for the FHEQ lies with the Quality Assurance Agency for Higher Education (QAA).

Framework implementation

The future role of the QCF is currently being discussed; the background document for the evaluation refers to practical experiences in implementing the QCF between 2008 and 2014. The following is stated regarding strengths of the QCF (Ofqual, 2014, p. 24):

- The QCF provides a structure within which the relative size and value of qualifications can be expressed using consistent terminology, providing the essential characteristics of a descriptive qualifications framework. Frameworks help learners to make informed decisions and assist in decisions on funding and recruitment;
- The existing level structure seems to work well. The current eight levels and three entry levels are suggested to be kept also in the future;
- The qualifications framework makes it possible to explain to learners how qualifications relate to each other and also ensures that awarding institutions design and market their qualifications accurately. This function needs to continue.

However, while these descriptive functions are seen as important, the consultation document raises fundamental questions over the reforming and regulatory role played by the QCF (Ofqual, 2014, p. 24): 'Our review of the QCF did not identify any issues with the use of descriptive frameworks, just with the prescriptive design features required by the regulatory arrangements for the QCF'. The main issues raised (Ofqual, 2014, pp. 24–25) are:

- While the structure of the QCF was designed to support credit transfer, in practice there have been very low levels of take-up for this and the projected benefits of a credit system have not been realised;
- Unit sharing[183] has not contributed to reducing the number of qualifications: after the introduction of the QCF the number of qualifications/units has increased by 10,000;
- There is a feeling that the requirement to unit share has damaged innovation and development;
- Regulatory arrangements impose an approach to assessment which requires students to satisfy all assessment criteria. This leads to over-assessment. The unit level focus is not easily compatible with synoptic and end-point assessment;
- The overall validity of qualifications is not sufficiently addressed. The focus on unit assessment draws attention away from overall validity;
- While these are the main points made by Ofqual, responses to the consultation will show whether other stakeholders share these views. Ofqual, in line with what is said above, suggests removing existing regulatory arrangements for the QCF and replacing them with 'general conditions' for qualifications currently administered by Ofqual.

Level descriptors and learning outcomes

The QCF comprises nine levels from entry (subdivided into entry levels 1 to 3) up to achievement at Level 8.

183 To reduce the overall number of qualifications, the QCF introduced the principle of 'unit sharing' requiring awarding organizations to share units adding up to qualifications. Shared units were supposed to be available in a 'unit bank' to be used as building blocks by awarding organizations. Ofqual reports that organizations are reluctant to engage in developing these shared units and that this lack of commitment has a negative impact on development and innovation. Whether this point of view is shared by stakeholders remains to be seen in responses to the current consultation.

The descriptors provide a general, shared understanding of learning and achievement at each of the nine levels. They 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, the existing level descriptors of the NQF, and a range of level descriptors from frameworks in the UK and internationally. The five upper levels are intended to be consistent with the levels of the FHEQ in England, Wales and Northern Ireland.

A level is an indication of the relative demand made on the learner, the complexity and/or depth of achievement, and the learner's autonomy in demonstrating that achievement. The level descriptors are concerned with the outcomes of learning and not the process of learning or the method of assessment. The indicators for each level are grouped into three categories:

- Knowledge and understanding;
- Application and action;
- Autonomy and accountability.

Apart from the levels, the QCF consists of a system of units and credits. One credit is based on ten hours of learning, regardless of where and when the learning took place. The QCF also includes principles for assembling qualifications from units, specifying which units must be achieved for each qualification. A set of principles for recognizing prior certified and non-certified learning is also included.

The learning outcomes approach underpins the English and Northern Irish qualifications systems. Actively promoted since the 1980s, this perspective is broadly accepted and implemented.

Validation of non-formal and informal learning and links to the NQF[184]

There is no comprehensive validation strategy or policy covering all sectors of education in England or Northern Ireland. Recognition of prior learning (RPL) is understood to refer to recognition of prior non-formal and informal learning. In relation to the QCF, RPL can lead to the award of units or full qualifications. In higher education, it is used for both admissions and exemptions, but most university regulatory frameworks limit RPL credit to between half and two-thirds of an award.

RPL is available through the QCF that awards formal qualifications. Individuals can apply for exemption from credits based on their work-based learning. Non-formal certificated learning (employer in-house training, adult and community learning or other types of certified training) can also serve to provide credit exemption. Unlike the QCF, the NQF does not include any reference to RPL. Further, the QCF enables a much wider application of RPL than the NQF, because its units of assessment allow for wider recognition of a set of achievements, as individuals do not have to demonstrate completion of a full qualification to be awarded credit.
In higher education, the fundamental premise of the FHEQ is that qualifications should be awarded based on achievement of outcomes and attainment, rather than years of study. The responsibility for RPL (formerly referred to as accreditation of prior [experiential] learning) lies with the awarding organization (as that is where ultimate responsibility for academic standards lies). Although there is no legislation that regulates RPL for higher education, there is a long tradition of RPL and encouraging mature students to participate. Since 2010, the QAA has introduced the quality code for higher education. This sets out the 'expectations' that all providers of UK higher education are required to meet (the code applies to England, Wales, Northern Ireland and Scotland). Each expectation is accompanied by a series of indicators that reflect 'sound practice', and through which providers can demonstrate they are complying. RPL is given significantly more emphasis in the new quality code and is specifically included in a chapter entitled 'assessment of students and the RPL' (Chapter B6, which refers only to experiential learning, not credit transfer) as well as in the chapter on admissions (Chapter B2).

Recording progress and achievement in non-accredited learning (RARPA) is another route by which individuals can have their prior learning validated. It relates mainly to adult and community learning and is compulsory in some specific projects, mainly related to second-chance education. Guidance on the application of RARPA has been prepared by the National Institute of Adult and Continuing Education which also provides events and training for practitioners in the application of RARPA.

There are also many qualifications not included in the QCF, NQF or FHEQ which can be achieved through validation, as it is up to the learning provider to decide what processes individuals are required to undertake to obtain the qualification in question.

184 This section draws mainly on input from European Commission et al., 2014.

Referencing to regional frameworks

The QCF was referenced to the EQF in February 2010 as a part of the overall UK referencing process. The relationship was established as shown in Table 61.

The FHEQ is not referenced to the EQF. While this option was discussed during the referencing process, agreement was not reached. As the five upper levels of the QCF are consistent with the FHEQ, an implicit and indirect link is established. Preparations are under way for presenting an updated referencing report to the EQF advisory group. Such a report would make it possible to revisit the linking of the FHEQ to the EQF.

Table 63 Level correspondence between the QCF and the EQF

QCF	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	
Level 3	Level 4
Level 2	Level 3
Level 1	Level 2
Entry level 3	Level 1
Entry level 2	
Entry level 1	

Source: QCDA et al., 2010.

Important lessons and future plans

The English and Northern Irish story demonstrates how qualifications frameworks continuously evolve and develop. It will be important to clarify the scope and the role to be played by the QCF. Experiences of the credit transfer element of the QCF will also be important outside the UK, as will those with a unit-based approach and the way these are linked to assessment. Existing issues regarding the overlap between the QCF and the original NQF also need to be clarified, for the benefit of learners and employers.

The issue of a comprehensive qualifications framework has yet to be raised systematically in England. The fact that many European countries are now moving towards comprehensive frameworks indicates that the new generation of framework development in response to the EQF actually goes beyond the scope of pioneering frameworks like that of England and Northern Ireland.

Main sources of information

[URLs accessed 17.11.2014]

Ofqual acts as EQF national coordination point: http://www.accreditedqualifications.org.uk/office-of-qualifications-and-examinations-regulation-ofqual.html
The Council for the Curriculum Examinations and Assessment Northern Ireland acts as the national coordination point for Northern Ireland: http://www.rewardinglearning.org.uk/

List of abbreviations

CQFW	Credit and Qualifications Framework of Wales
EQF	European Qualifications Framework
FHEQ	Framework for Higher Education Qualifications
Gcse	General Certificate of Secondary Education
NOS	national occupational standards
NQF	national qualifications framework
NVQ	national vocational qualifications
Ofqual	Office of Qualifications and Examinations Regulation
QAA	Quality Assurance Agency for Higher Education
QCA	Qualifications and Curriculum Authority
QCF	Qualifications and Credit Framework
RARPA	recording progress and achievement in non-accredited learning
RPL	recognition of prior learning
VET	vocational education and training

References

[URLs accessed 10.11.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report UK (England and Northern Ireland).* http://libserver.cedefop.europa.eu/vetelib/2014/87079_UK_EN_NI.pdf

Lester, S. 2011. The UK qualifications and credit framework; a critique. *Journal of vocational education and training,* Vol. 63, No 2, pp. 205–216. http://www.sld.demon.co.uk/qcf.pdf

Ofqual 2014. *A consultation on withdrawing the regulatory arrangements for the qualifications and credit framework.* Coventry: Ofqual. http://ofqual.gov.uk/ofdoc_categories/consultation-docs/withdrawing-the-regulatory-arrangements-for-the-qualifications-and-credit-framework-july-2014/

QCDA et al. 2010. *Referencing the qualifications frameworks of the United Kingdom to the European qualifications framework.* London: QCDA. http://scqf.org.uk/content/files/europe/QFUK_Joint_Report_-_Updated_March_2010.pdf

Quality Assurance Agency for Higher Education et al. 2014. *Qualifications can cross boundaries: A rough guide to comparing qualifications in the UK and Ireland.* Gloucester: Quality Assurance Agency for Higher Education. http://www.qaa.ac.uk/en/Publications/Documents/qualifications-can-cross-boundaries.pdf

Tuck, R. 2007. *An introductory guide to NQFs: Conceptual and practical issues for policy-makers.* http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/instructionalmaterial/wcms_103623.pdf

Prepared by:
The European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts

Scotland

Introduction

The SCQF promotes lifelong learning in Scotland. The framework was originally implemented in 2001, but has since been gradually revised and refined. SCQF governance is organized as a company (see below 'Stakeholder involvement'), 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, 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 (twelve) levels and types of qualification.

Main policy objectives

The objectives pursued by the SCQF are to:

- support lifelong learning;
- clarify entry and exit points for qualifications and programmes of learning at whatever level;
- show learners and others possible routes for progression and credit transfer;
- show the general level and credit (size) of the different types of Scottish qualifications;
- enable credit links to be made between qualifications or learning programmes to assist learners to build on previous successes.

It will do this by making the overall system of qualifications and relevant programmes of learning easier to understand and providing a national vocabulary for describing learning opportunities. The SCQF has a clear ambition to promote integration and progression across levels and types of qualification. While the existence of a common set of descriptors and criteria is seen as an important precondition, the development of a fully integrated framework is seen as a long- term task. As one of the oldest comprehensive NQFs in Europe, the SCQF illustrates the potential of frameworks as instruments for development and, to some extent, reform. The SCQF has been described (Raffe, 2009, 2011) as a 'communication framework' without strong regulatory functions. Experiences suggest that the distinction between 'communication' and 'reform' is too simplistic; the SCQF seems gradually and increasingly to operate from a middle position where it acts as a reference point for revision and renewal of curricula and education and training in general. This is closely related to the important role played by learning outcomes throughout Scottish education and training, supported and made possible by the NQF. As important is the role played by the SCQF as a platform for dialogue between stakeholders and its ability to initiate and sustain a 'common conversation'.

The SCQF is an 'open framework' in the sense that it explicitly addresses the private sector and employers, and encourages these to have their

training provisions accredited and included under the framework. The benefits of such inclusion are presented on the SCQF website:[185]

- It gives in-house training national recognition and a comparison with nationally recognized qualifications;
- It helps employees to map their learning pathways and gain personal recognition for what they have achieved. It also allows them to progress into more advanced learning Programmes, whether in-house or via an external learning or training provider;
- It encourages employees to undertake learning, raises morale and increases company loyalty;
- It promotes skills development and helps support effective skills utilization.

As is generally the case in the UK countries, the unit-based approach used in Scotland seeks to aid inclusion of qualifications of differing character and size. Normal procedures applied for the framework as a whole can also be used for qualifications outside the traditional public sector. Much of the SCQF database contains what can be termed non-traditional qualifications estimated by the SCQF in 2013 to be approximately 400 out of 1,500), while several 'international qualifications', notably awarded by multinational information and communications technology companies, are included in the SCQF.

Stakeholder involvement

The framework is maintained by the SCQF partnership, a company limited by guarantee and also a Scottish charity. The partnership is made up of the Scottish Qualifications Authority, Universities Scotland, the Quality Assurance Agency, the association of Scotland's colleges and Scottish ministers. Employers are also represented in the SCQF partnership board.

A high degree of ownership can be observed with the SCQF, in all sectors of education and training as well as by labour market stakeholders. This reflects how the framework, established in 2001, brought together three previously developed frameworks covering different types and levels of qualifications, ranging from higher education institution qualifications and Scottish vocational qualifications, to the national and higher national qualifications.

185 See http://scqf.org.uk/employers/employer-guide/ [accessed 13.11.2014].

Framework implementation

Independent evaluation carried out in 2013 looked at the level of awareness, perception and understanding of the SCQF among learners, parents, teaching staff and management (SCQF partnership, 2013). Based on a combination of focus groups (27), online questionnaires (1,444 responses), face-to-face interviews (250) and in-depth interviews (16), it gave valuable insight into the level of implementation of the framework. Overall results are encouraging and demonstrate that the SCQF is widely recognized by learners, parents and education professionals in Scotland. The evaluation is also important outside Scotland as it provides research-based documentation on the impact of the framework on end-users. The following main findings were reported for the learners:

- Fifty three per cent of all learners reported that they are aware of the SCQF. The level of knowledge varied between the different parts of education, with the highest levels found in schools (63 per cent) and the lowest in community adult education. Some learners are aware of the qualifications levels, but do not associate them with the SCQF as such, indicating that the actual level of awareness is higher than 53 per cent;
- Those learners aware of the framework (66 per cent) have reasonable understanding of its principles and purposes. Learners are particularly aware of the levels, the credit points and the role of the framework in visualizing progression and transition throughout education and training;
- Half of the learners aware of the framework have actively used it. Those in schools are most likely to use it, to support them in planning future education and training careers. The framework is only partly used in further education and in community adult education, reflecting low levels of awareness.

For teaching staff and school management, the following main findings were reported:

- There is a universal awareness of the SCQF among management and teaching staff. The level of detailed understanding varies, however, being the highest among guidance staff and in schools where the framework has been actively presented and promoted;
- The level of understanding of the SCQF is lowest among classroom teachers, as is appreciation of the added-value offered by the framework;
- The overall perception of the framework is positive and teaching staff in particular point

to the role of the framework in identifying levels and pointing to progression routes. Specific benefits mentioned are that the framework helps learners to understand better the qualifications they are working towards and to identify progression. The framework is also perceived as promoting a comprehensive picture, including academic, vocational and general qualifications.

Among parents, the following findings were reported:

- Around a third of the parents interviewed have heard of the SCQF. Most had developed their awareness through an education institution (53 per cent), while 47 per cent reported becoming aware of the framework through their children;
- Only 8 per cent of parents interviewed have been actively using the framework;
- Virtually everybody participating in the interviews recognized the added value of the SCQF and supported the suggestion that parents should be more actively informed about the framework and its potential role in supporting their children's education choices.

The findings of the evaluation point to a number of areas for future development of the framework and some recommendations:

- The role of the SCQF levels in providing a reference for all qualifications must be further promoted;
- All members of the SCQF partnership (see above) should be involved in raising further awareness of it;
- The positive effect of using social media to increase awareness should be developed;
- The SCQF brand should be strengthened;
- Toolkits should be developed for different purposes, supporting practical use of the different elements of the framework.

The 2013 evaluation confirms that the SCQF has reached an advanced state of implementation and that overall awareness of the framework is relatively high.

Level descriptors and learning outcomes

The SCQF has twelve levels ranging from access at SCQF Level 1, up to doctorate at Level 12. The different levels indicate the level of difficulty of a particular qualification; increases in levels relate to factors such as:

- the complexity and depth of knowledge and understanding;
- Links to associated academic, vocational or professional practice;
- The degree of integration, independence and creativity required;
- The range and sophistication of application/practice;
- The role(s) taken in relation to other learners/workers in carrying out tasks.

Scottish level descriptors were revised in 2012. This does not represent a radical departure from the past approach but can be seen as part of continuous evolution of the framework based on experiences gained. The three access (entry) levels are seen as important in addressing the needs of individuals with particular learning needs and as an important part of overall lifelong learning strategy. For some, the access level can function as a way back to formal education and training.

It is a requirement of the framework that all learning to be included in it is described in terms of learning outcomes.

Validation of non-formal and informal learning and links to the NQF[186]

An overarching validation methodology known as 'recognition of prior learning' (RPL) has been linked to the implementation of the SCQF. RPL in the Scottish context goes beyond the validation of non-formal and informal learning, to also include prior formal learning.

Two national RPL networks ensure that there are links between relevant stakeholders; one run by the SCQF partnership and one by the Scottish higher education RPL network, supported by Quality Assurance Agency for Higher Education (QAA) Scotland and Universities Scotland. The SCQF RPL toolkit was initially published in March 2010 and then reprinted in December of that year, with over 1,000 copies issued. A review of use of the toolkit began with a testing phase (carried out by Learning Link Scotland) to see if it was fit for purpose for different types of individuals. The second phase involved full consultation (an online survey and focus group with stakeholders) in 2012/13. As a result of the review, there are plans to develop online RPL guides, both for learners and providers, to be finalized in second half of 2014 (SCQF, 2014).

RPL can be used to award credits towards qualifications or in admissions processes. It is also recognized as a method of supporting personal

186 This section draws mainly on the European Commission et al., 2014.

development planning, career development and to form bridges between non-formal/informal learning and formal education and training. The SCQF handbook describes the two types of RPL possible in Scotland: formative and summative recognition. Formative recognition provides the possibility for the learner to benchmark their learning against the SCQF level descriptors. This does not result in the award of SCQF credit points. Summative recognition results in the award of SCQF credit points and involves formal assessment of the learner's prior informal or experiential learning. This may also be referred to as the accreditation of prior experiential learning.

RPL can be used for the assessment of units in the following types of qualification:

- Higher national certificate and diplomas (except graded units);
- Professional development awards;
- Scottish vocational qualifications;
- National progression awards;
- National certificates;
- Awards/professional development awards.

Some units and assessments cannot be achieved through RPL, such as where there are regulatory, professional or other statutory requirements. The QAA has introduced a new quality code for higher education, which is 'the definitive reference point for all UK higher education providers'. This new quality code replaces the set of national reference points known as the academic infrastructure and places major emphasis on RPL. QAA Scotland is working with the Scottish higher education sector to develop a national framework for RPL.

Table 64 Level correspondence between the SCQF and the EQF

SCQF	EQF
Level 12	Level 8
Level 11	Level 7
Level 10	
Level 9	Level 6
Level 8	
Level 7	Level 5
Level 6	Level 4
Level 5	Level 3
Level 4	Level 2
Level 3	Level 1
Level 2	
Level 1	

Source: QCDA et al., 2010.

Referencing to regional frameworks

The SCQF was referenced to the EQF in February 2010 as part of the overall UK referencing process as follows:

Main sources of information

Scottish credit and qualifications framework partnership acts as national coordination point for Scotland. http://www.scqf.org.uk/ [accessed 13.11.2014].

List of abbreviations

CQFW	Credit and Qualifications Framework of Wales
EQF	European Qualifications Framework
Fheq	Framework for Higher Education Qualifications
NQF	national qualifications framework
QAA	Quality Assurance Agency for Higher Education
QCF	Qualifications and Credit Framework
RPL	recognition of prior learning
SCQF	Scottish Qualifications Framework
UK	United Kingdom

References

[URLs accessed 10.11.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report UK-Scotland.* http://bit.ly/1N447ps

QCDA et al. 2010. *Referencing the qualifications frameworks of the United Kingdom to the European qualifications framework.* London: QCDA. http://bit.ly/1Gk9V6w

Quality Assurance Agency for Higher Education et al. 2014. *Qualifications can cross boundaries: a rough guide to comparing qualifications in the UK and Ireland.* Gloucester: Quality Assurance Agency for Higher Education. http://bit.ly/1YQJUXZ

Raffe, D. 2009. *National qualifications frameworks in Ireland and Scotland: A comparative analysis.* Paper presented at the European conference on educational research, Vienna, 28–30 September 2009. http://bit.ly/1MJa5cm

Raffe, D. 2011. The role of learning outcomes in national qualifications frameworks. Bohlinger, S.; Münchhausen, G. (eds), *Validierung von Lernergebnisse* [Recognition and validation of learning outcomes]. Bonn: BIBB, pp. 87–104.

SCQF. 2014. *Guide to recognition of prior learning (RPL): Introduction.* http://bit.ly/1hdN067

SCQF partnership. 2013. *Final report evaluations of the awareness, perceptions and*

understanding of the SCQF amongst learners and the understanding, awareness and perceptions of the framework amongst management and teaching staff in schools. http://bit.ly/1KOfRbZ

Wales

Introduction

The CQFW was adopted in 2002 and launched in 2003. Its purpose is to act as an overarching structure to provide clarity for existing education systems. It includes all formal and regulated qualifications (including higher education) as well as quality assured lifelong learning (QALL). The CQFW thus brings together all recognized learning into a single unifying, inclusive structure incorporating all kinds of learning, whether formal, non-formal or informal. The CQFW can be seen as a second generation framework departing from sector frameworks established from the 1990s and onwards. In certain areas, for example for general upper secondary qualifications (GCSEs), the Welsh framework overlaps with those of England and Northern Ireland. In recent years, divergences between England and Wales in general qualifications have highlighted the need to review existing strategies, including the role of the CQFW.[187] Evaluation of the CQFW was carried out in 2014 (Welsh Government, 2014) focusing on strengths and weaknesses of the framework. The CQFW is seen as playing a generally positive and constructive role in the Welsh qualification landscape and there is support among all stakeholders to continue the work started a decade ago.

Main policy objectives

The CQFW is positioned as a key part of Wales' lifelong learning policy and strategy. It has five key goals, to:

- enable everyone to develop and maintain essential skills;
- encourage people to become lifelong learners;
- exploit the knowledge in business and educational institutions;
- encourage business and workers to gain new skills;
- help people within their communities to develop new skills.

The CQFW allows learners to explain to others the relative value of their award and enables them to transfer their knowledge and skills between career and learning paths. The CQFW is based on three principles:

- Expression of achievement as learning outcomes;
- Demands made by that learning on the learner (level);
- The volume of learning achievements (credit).

The framework supports all recognized, credit-based formal education and training learning within:

- higher education;
- regulated general and vocational qualifications.

The links to these two pillars of education and training mean that the CQFW enables any learning post-14 to be formally recognized. However, the CQFW is not in itself a regulatory mechanism; any regulatory requirements are supplied through its relationship with regulating bodies. The framework is unit-based; it defines one credit as ten hours of learning time and has nine levels (the lowest subdivided into three) with supporting levels descriptors.

The system for QALL forms a third and integrated pillar of the CQFW. It takes as its starting point that all learning, wherever and whenever it takes place, should be valued and recognized, making the Welsh framework one of the few European frameworks where validation and/or recognition of prior learning (RPL) is fully integrated. In recent years much effort has been invested in putting this system into practice. While enjoying some success, the number of individuals actually using this opportunity has been relatively limited and there is currently discussion on how to adjust the approach, for example by reducing the complexity of procedures.

The CQFW can be considered an 'open framework' in the sense that its unit-based approach at the outset is oriented towards many awarding bodies and education and training formats. This aids inclusion of units developed (for example) by the private sector and as part of continuing and enterprise-based education and training. Consequently, the procedures and quality criteria applied within QALL can exemplify how a NQF can establish links beyond traditional, formal education and training.

187 See http://bit.ly/1JFOBsi [accessed 13.11.2014].

Stakeholder involvement

The 2014 evaluation points out that the CQFW is particularly well established in certain sectors, notably higher education and adult and community learning. For others, however, engagement was lower. The framework is currently governed by the Welsh Government, but stakeholders point out the need to broaden its basis by linking more directly to relevant employment and qualifications bodies (for example Career Wales and Qualification Wales). Increased involvement of employer representatives was also seen as relevant and the governing model of the Scottish qualifications framework has been referred to as an option (a charitable educational trust involving a broad selection of stakeholders).

Stakeholders generally perceived engagement with the framework to be low among employers and most learners; they also saw the need to increase awareness of – and buy-in to – the framework across education and training sectors. This mixed assessment was balanced by the fact that stakeholders are generally aware of the CQFW and its roles and considered it a useful information tool, providing coherent understanding of Welsh qualifications. Several stakeholders point out that the framework is currently not a driver for policy in Wales and that there is a need to strengthen its overall role and visibility. However, both student and employer representatives state that CQFW is not 'on their radar' and has thus played a limited role in education and training policy developments.

Framework implementation

When the framework was adopted in 2002, a ten-year implementation plan (2003– 2014) was agreed. This reflected the view that framework implementation takes time and requires a long-term development perspective. The evaluation carried out in 2013/14 is also of considerable interest outside Wales as it offers a good insight into the challenges involved in setting up NQFs. The main strengths of the CQFW were summarised as follows:

- Stakeholders from all sectors consider the CQFW to have played a main role in allowing greater validation of non-formal and informal learning (recognition of prior and informal learning). The QALL pillar of the framework is considered to have had an impact on disadvantaged learner groups and contributed to overall lifelong learning strategies. The framework was generally seen to have raised learner aspirations and contributed to promoting progression. The opportunity to add new units to the QALL pillar of the framework is seen as beneficial to its flexibility and as a condition for helping special-needs groups;

- Stakeholders considered the CQFW to have supported recognition of non-mainstream provisions, enabling providers to extend their overall offers to the benefit of learners. They believed the framework made it possible to develop these non-mainstream provisions consistently, referring to the levels and the descriptors of the framework;

- The CQFW is seen as supporting a 'common currency' of credit that has made it easier to articulate and communicate achievements across sectors, levels and geographic areas. The levels descriptors are considered to support consistency and trust between stakeholders, allowing learners to understand better what their qualifications are worth and to map various progression pathways;

- A broad range of stakeholders appreciated the flexibility offered by the unit-based approach. These stakeholders, including awarding bodies, sector skills councils, training providers and third-sector organizations, pointed to this approach as allowing for rapid renewal of provisions and meeting the needs of a diverse group of learners. The framework, by providing an overview, also made it possible to avoid duplication of units and qualifications, thus providing economic benefit;

- Several stakeholders point to the role played by the framework in supporting transfer and progression outside Wales, in particular in relation to the rest of the UK.

The main weaknesses of the CQFW were considered to be:

- Most stakeholders believe that the potential of the CQFW has not been used in practice as much as originally hoped. Despite having been used in some sectors, the 'concept has not acquired great scale'. Despite some work carried out by the Welsh Government, the framework has yet to reach the general public, employers and learners. The use of complicated language (written for awarding institutions) and lack of guidance on the benefits of the framework may have contributed to this lack of visibility. Stakeholders highlight the bureaucracy surrounding the framework as one factor preventing its wider use. Employers in particular ask for a framework which is easier to understand and simpler to approach.

The arrangements for validating non-formal and informal learning (see also below) are considered by some to be too complicated and run the risk of discouraging potential users;

- It is generally concluded that too few employers engage in or are aware of the framework. While this reflects a general lack of visibility of the CQFW, some stakeholders highlight that the English-Northern Irish QCF is the dominant framework in the UK and that some employers may prefer to relate to this and not limit themselves to Wales;

- Some stakeholders point out that credit accumulation and transfer has not played the role it originally was expected to: learners and employers seem to be more focused on full qualifications than credits in the current situation;

- The most important criticism was directed towards the Welsh Government and the lack of 'strategic investment' in the framework. It is noted that recent policy documents and statements do not place much focus on the role of the framework in the wider Welsh education and training landscape. It was, for example, not prominent in the 2013/14 review of qualifications (Welsh Government, 2014). It was pointed out that the recent disbanding of the credit common accord forum impacted on the role and profile of the CQFW, in particular as a wide range of key stakeholders were involved, lending credibility to the framework.

- Stakeholders responding to the evaluation generally recognize the role played by the CQFW as a unifying framework; there is support for its development and implementation. Increasing divergences between the Welsh and the English education and training systems offers an opportunity for the CQFW to present the Welsh qualification landscape and to inspire its development and reform. To strengthen the role of the CQFW will, however, require that the Welsh Government contributes raising its profile as an integrated part of the education and training policy landscape.

Level descriptors and learning outcomes

There are nine levels in the CQFW: entry plus eight levels. There are common level descriptors which apply to all types of learning programmes and qualifications.

All qualifications and learning programmes within the CQFW are based on learning outcomes and must have quality-assured assessment of these outcomes. The CQFW uses two measures to describe qualifications:

- The level of the outcomes of learning;
- The volume of outcomes, described by the number of CQFW credit points.

Validation of non-formal and informal learning and links to the NQF[188]

The CQFW, adopted in 2002, has sought to integrate fully validation of non-formal and informal learning from the start. The QALL pillar of the framework offers a mechanism to recognize (certify knowledge and/or skills gained through non-formal and informal learning. This includes adult and community learning, training undertaken in the workplace, and informal, specialist, interest or hobby-based learning. The learning must be identified in recognized units, which can only be awarded by a 'recognized body'. There is a clear process for developing and drafting units, and training is available from recognized awarding bodies on how to write them. Draft units submitted to a recognized body are subject to a process of scrutiny including experienced expert review, after which there may be revisions before the unit is submitted for approval and recognition. Once approved, it is available for use by any recognised awarding body. There are over 1,000 units registered.

Alongside this, learners in Wales can also make use of the other validation routes available in the UK: RPL in VET, continuing VET and higher education, and recognizing and recording progress and achievement in non-accredited learning, as well as procedures to access higher education courses (see the UK-England, Northern Ireland country fiche for further information on these).

None of these initiatives can be considered a formal strategy/policy as they are methods/guidelines within specific education and training sectors: adult and continuing education, higher

188 This section draws mainly on the European Commission et al., 2014.

education, non-accredited adult learning. Validation is generally devolved to the learning provider, or at times to departments within the learning provider. Sectoral initiatives in the private sector or third sector are focused on providing guidance and frameworks for validation, through the use of QALL. RPL is conducted using same curricula/ standards as those of formal education.

According to stakeholders interviewed for the 2014 validation inventory, some potential obstacles to further development of RPL include lack of awareness among learners of RPL opportunities, lack of expertise among providers, or lack of confidence to carry out RPL. It is also possible that the lack of dedicated funding for RPL (except in the higher education sector) is a disincentive to what can be perceived as a process that is difficult to administer and time-consuming (for both the individual applicants and the providers).

Referencing to regional frameworks

The CQFW was referenced to the EQF as a part of the overall UK referencing process in February 2010.

Table 65 Level correspondence between the CQFW and the EQF

CQFW	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	
Level 3	Level 4
Level 2	Level 3
Level 1	Level 2
Entry level 3	Level 1
Entry level 2	
Entry level 1	

Source: *QCDA et al., 2010.*

Important lessons and future plans

The role to be played by the CQFW depends on a number of factors. The follow-up to the 2014 evaluation by the Welsh Government will indicate whether the framework will be given higher priority and visibility. Stakeholders seem to be in favour of a model closer to the Scottish qualification framework, where they are more directly involved in its running. The future of the CQFW also depends on the development of the qualifications framework in England and whether evaluation of the QCF will result in clarification of the future role of these frameworks. The presentation of the CQFW on its dedicated website is – from an external user point of view – very complicated. While containing much information, the website is organised in a way which makes it hard for learners, parents or employers to grasp the essence and added value of the CQFW.

Main sources of information

The Welsh Assembly Government acts as national coordination point.
Welsh Government, 2012.

List of abbreviations

CQFW	Credit and Qualifications Framework of Wales
EQF	European Qualifications Framework
FHEQ	Framework for Higher Education Qualifications
Gcses	General Certificate of Secondary Education
NQF	national qualifications framework
QALL	quality assured lifelong learning
QCDA	Qualifications and Curriculum Development Agency
QCF	Qualifications and Credit Framework
RPL	recognition of prior learning
UK	United Kingdom
VET	vocational education and training
WBQ	Welsh baccalaureate qualification

References

[URLs accessed 13.11.2014]

European Commission; Cedefop; ICF International. 2014. *European inventory on validation of non-formal and informal learning 2014: Country report UK, Wales.* http://libserver.cedefop.europa.eu/vetelib/2014/87081_UK_WA.pdf

European Commission et al. 2014. *European inventory on validation of non-formal and informal learning 2014. Country report: UK Wales.* http://www.cedefop.europa.eu/en/events-and-projects/projects/validation-non-formal-and-informal-learning/european-inventory

QCDA et al. 2010. *Referencing the qualifications frameworks of the United Kingdom to the European qualifications framework.* London: QCDA. http://scqf.org.uk/content/files/europe/QFUK_Joint_Report_-_Updated_March_2010.pdf

Quality Assurance Agency for Higher Education et al. 2014. *Qualifications can cross boundaries: A rough guide to comparing qualifications in the UK and Ireland.* Gloucester: Quality Assurance Agency for Higher Education. http://www.qaa.ac.uk/en/Publications/Documents/qualifications-can-cross-boundaries.pdf

Welsh Government. 2012. The Credit and Qualifications Framework for Wales (CQFW) enables recognition and comparison of achievements from all types of education and training activity. http://bit.ly/1FHLANe

Welsh Government. 2014. Review and evaluation of the impact of the Credit and Qualifications Framework for Wales (CQFW). http://wales.gov.uk/statistics-and-research/evaluation-impact-credit-qualifications-framework-wales/?lang=en

Prepared by:

European Centre for the Development of Vocational Training (Cedefop) in collaboration with national experts.

UNITED REPUBLIC OF TANZANIA

Introduction

The Tanzania Qualifications Framework (TzQF) was proposed in 2009 by the Ministry of Education and Vocational Training and the Tanzania Commission for Universities (TCU) (TCU, 2010; SADC and UNESCO, 2010, p. 20). A comprehensive framework covering all sectors of education and training, the TzQF builds on the experience gained from the development of the already existing sub-framework for technical and vocational education and training (TVET). Although implementation of the TzQF is still in progress, the government is confident that the framework will catalyze systemic change in the Tanzanian education and training landscape.

Unemployment is a major problem in Tanzania. More than 10 per cent of the population is unemployed; among urban youth, particularly young women, the figure is even higher (OECD, 2012). A number of TVET programmes have been initiated to address this problem. However, the present TVET system in Tanzania is deficient in several respects. These were highlighted by the recently conducted education sector analysis (Government of Tanzania, Pôle de Dakar and UNESCO Institute of Statistics, 2011), which found that the system in its present state is unable to cater to the diverse learning needs of a heterogeneous target population.

TVET in Tanzania is divided into vocational education and training (VET) and technical education and training (TET), involving two ministries and three different parastatal agencies. This fragmentation results in a lack of coordination among programmes and providers. There is little opportunity for horizontal and vertical mobility between VET, TET and university education or between basic and advanced levels of training. These shortcomings are increasingly making themselves felt as ever greater numbers of employers in the country and the region demand proven demonstration that graduates have mastered the expected learning outcomes of training courses. There is also a pressing need to make learning outcomes internationally comparable so as to facilitate learner and worker mobility (Sabaya, 2006).

Main policy objectives

The TzQF aims to create a unified national education and training system which:

- defines nationally valid standards regarding the knowledge and skills required for entry into employment, self-employment and further education and training;
- features agreed and standardized principles, practices, procedures and terminology;
- makes learning achievements (credits) and qualifications recognizable, comparable and transferable across institutions, levels, learning modes and borders, both within and outside the Southern African Development Community (SADC);
- enables the establishment of a national education and training database accessible to all stakeholders (TCU, 2010).

The above policy objectives are aligned to the TVET qualifications sub-framework developed by the National Council for Technical Education (NACTE). They are also linked to the policy on TVET, which was developed in 2009 with the aim of rectifying the deficiencies in the TVET system (SADC and UNESCO, 2010, p. 5).

Stakeholder involvement and framework implementation

The TzQF was established through a participatory process which brought together a wide range of stakeholders involved in the provision of education and training and the awarding of certificates (TCU, 2010). The institutional set-up for the TzQF is not yet complete. In line with international best practice, Tanzania intends to establish a national qualifications authority, the TzQA, which will create and maintain an electronic register for all TzQF qualifications and providers. Establishment of the TzQA will be enacted by parliament. The TzQA act will, among other things, stipulate the responsibilities of existing bodies such as the National Examinations Council of Tanzania (NECTA), the Vocational Education and Training Authority (VETA), NACTE, the TCU and professional bodies with respect to the TzQF (ibid.).

The VETA was established as an autonomous government agency to promote access to vocational education and training for disadvantaged groups, including women and people with disabilities (SADC and UNESCO, 2010, p. 5). NACTE coordinates institutions which deliver TVET courses leading to certificates at technician, semi-professional and professional levels (excluding universities and affiliated colleges) (NACTE, 2013). The VETA and NACTE will together be responsible for quality control and assurance, accreditation of institutions and approval of programmes (Muluga, 2012). The TzQA will in due course establish standards-setting committees for all TzQF programmes in collaboration with the regulatory bodies under its jurisdiction.

Level descriptors and learning outcomes

The ten levels of the TzQF cover the Tanzanian education and training system in its entirety (TCU, 2010). As well as targeting all areas of formal education and training, the TzQF also makes provision for out-of-school or non-formal education, open and distance learning, and e-learning. TzQF qualifications are classified into the following categories: (a) schools; (b) TVET; (c) universities; and (d) professions. Levels are differentiated according to the breadth, depth and complexity of the knowledge and skills imparted. These are described in terms of learning outcomes, which are designed to give both learners and employers a clear understanding of what the holder of a particular qualification can be expected to know and do. In this way, course content will be kept maximally relevant to the needs of the labour market. All TzQF qualifications are linked so as to facilitate learner mobility and progression. Mechanisms are provided for the recognition of prior learning (RPL).

Recognition and validation of non-formal and informal learning and links to the NQF

The TzQF incorporates horizontal and diagonal pathways to facilitate articulation within and between both academic and vocational streams (TCU, 2010). Special attention will be given to helping education and training institutions to better articulate their entry requirements, awards of credits and qualifications. Institutions will be required to publicly declare entry requirements for qualifications programmes in order to register them on the TzQF.

The adoption of credit accumulation and transfer (CAT) is expected to open doors for progression at all levels of education and training. Detailed implementation rules for CAT are presented in the TzQF draft. CAT may occur within a field of study and across institutions and countries. Thus, a student following a university path will be able to switch to a technical path and vice versa (ibid.).

Access to qualifications in Tanzania is still very much determined by formal entry requirements. However, the creation of progression pathways and RPL mechanisms through the TzQF is intended to facilitate access to training courses for learners who do not meet the full entry requirements. The TzQF draft proposes a number of RPL assessment methodologies, including interviews, challenge examinations, assignments or projects, skills demonstrations, validation of previous qualifications, and combinations of the above. The RPL process usually entails the following steps:

1. Identifying the qualifications, unit standards or learning outcomes for which a candidate believes he/she will meet the requirements;
2. Matching the candidate's skills, knowledge and experience with those requirements;
3. Assessing the candidate using appropriate methods;
4. Crediting the candidate for the skills, knowledge and experience he/she has attained (TCU, 2010).

Referencing to regional frameworks

The TzQF is expected to serve as an important component of the proposed Southern African Development Community (SADC) Qualifications Framework. The SADC framework aims to harmonize qualifications between SADC countries in order to facilitate the mobility of learners and workers in the region. This resonates with the TzQF's goal of integrating all levels and sectors of the Tanzanian education system and relating it to the education systems of other SADC member states (TCU, 2010).

Important lessons and future plans

The development of the TzQF represents a big step forward from the previous framework which focused on the TVET sector only. The division of responsibilities between the TCU and the Ministry of Education and Vocational Training is becoming clearer, but still needs fine-tuning. The TCU believes that the TzQF now needs to do the following things in order to be successful:

Table 66 Tanzania Qualifications Framework and associated qualification titles

TzQF levels	School sector	Technical and vocational education and training (TVET) sector*		University education sector	Professions	Lifelong learning
		Vocational	Technical			
10				Doctoral degree		Articulation – Horizontal and diagonal Articulation credits, credit transfer, RPL, also additional qualifications that facilitate mobility and access
9			Master's (technology) degree	Master's degree Postgraduate certificate, Postgraduate diploma	Professional Level IV	
8		Vocational bachelor's degree	Bachelor's (technology) degree	Bachelor's degree	Professional Level III	
7		Higher vocational diploma	Higher diploma	Higher diploma	Professional Level II	
6		Ordinary vocational diploma	Ordinary diploma		Professional Level I	
5	Advanced certificate of secondary education	Advanced vocational certificate	Technician certificate		Technican Level II	
4	Certificate of secondary education	Vocational certificate	Basic technician certificate		Technican Level I	
3		Basic vocational certificate				
2		VET Level I				
1	Certificate of primary education					

Arrows in the framework refer to horizontal and diagonal movement between and within sectors.
Lifelong education pathways cut across all levels of qualifications through RPL.

Source: TCU, 2010.

- Learn from international best practice;
- Respond to national policy objectives regarding the structure of the education and training system;
- Gradually evolve into a comprehensive system while continuing to allow for differences between sectors;
- Audit and accredit education and training institutions so as to assure the quality of educational provision.

The TCU further recommends that the TzQF should serve the social and economic needs of the nation at large, taking into account the diversity in learning needs, qualification types and learning contexts. In order to do this, the framework must remain flexible enough to allow access and progression, yet robust enough to remain coherent and unified (TCU, 2010).

References

Government of Tanzania, Pôle de Dakar and UNESCO Institute of Statistics. 2011. T*anzania: Education Sector Analysis. Beyond Primary Education, the Quest for Balanced and Efficient Policy Choices for Human Development and Economic Growth.* Dakar, Senegal, Regional Bureau for Education in Africa and Dar es Salaam, Cluster Office.

Mulugo, P.A. 2012. *Education for Employment, Developing Skills for Vocation*. (Presentation at Innovation Africa, Cape Town, South Africa, 5–7 October 2012).

National Council for Technical Education (NACTE). 2013. Home page. http://www.nacte.go.tz/index.php (Accessed 14 February 2013).

Organisation for Economic Co-operation and Development (OECD) and African Development Bank. 2012. *African Economic Outlook 2012*. Paris, OECD Publishing.

Sabaya, W. 2006. *Tanzania National Qualifications Framework Concept Paper.* Unpublished manuscript.

Southern African Development Community (SADC) and UNESCO. 2010. *National TVET Monitoring Report for Tanzania.* Dar es Salaam, National Stakeholders Workshop.

TCU. 2010. *National Qualifications Framework.* Final Draft. Dar es Salaam, TCU.

Prepared by:
The UNESCO Institute for Lifelong Learning (UIL) in collaboration with national experts

UZBEKISTAN

Introduction

Uzbekistan has a very young and rapidly growing population. The share of young people from 15 to 29 years of age reached 61.7 per cent of the population in 2008. As a result of demographic trends, Uzbekistan is experiencing a rapid increase in the working-age population, significantly increasing the size of the population overall.

In the labour market, between 2004 and 2009 the workforce grew by 23.9 per cent, reaching 16 million people, while the employed population increased by 26.1 per cent and totalled 11.3 million people in 2009. According to official data, 95 per cent of the population of working age were employed in 2010. The highest employment rates have been registered in construction, the housing and communal sector, domestic services, trade and public catering, transport and communication.

Differences between rural and urban experiences are important in terms of ensuring that the benefits of vocational education are evenly distributed. The agricultural sector of the economy covers about 34 per cent of employment, while over 60 per cent of the population lives in the rural areas.

The government acknowledges that the quality of the workforce is important to meeting the occupation and qualification requirements of employers (Republic of Uzbekistan, 2007). The VET school curriculum needs to strengthen its relevance to labour-market needs. The involvement of private-sector businesses in curriculum development is important in ensuring that graduates obtain practical skills and the capacity to work independently.

Main policy objectives

NQF development in Uzbekistan is at a design and development stage.

Stakeholder involvement

The NQF is a contributory discussion to policy-making between different stakeholders with an interest in skills development and in establishing a dialogue between the country and the wider world, particularly the EU, on vocational education. Between the third quarter of 2013 and the second quarter of 2014 the development of a national qualifications framework was advanced through a series of workshops conducted in co-operation with the national centre for specialized secondary professional education (SPEE). The workshops involved a range of stakeholders from schools, the ministry of education, SPEE and the chamber of commerce. The concept is well supported and stakeholder participation is expected to be maintained and to grow. Participants have considered how the Uzbek education system of vocational education relates to the EQF reference criteria and considered the following:

- The organizations involved in qualifications in Uzbekistan;
- How the qualifications are defined;
- The extent to which qualifications are based on knowledge and skill;
- The procedures in place for updating and introducing new qualifications;
- The quality-assurance processes associated with different types of qualification;
- How different institutions in the process co-operate and reach agreement.

Level descriptors and learning outcomes

No decisions have yet been made on the number of levels for any NQF. Qualification level descriptors are likely to be consistent with the style and form of those generally found in other countries' existing qualifications frameworks as present discussions on levels have drawn on the EQF and EU member state descriptors. Some curricula used in the country are oriented to learning outcomes. The framework descriptors will also draw on the EU common framework for languages, validation of non-formal and informal learning and links to NQF.

Pathways exist between vocational and academic qualifications at the level of senior secondary education, in senior specialized professional education, and in the university sector. There may be scope for further development of pathways through the development of a form of credential equivalency to EQF Level 5. This may draw on current adult learning certificates already available via industry based learning centres.

Referencing to regional frameworks

Uzbekistan is not party to any regional framework, but its evolving NQF is influenced by the EQF.

Important lessons and future plans

Further development regarding qualifications frameworks will comprise ongoing discussions in the country during 2014. A draft project for the next three years has been prepared and is expected to be the basis of ongoing work in the area. If effective, the project could be the basis of government decisions for the framework's implementation. The development of a framework may be trialed on an industry sectoral basis, for example via the tourism sector.

Prepared by:
European Training Foundation (ETF) in collaboration with national experts.

Section II

Inventory of Regional Qualifications Frameworks

The Association of Southeast Asian Nations framework arrangement[1]

Member states:

Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam (10).

Background

The Association of Southeast Asian Nations (ASEAN) is a political and economic organization of ten South-East Asian countries, which was formed on 8 August 1967 by Indonesia, Malaysia, the Philippines, Singapore and Thailand. Since then, membership has expanded to include Brunei Darussalam, Cambodia, Laos, Myanmar and Viet Nam. Its aims include accelerating economic growth, social progress and sociocultural evolution among its members, protection of regional peace and stability, and opportunities for member countries to discuss differences peacefully.

The basis for an ASEAN Qualifications Reference Framework (AQRF) is derived from the ASEAN Charter signed by the ten ASEAN leaders in Singapore on 20 November 2007, where aspirations to become a single entity – the ASEAN Community – were reinforced. The charter aims to develop human resources through closer cooperation in education and lifelong learning, and in science and technology, for the empowerment of the peoples of ASEAN and for the strengthening of the ASEAN Community, and to enhance the well being and livelihood of the peoples of ASEAN by providing them with equitable access to opportunities for human development, social welfare and justice. Also in 2007, the ASEAN Economic Blueprint (ASEAN, 2007) was signed by member countries. It called for areas of cooperation, including the recognition of professional qualifications (ASEAN, 2007). In addition to mutual recognition arrangements (MRAs) in engineering and nursing which were completed in 2005 and 2006 respectively, five additional MRAs were concluded between 2007 and 2009 in the fields of architecture, surveying, medical practitioners, dental practitioners and accountancy. The most recent was in tourism in 2012. Another important component of the blueprint was the creation of the free flow of skilled labour through 'harmonization and standardization' (ASEAN 2007: 18), particularly in preparation for the ASEAN Economic Community 2015 (ASEAN, 2014: 1).

Level of development

In 2011 a process was initiated to develop a concept design for the AQRF as a common reference framework that would serve as a translation device for participating ASEAN countries. Following consultations across the ASEAN countries, a draft framework was developed (ASEAN, 2014). There is now a document that describes the principles and structure of the AQRF. All education and economic ministers have endorsed the AQRF as a regional tool. It is still awaiting endorsement from the labour ministries in two countries (expected soon). The fully endorsed document will be the core document for the AQRF. The proposed AQRF includes a set of regional level descriptors, and will allow ASEAN member states to link the levels of their NQFs to the AQRF. The ARQF level descriptors are included in annex. The level descriptors include two domains: (i) knowledge and skills; and (ii) application and responsibility.

The framework will function as a translation device to enable comparisons of qualifications across participating ASEAN countries. It addresses all education and training sectors and the wider objective of promoting lifelong learning.

The AQRF is based on agreed understandings between member states, and invites voluntary engagement from countries (ASEAN, 2014). The AQRF aims to be a neutral influence on the NQFs of ASEAN member states. The aim is to make national qualifications systems

1 Special thanks are due to Andrea Bateman and Mile Coles for their review and inputs.

explicit according to the AQRF, and changes to national qualifications systems are not required (ASEAN, 2014: 3). The AQRF respects the member states' specific structures and processes which are responsive to national priorities. The process for endorsing the AQRF is intended to be mutual agreement by the member states (ASEAN, 2014: 4).

The framework will be underpinned by a set of agreed quality-assurance principles and broad standards, with the aim of building confidence and trust in national qualifications and in the value of the region's qualifications. These include quality-assurance principles and broad standards related to: (i) the functions of the registering and accrediting agencies; (ii) systems for the assessment of learning and the issuing of qualifications; and (iii) regulation of the issuance of certificates. Furthermore, the AQRF requires countries to refer to one or more established quality-assurance frameworks as the basis for the agreed quality assurance principles and broad standards (ASEAN, 2014: 4).

The progress at national level is uneven. Some countries, such as Malaysia, have a well-established comprehensive NQF, while Singapore has a well-established sectoral framework. Other countries, such as Indonesia, Thailand, the Philippines, Brunei Darussalam and Cambodia, have recently endorsed an NQF and are in the implementation phase. Others, such as Laos, Viet Nam and Myanmar, are in the planning stage for NQFs. For many of the countries, reviewing and reflecting on quality-assurance arrangements has been a key step for planning and/or implementing an NQF.

The future of AQRF

The implementation of the AQRF requires all member states to implement a common process, a referencing process. The referencing process will require that member states describe their education and training quality-assurance systems. The member countries are currently preparing for the referencing of NQFs and are discussing guidelines for this process that will help ensure consistency of approach. The referencing process also requires that each country sets up a national referencing panel of key stakeholders. This panel is to include at least one observer from one of the other ASEAN member states.

The AQRF is intended to be endorsed by mutual agreement by the member states. Countries will be able to determine when they undertake the processes of referencing their qualifications framework and system or their qualification types and quality-assurance systems against the framework.

A structure for the future governance of the AQRF has been agreed. This puts emphasis on voluntary engagement of member states and collegiality in the peer review process. Discussions have taken place on broadening the range of routes to learning, and concept notes are being prepared on promoting the use of learning outcomes and on ways to support the recognition of non-formal and informal learning.

References

ASEAN. 2007. *ASEAN Framework Arrangement for the Mutual Recognition of Surveying Qualifications.* Jakarta, ASEAN.

——. 2014. *The ASEAN Qualifications Reference Framework.* Final text (4th AQRF Meeting, 20 March 2014) .

Prepared by:
UNESCO

Annex 1: Level descriptors for the ASEAN Qualifications Reference Framework (AQRF)

	Knowledge and skills	Application and responsibility
	Demonstration of knowledge and skills that:	**The context in which knowledge and skills are demonstrated:**
Level 8	• is at the most advanced and specialized level and at the frontier of a field; • involves independent and original thinking and research, resulting in the creation of new knowledge or practice.	• is highly specialised and complex, involving development and testing of new theories and solutions to resolve complex, abstract issues; • requires authoritative and expert judgement in management of research or an organization and significant responsibility for extending professional knowledge and practice and creation of new ideas or processes.
Level 7	• is a the forefront of a field and shows mastery of a body of knowledges; • involves critical and independent thinking as the basis for research to extend or redefine knowledge or practice.	• is complex and unpredictable and involves the development and testing of innovative solutions to resolve issues; • requires expert judgement and significant responsibility for professional knowledge, practice and management.
Level 6	• is specialized, technical and theoretical within a specific field; • involves critical and analytical thinking.	• is complex and changing; • requires initiative and adaptability as well as strategies to improve activities and to solve complex and abstract issues.
Level 5	• is detailed technical and theoretical knowledge of a general field; • involves analytical thinking.	• is often subject to change; • involves independent evaluation of activities to resolve complex and sometimes abstract issues.
Level 4	• is technical and theoretical with general coverage of a field; • involves adapting processes.	• is generally predictable but subject to change; • involves broad guidance requiring some self-direction and coordination to resolve unfamiliar issues.
	• includes general principles and some conceptual aspects; • involve selecting and applying basic methods, tools, materials and information.	• is stable with some aspects subject to change; • involves general guidance and require judgement and planning to resolve some issues independently.
Level 2	• is general and factual; • involves use of standard actions.	• involves structured processes; • involves supervision and some discretion for judgement on resolving familiar issues.
	• is basic and general; • involves simple, straightforward and routine actions.	• involves structured routine processes; • involves close levels of support and supervision.

Source: ASEAN, 2014

The Caribbean Qualifications Framework[2]

Member states:

Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, St Kitts and Nevis, St Vincent and the Grenadines, Suriname, and Trinidad and Tobago (15).

Background

Established in 1973, the Caribbean Community (CARICOM) is an organization of 15 Caribbean nations and dependencies. CARICOM's main purposes are to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.

In 2001, the heads of government signed the revised Treaty of Chaguaramas, clearing the way to the transformation of the idea of a common market aspect to CARICOM into a Caribbean (CARICOM) single market and economy. Part of the revised treaty includes the establishment of the appropriate legislative, administrative and procedural arrangements to give effect to the free movement of labour and recognition of diplomas, certificates and other evidence of qualifications.

In this context, the purpose of the CARICOM qualification statement is to provide sufficient independent data to improve regional and international 'transparency' and support the fair vocational, academic and professional recognition of qualifications (diplomas, degrees, certificates and so on). It is designed to provide a description of the nature, level, context, content and status of the studies and experiential learning that were pursued and successfully completed by the individual named on the original qualification to which the statement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition.

Level of development

Following agreement on a CARICOM regional strategy for technical and vocational education and training (TVET) in 1990, and the adoption of a competence model for TVET in 2002 by the CARICOM Council for Human and Social Development (COHSOD), the basis was laid for a CARICOM-wide TVET strategy. The Caribbean Association of National Training Agencies (CANTA) was established in 2003 and endorsed by CARICOM as the implementation arm of the regional coordinating mechanism for TVET. The key purpose of CANTA was to establish and govern a regional training and certification system, called Caribbean Vocational Qualifications (CVQs), to ensure the standard and uniform delivery of competency-based TVET within the CARICOM single market and economy (CSME) (see CARICOM, 2007, 2009). The CVQs act as the basis of an articulation and accreditation system that allows seamless transfer for students between one institutional system and another.
The national training agencies, TVET councils and apex bodies are responsible for facilitating the development of the CVQs through the various institutional arrangements and industry engagement. The qualifications are then routed for regional review through CANTA. The system consists of national training agencies (NTA) in each country, reporting to TVET ministries that coordinate the provision of TVET training and certification based on the CVQ standards. NTAs are coordinated by CANTA, which reports to CARICOM.

In 2012 the CARICOM regional qualifications framework (RQF) (CARICOM, 2012) was developed. The CARICOM RQF is informed by the principles of the 'ideal Caribbean citizen', and is also based on eight generic level descriptors (see annex) that act as a reference point for determining expectations of achievements and abilities associated with qualifications that represent outcomes at each level (CARICOM, 2012). Five domains are used: (i) knowledge and understanding; (ii) application and practice; (iii) communication, numeracy and ICT; (iv) life skills; and (v) autonomy, accountability and working with others.

2 Special thanks are due to Morella Joseph for her review and inputs.

According to the draft CARICOM Qualifications Framework (CQF), the purpose of the CQF is to provide sufficient independent data to improve the regional and international 'transparency' and fair vocational, academic and professional recognition of qualifications (diplomas, degrees, certificates and so on). It is designed to provide a description of the nature, level, context, content and status of the studies and experiential learning that were pursued and successfully completed by the individual. Information in all seven sections should be provided. Where information is not provided, an explanation should be given. The level descriptors are intended as a guide for CARICOM member states to translate these at the national level into precise or comprehensive statements of required learning for the award of qualifications.

Several countries have already established the first NQFs in the region, including Jamaica, Trinidad and Tobago, Barbados and Belize. Other countries are starting the development of their NQFs, including St Kitts and Nevis, and Suriname.

The future of CQF

Although it is not fully developed or operational, the CQF became 'active' in June 2012. The CARICOM TVET strategy (CARICOM, 2013)[2] considers that operationalizing the CQF is critical for the achievement of articulation between TVET and the rest of the education and training system at all levels. In this context, countries are expected to relate their qualifications systems to the CQF within three years of the date of approval by COHSOD. An oversight council established by the CARICOM secretariat will be responsible for monitoring the CQF.

With regard to the way forward, CARICOM wants to ensure that a coherent and cohesive approach is used in this region in operationalizing the CQF. As a consequence, it is exploring possibilities to:

- develop a unified credit framework (and to conduct a survey to collect baseline data and then develop some specifications at the different qualification levels);
- develop guidelines for the use of the CQF;
- develop guidelines for the development of NQFs.

3 In 2013, CARICOM adopted a new strategy for TVET. This strategy focuses on the vision of 'sustainable economic prosperity through the creation of a globally competitive regional workforce enabled by a market-responsive education system'. Incorporating and building on the significant foundation provided by the 1990 strategy, the strategy envisions a balanced, even and harmonious region-wide implementation, where each member state is committed to an accountability framework requiring periodic implementation, progress review and reporting to CARICOM through CANTA.

References

CARICOM. 2007. Launch of the Caribbean Vocational Qualification. CARICOM Secretariat. Press release 258/2007, 23 October. Remarks by Myrna Bernard. St Michael, Barbados, CARICOM.

——. 2009. Caribbean Vocational Qualifications Framework. Presentation made at the Technical Commission Meeting of the ILO CINTERFOR, Brasilia, 28 October.

——. 2012. *CARICOM Qualifications Framework.* Draft document. Unpublished. St Michael, Barbados, CARICOM.

——. 2013. *Regional TVET strategy for workforce development and economic competitiveness*. CARICOM-CANTA. www.caricom.org (Accessed 15 April 2015.).

Prepared by:
UNESCO

Annex 2: Level descriptors for the CARICOM Qualifications Framework (CQF)

Level	Level summary	Knowledge and understanding	Application and practice	Communication, numeracy and ICT	Life skills	Autonomy, accountability, working with others
Access 1	Achievement at Access 1 reflects the ability to use elementary skills, knowledge and understanding to carry out simple tasks and activities with support and close guidance.	Demonstrate knowledge of the steps needed to complete simple activities. Demonstrate knowledge or understanding to carry out simple, familiar activities.	Relate knowledge to a few simple, everyday or personal contexts when prompted. Use, under supervision, basic tools and materials. Use a limited range of very simple skills to carry out a few familiar tasks with guidance. Follow rehearsed stages in solving problems. Respond appropriately, when prompted, to identify consequences of action.	Use very simple skills with guidance to: • Respond to and produce basic written and oral communications in familiar and/or routine contexts. • Use a limited range of basic numerical and graphical data in everyday contexts. • Carry out limited range of very simple tasks to process data and access information.	Respect self, persons in authority and the environment. Follow simple instructions. Communicate the decision to say no effectively. Self-aware of emotions. Recognize non-verbal signals of other persons' emotional states. Make simple choices with guidance. Differentiate between/ among options. Solve routine problems with supervision. Express self effectively verbally and non-verbally. Use communication technology in a socially appropriate manner. Relate positively with others. Have a sense of identity and display positive behaviour. Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.
Access 2	Achievement at Access 2 reflects the ability to use skills, knowledge and understanding to carry out structured tasks and activities with the appropriate support and guidance when required.	Demonstrate knowledge or understanding to carry out structured tasks and activities. Demonstrate knowledge and understanding of the steps needed to complete structured tasks and activities in familiar contexts.	Relate knowledge to personal and everyday contexts after some prompting. Use, with guidance, basic tools and materials safely and effectively. Use a few basic, routine skills to undertake familiar and repetitive tasks. Use relevant skills and procedures, with guidance, to complete pre-planned tasks. Identify, with some prompting, appropriate methods for addressing simple emerging challenges. Recognize and respond appropriately to the consequences of actions for self and others.	Use simple skills to: • Respond to and produce basic written and oral communications in familiar and/or routine contexts. • Use a limited range of basic numerical and graphical data in everyday contexts. • Carry out limited range of very simple tasks to process data and access information.	Respect self, persons in authority and the environment. Follow simple instructions. Communicate the decision to say no effectively. Self-aware of emotions. Recognize non-verbal signals of emotional states. Make simple choices with guidance. Differentiate between/ among options. Solve routine problems with supervision. Express self effectively verbally and non-verbally. Use communication technology in a socially appropriate manner. Relate positively with others. Have a sense of identity and display positive behaviour. Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.

Level	Level summary	Knowledge and understanding	Application and practice	Communication, numeracy and ICT	Life skills	Autonomy, accountability, working with others
Level 1	Achievement at Level 1 recognizes the ability to use relevant knowledge, skills and procedures, to complete basic and routine tasks with direct supervision and support. It includes the ability to communicate simple information using appropriate communication tools. Collaboration with others through work groups or teams may often be a requirement.	Demonstrate knowledge of facts, procedures and ideas to complete well-defined tasks. Demonstrate awareness of information relevant to the area of study or work, including basic processes, materials and terminology.	Apply knowledge of facts, procedures and ideas to complete well-defined, tasks in predictable and structured contexts. Use tools and resources with guidance when necessary. Use relevant skills and procedures. Determine whether or not actions have been effective. Review completed tasks to ensure that specified standards have been met and negative consequences are minimized.	Demonstrate a range of skills to: • Produce and respond to detailed written and oral communications. • Select and use appropriate applications and media to process and obtain information. • Use a range of numerical and graphical data in context that have some complex features.	Follow instructions. Make simple choices with guidance. Differentiate between/among options. Solve routine problems with supervision. Use communication technology in a socially appropriate manner. Demonstrate respect and tolerance when interacting with others. Negotiate positions and build consensus. Make and promote healthy lifestyle choices. Express self effectively verbally and non-verbally. Have a sense of identity and display positive behaviour. Follow instructions. Respect self, persons in authority and the environment. Express emotions appropriately. Make morally appropriate choices.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.
Level 2	Achievement at Level 2 recognises the ability to select and use relevant knowledge, ideas, skills and procedures to complete well-defined tasks in a range of contexts some of which are complex and non-routine. It includes the ability to communicate ideas and information using appropriate communication tools and representation. It includes taking responsibility for completing tasks and procedures and involves some level of autonomy, teamwork and guidance.	Demonstrate understanding of facts, procedures and ideas to complete well-defined tasks and address simple problems. Demonstrate awareness of the type of information that is relevant to the area of study or work.	Select and use relevant skills and procedures in familiar contexts. Apply knowledge and understanding in familiar, practical contexts. Use simple tools, techniques and/or resources associated with a subject/discipline in routine contexts which may have non-routine elements. Develop, adapt and implement plans to use tools and techniques to address set situations and/or problems.	Use a wide range of skills to: • Produce and respond to well-defined written and oral communication in routine and non-routine contexts. • Select and use appropriate applications and media to obtain, process, combine and communicate information. • Utilize a wide range of numerical and graphical data in routine and non-routine contexts.	Make simple choices. Justify/defend choices. Differentiate/among between options. Anticipate consequences as related to choices and problems. Solve routine problems with minimal supervision. Use communication technology in a socially appropriate manner. Relate positively with others. Demonstrate respect and tolerance when interacting with others. Negotiate positions and build consensus. Make and promote healthy lifestyle choices. Have a sense of identity and display positive behaviour. Make morally appropriate choices. Express self effectively verbally and non-verbally. Follow instructions. Respect self, persons in authority and the environment. Use emotional awareness in decision-making.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.
Level 3	Achievement at Level 3 reflects the ability to identify, select and use relevant and appropriate knowledge, skills and technology to complete tasks and procedures and address problems with a measure of complexity with autonomy and judgement. Within these	Demonstrate knowledge of factual procedural and theoretical understanding to complete tasks and address problems which may be complex and non-routine. Interpret and evaluate relevant information and ideas.	Apply knowledge and understanding in contexts that may be complex and non-routine. Select and use relevant skills, resources, methods and procedures in non-routine contexts that may have complex elements. Be aware of consequences of actions	Produce and respond to detailed and relatively complex written and oral communication. Select and use appropriate applications and media to obtain, process, combine and communicate a variety of information and data. Integrate a range of	Make informed decisions. Make independent choices. Solve routine problems independently. Use communication technology in a socially appropriate manner. Demonstrate tolerance and respect for others.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.

Level	Level summary	Knowledge and understanding	Application and practice	Communication, numeracy and ICT	Life skills	Autonomy, accountability,
	parameters, demonstrate leadership, teamwork and critical thinking skills.	Demonstrate an awareness of facts, ideas, properties, materials, terminology, practices and techniques associated with an area of study or work.	on self, others and the environment and take action to limit any negative impact. Use skills and adapt specified procedures to resolve challenges in simple non-routine contexts.	numerical and graphical skills in routine and non-routine contexts.	Negotiate positions and build consensus Make and promote healthy lifestyle choices Express self effectively verbally and non- verbally Justify/defend choices Anticipate consequences as related to choices made Differentiate between / among options. Make morally appropriate choices. Respect self, persons in authority and the environment. Identify emotional states of others.	
Level 4	Achievement at Level 4 reflects the ability to identify, select and use relevant and appropriate knowledge, skills and technology to complete tasks and procedures and to address problems that are complex and non-routine. Within these parameters, demonstrate leadership, teamwork and critical thinking skills, exercising autonomy and judgement while appreciating different perspectives and approaches in an area of study or work.	Demonstrate practical theoretical or technical knowledge and understanding to address problems that are well defined, but complex and non-routine in broad context within a field of study or work. Analyse, interpret and evaluate relevant information and ideas. Demonstrate an awareness of the theories and principles in the area of study or work. Demonstrate an informed awareness of different perspectives or approaches, within the area of study or work	Select, adapt and use appropriate professional methods, resources, procedures and skills in non-routine and complex contexts. Review the effectiveness and appropriateness of methods, actions, and results. Initiate and use appropriate investigation to inform actions. Recognize and acknowledge the consequences of actions on self, others and the environment and take action to limit negative impact.	Use a wide range of skills and competences associated with work/ study to: • Convey complex ideas in well-structured and coherent form. • Use a range of communications in both familiar and new contexts. • Select and use a range of applications and media to obtain variety of information and data. • Apply a range of numerical and graphical skills assigned tasks in routine and non-routine contexts. • Use numerical graphical data to measure progress and achieve goals and targets.	Make informed decisions. Guide and support others in making decisions. Analyse decisions made to inform future decisions. Use evidence-based decision making. Accept responsibility for decisions made. Identify and solve problems in collaboration with others. Use communication technology in a socially appropriate manner. Express self effectively verbally and non-verbally recognising individual and cultural differences. Demonstrate tolerance and respect for others. Promote and build con-sensus/diffuse conflict. Make and promote healthy lifestyle choices Make morally appropriate choices. Respect self, persons in authority and the environment. Interpret cause and effect of emotional responses. Recognize and manage emotions.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.
Level 5	Achievement at Level 5 recognizes the application of relevant knowledge, methods and skills for the workplace and for further learning. It reflects the ability to plan, assess, develop courses of action in response to a broad range of situations, exercising judgement and autonomy; communicate to varied audiences; reflect understanding of different perspectives and schools of thoughts and the reasoning behind them.	Demonstrate comprehensive specialized, practical, theoretical or technological knowledge and understanding to inform practice 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. Demonstrate knowledge and understanding of the difference between explanations based on evidence and/or research and other	Determine, adapt and use appropriate methods, resources, tools, procedures and skills to solve complex non-routine problems. Carry out lines of enquiry, development, or investigation into professional-level problems and issues. Use relevant research or development to inform actions. Evaluate actions, methods and results and take responsibility for consequences.	Use a wide range of advanced and specialized skills and competences associated with the discipline or field of work or study to: • To convey complex information to a range of audiences for a range of purposes. • Use a range of applications and media to obtain variety of information and data. • Use and evaluate numerical and graphical data to measure progress and achieve goals and targets.	Guide and support others in making decisions. Analyse decisions made to inform future decisions. Practise evidence- based decision making. Make decisions that reflect sensitivity to issues of diversity. Accept responsibility for decisions made. Diagnose and solve problems in collaboration with others. Anticipate problems and initiate preventative action. Use communication technology in a socially. appropriate manner.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.

Level	Level summary	Knowledge and understanding	Application and practice	Communication, numeracy and ICT	Life skills	Autonomy, accountability, working with others
		forms of explanation and the importance of this difference within the area of study or work.			Express self effectively verbally and non-verbally recognizing individual and cultural differences. Create an environment conducive to free interaction and expression. Demonstrate tolerance and respect for others. Negotiate positions and build consensus. Make and promote healthy lifestyle choices. Make morally appropriate choices. Recognize and reward good performances. Diffuse conflict.	
Level 6	Achievement at Level 6 demonstrates the ability to take responsibility to refine, integrate and apply advanced knowledge and skills to solve complex problems with limited data; initiate and develop courses of action for change and improvement utilizing applicable theories; continue to advance knowledge and understanding and develop new skills to a high level.	Modify and use practical conceptual or technological knowledge and understanding to sustain or improve contexts where there are many interacting factors. Critically analyse, interpret and evaluate complex information concepts and ideas. Demonstrate critical knowledge and understanding of theories and principles within the context in which the area of study is located. Demonstrate knowledge and understanding of the ways in which the subject or discipline is developed, including a range of established techniques of enquiry or research methodologies. Demonstrate an understanding of different perspectives, approaches and the theories that underpin them, and demonstrate awareness of current developments in the area of study or work.	Determine, refine, adapt and use appropriate methods, skills, techniques, practices and or resources associated with a subject or discipline or profession. Practise methods of enquiry and/or research. Use some specialized or advanced skills, techniques, practices, and resources in a range of complex contexts. Practise in a range of professional level contexts that include a degree of unpredictability. Anticipate and evaluate actions, methods and results and their consequences and propose and implement mitigation strategies.	Use a range of advanced and specialized skills and competences in support of established practices in the discipline or field of work to: • Make formal and informal presentations on a variety of topics in the subject or discipline to a range of audiences. • Use a range of IT applications to support and enhance work. • Interpret, use and evaluate numerical and graphical data to measure progress and achieve goals and targets.	Guide and support others in making decisions. Accept responsibility for decisions made. Diagnose and solve problems in collaboration with others. Anticipate problems and initiate preventative action. Use communication technology in a socially appropriate manner. Express self effectively verbally and non- verbally recognising individual and cultural differences. Create an environment conducive to free interaction and expression. Demonstrate tolerance and respect for others. Recognize and reward good performance. Promote and build consensus. Make and promote healthy lifestyle choices. Communicate the decision to say no effectively. Make decisions using experience and empirical data. Use emotional awareness to inform decisions in multicultural situations. Assign responsibilities and tasks based on decisions made. Demonstrate tolerance and respect for others. Engage in stress reducing activity.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.
Level 7	Achievement at Level 7 demonstrates the ability to apply knowledge and understanding to real-life situations. It reflects the responsibility for planning and developing courses of action that impact on organizational	Reformulate and use practical, conceptual or technological knowledge and understanding to sustain or improve contexts where there are many interacting factors. Critically analyse, interpret and evaluate complex information,	Demonstrate originality and creativity in the application of knowledge, understanding and or professional practice. Apply skills, practices, procedures and methods which are specialized, advanced, or at the forefront of a subject,	Use a broad range of advanced and specialized skills and competences in support of established practices in the discipline or field of work to:	Assign responsibilities and tasks based on decisions made. Accept responsibility for decisions made. Diagnose and solve problems in collaboration with others. Develop creative solutions and original	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.

Level	Level summary	Knowledge and understanding	Application and practice	Communication, numeracy and ict	Life skills	Autonomy, accountability,
	change within the working environment. It reflects broad autonomy and judgement. It also reflects an understanding of the relevant theoretical and methodological area of study or work.	concepts and theories to produce original and creative modifications to conceptions, their features, boundaries, terminology and conventions. Demonstrate understanding of the wider contexts in which the area of study or work is located. Demonstrate originality or creativity in understanding and/ or practices working with knowledge that covers and integrates most if not all of the main areas of a subject discipline. Demonstrate understanding of different theoretical and methodological perspectives and how they affect the area of study or work.	discipline or profession. Practise in a range of professional level contexts which include a degree of unpredictability. Design and undertake research, and develop strategic activities to inform the area of work or study, or produce organizational or professional change. Critically evaluate actions, methods and consequences and their short- and long-term implications. Plan and implement mitigation strategies where necessary.	• Make formal, specialized presentations to informed audiences. • Communicate to peers, senior colleagues and specialists and practitioners. • Use and adapt a range of software and media to support and enhance work to increase effectiveness. • Interpret, use and evaluate a wide range of qualitative and quantitative data to set and achieve goals.	responses to solve problems and issues. Deal with very complex and/or new issues and make informed judgements in the absence of complete or consistent data. Use communication technology in a socially appropriate manner. Express self effectively verbally and non-verbally, recognizing individual and cultural differences. Create an environment conducive to free interaction and expression. Demonstrate tolerance and respect for others. Recognize and reward good performance. Promote and build consensus. Make and promote healthy lifestyle choices. Communicate the decision to say no effectively. Guide and support others in making decisions. Make decisions that will impact organizations and others. Make decisions using knowledge of relevant laws and conventions, experience and related empirical data. Use emotional awareness to inform decisions in multicultural situations. Resolve conflicts positively and confidently.	
Level 8	Achievement at Level 8 demonstrates the ability to generate new ideas/knowledge and understanding and expand on an area of knowledge and professional practice. It demonstrates the ability to address complex issues through initiating and designing research, development and strategic activities. It reflects a profound understanding of complex theoretical and methodological principles and analysis to bring about change in the profession and/or workplace. It indicates an ability to exercise autonomy, judgement and leadership in taking/ sharing responsibility in the development of an area of work or study or in influencing substantial	Develop innovative practical, conceptual or technological understanding to create ways forward in contexts that lack definition and where there are many complex interacting factors. Critically analyse, interpret and evaluate complex information, concepts and theories to produce new knowledge and theories. Reconceptualize the wider contexts in which the field of knowledge is located. Extend the field of knowledge or work by contributing original and creative insights. Significantly contribute to the body of existing knowledge in the subject area or discipline through personal research or equivalent work.	Use a comprehensive range of the principal skills, techniques, practices and resources associated with a subject or discipline or profession. Formulate, use and add to a range of complex skills, techniques, practices and materials at the forefront of one or more specialities. Apply a range of standard and specialized research or equivalent instruments and techniques of enquiry. Conceptualize and address problematic situations that involve many complex interacting factors. Demonstrate originality and creativity in the development and application of new knowledge, understanding and practices.	Use a significant range of advanced and specialized skills and competences as appropriate in the work/study to: • Communicate appropriately to a range of audiences and adapt communication to the context and purpose. • Communicate through scholarly presentations and publications and engage in critical dialogue and review with peers, experts and practitioners within the field. • Develop, use and specify a range of software to support and enhance work at this level. • Critically evaluate qualitative and quantitative data.	Use experiences and data to make decisions. Guide and support others in making decisions. Assign responsibilities and tasks based on decisions made. Accept responsibility for outcomes of decisions made. Develop creative and original responses to problems and issues. Use communication technology in a socially appropriate manner. Express self effectively verbally and non-verbally recognizing individual and cultural differences. Deal with very complex and/or new issues and make informed judgements in the absence of complete or consistent data. Create an environment conducive to free interaction and expression.	Demonstrate respect and tolerance when interacting with others. Make and promote healthy lifestyle choices. Negotiate positions.

Level	Level summary	Knowledge and understanding	Application and practice	Communication, numeracy and ict	Life skills	Autonomy, accountability,
	change in a profession, organization or society	Exercise critical understanding of different theoretical and methodological perspectives and how they affect the field of knowledge and work.	Critically evaluate actions, methods and their results and long- and short-term consequences for society, the environment, the field of work or knowledge, and their wider context. Demonstrate the ability to address intended and unintended consequences of one`s professional practice.	• Devise new communication methods and techniques to enhance work and study environments.	Demonstrate tolerance and respect for others. Recognize and reward good performance. Promote and build consensus. Make and promote healthy lifestyle choices. Make and defend morally appropriate choices. Guide and support others in making decisions. Make decisions using. Knowledge of relevant laws and conventions, experience and related empirical data. Use emotional awareness to inform decisions in multicultural situations. Resolve conflicts positively and confidently.	

Source: Draft CARICOM Qualifications Framework, August 2012.

The European Qualifications Framework

The European Qualifications Framework (EQF) acts as a translation device to make national qualifications more transparent across Europe, promoting workers' and learners' mobility between countries and facilitating their lifelong learning. The EQF, adopted in 2008,[4] aims to relate different countries' national qualifications systems and levels to a common European reference framework. Individuals and employers will be able to use the EQF to better understand and compare the qualifications levels of different countries and different education and training systems. A total of 38 European countries[5] are now committed to work towards the implementation of the EQF.

Basic elements

The core of the EQF concerns eight reference levels based on learning outcomes (see annex). Levels of national qualifications will be linked to one of the EQF reference levels, ranging from basic (Level 1) to most advanced (Level 8). This will enable a comparison between national qualifications levels and diverse national qualifications set at these levels. The long-term aim is that all new qualifications issued in Europe will contain a reference to the appropriate NQF and EQF level. The EQF applies to all types and levels of education, training and qualifications, from general education to academic, professional and vocational training. Each level of qualification should, in principle, be attainable by way of a variety of educational and career paths. This learning outcomes based approach shifts the focus away from the traditional emphasis on 'learning inputs', such as the length of a learning experience or type of institution. It also encourages lifelong learning by promoting the validation of non-formal and informal learning.

4 Recommendation of the European Parliament and Council (2008/C 111/01) on the establishment of a European Qualifications Framework (EQF) for lifelong learning: http://bit.ly/1VrYdxw

5 These countries are: the EU-28 member states, Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey.

The interaction between the EQF and NQFs

The approach promoted by the EQF reflects a wider shift at national level towards a focus on outcomes of learning. Most European countries are now developing and implementing national qualifications frameworks (NQFs) based on learning outcomes and linked (referenced) to the EQF.

By February 2015, twenty-four countries had formally linked referenced their national qualifications levels to the EQF: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Slovenia and the United Kingdom. Additionally, three countries have presented their referencing reports but are still in a dialogue with the EQF advisory group (AG)[6] – which is responsible for the overall monitoring and coherence of the process – on the finalization of their reports. The remaining eleven countries are expected to follow in 2015 or 2016. It is worth noting that the number of countries in EQF cooperation has gradually increased, showing that the EQF is seen as increasingly relevant. The development of the EQF is closely coordinated with the Bologna Process and the agreement to implement qualifications frameworks in the European Higher Education Area (QF-EHEA). This means that levels 5–8 of EQF are compatible with the 'cycles 'of the Bologna Process and the 'Dublin descriptors' underpinning these.

Twenty-four countries have formally 'self-certified' their higher education qualifications to the QF-EHEA. Countries are increasingly combining referencing to the EQF and self-certification to the QF-EHEA.[7] Austria, Bulgaria, Croatia, Estonia,

6 All 38 countries taking part in the EQF process are represented in the EQF AG, as are the European social partners (trade unions and employers) as well as representatives of the non-governmental sector.

7 Self-certification reports verify the compatibility of the national framework for higher education with the QF-EHEA.

Hungary, Iceland, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Norway, Poland, Portugal and Slovenia have all produced joint reports on both processes, reflecting the priority given to the development and adoption of comprehensive NQFs covering all levels and types of qualification. It is expected that this approach will be chosen by most countries preparing to reference to the EQF in 2015/16. This development reflects the increasingly close cooperation between the two European framework initiatives, which is also illustrated by regular meetings between EQF national coordination points and Bologna framework coordinators.

Experiences from implementing the EQF

Overall, the referencing process has worked according to the intentions expressed in the 2008 EQF recommendation. The linking of national qualification levels to the EQF refers to ten criteria[8] which have to be addressed in detail. Three criteria, 2,[9] 4[10] and 5,[11] are of particular importance as they seek to clarify why a national qualification has been assigned to a particular NQF and EQF level and how the qualification is quality-assured. Clarity on this particular aspect is of importance as it provides the basis on which mutual trust is built. The following main observations on strengths and weaknesses on referencing NQFs to the EQF have been made.

- All countries are actively seeking to meet the objectives expressed in the EQF recommendation and the requirements outlined in the ten referencing criteria.
- The EQF initiative – and the requirements of the referencing process – has motivated most countries to develop and implement national qualifications frameworks. Fully implemented NQFs can increase transparency of qualifications at national and European level and also contribute to national reform of education and training systems.
- The majority of countries have, in line with the EQF, developed comprehensive NQFs covering all levels and types of qualification, and aim to integrate learning outcomes from non-formal and informal learning. The information gathered through referencing contributes directly to increased transparency of qualifications at national and European level. The referencing reports[12] provide a comprehensive overview of national qualifications (in the national language as well as in English), covering all levels and types of qualification. For many countries this information did not exist prior to the EQF. The common approach triggered by the ten criteria simplifies comparison across countries.
- The working methods developed by the EQF AG contribute to increased mutual trust. Members have taken on the role of 'critical friends' and acknowledge that the overall success of the EQF depends on transparency and a willingness to give as well as receive constructive feedback.

While overall the experience has been positive, a number of challenges remain:

- Many referencing reports are 'works in progress' and refer to future developments. While this is necessary, given the introduction of NQFs and the ongoing shift to learning outcomes, any failure to update might undermine the long-term added value of the referencing reports. Important information is missing in some cases, notably on how the national qualifications/qualification types have been assigned to specific NQF levels. While the conceptual and terminological links between NQF and EQF descriptors have been addressed in detail, the application of the 'best fit' principle when assigning qualifications to NQF levels is in many cases only vaguely described and documented.
- It is sometimes difficult to understand which qualifications are included or not included in a referencing report.
- Referencing reports in some cases fail to discuss the linkages between the different referencing criteria, in particular between 2 (descriptors), 3 (learning outcomes),[13] 4 (placing of qualifications) and 5 (quality assurance). When these criteria are discussed in isolation from each other, important issues

8 http://bit.ly/1PPBBFC

9 EQF Criterion 2: 'There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.'

10 EQF Criterion 4: 'The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.'

11 EQF Criterion 5: 'The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in annex 3 of the Recommendation).'

12 https://ec.europa.eu/ploteus/documentation

13 EQF Criterion 3: 'The national qualifications framework or system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.'

relevant to the referencing process are not presented in a coherent way, and this affects the overall transparency of the process. How, for example, do quality-assurance arrangements support the shift to learning outcomes and the assignment of qualifications to NQF levels?

The future of the EQF

The EQF is generally considered as a success and as an important instrument for increasing the transparency of qualifications nationally and internationally and promoting mutual trust between European countries. There is agreement, in line with the observations made above, that the future success of the EQF depends on a continuous process in which the referencing is reviewed and renewed. There is also agreement that a key priority in the coming period is to make the EQF more visible to end users – notably by making sure that EQF levels from now on are systematically included in all new qualifications awarded in Europe.

Prepared by:
Cedefop

The reference levels in the European Qualifications Framework

	Knowledge	Skills	Competence
Level 1	Basic general knowledge	Basic skills required to carry out simple tasks	Work or study under direct supervision in a structured context
Level 2	Basic factual knowledge of a field of work or study	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	Work and study under supervision with some autonomy
Level 3	Knowledge of facts, principles, processes and general concepts in a field of work or study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems
Level 4	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
Level 5	Comprehensive, specialized, 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
Level 6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialized field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups
Level 7	Highly specialized knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields	Specialized problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures to integrate knowledge from different fields	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or reviewing the strategic performance of teams
Level 8	Knowledge at the most advanced frontier of a field of work or study and at the interface between the fields	The most advanced and specialized skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	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

Source: European Union. 2008. Recommendations of the European Parliament and of the Council on the establishment of the EQF for lifelong learning. *Official Journal of the European Union,* 6 June 2008

The Gulf Qualifications Framework[14]

Member states are the members of the Gulf Cooperation Council (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE) (6).

Background

The Cooperation Council for the Arab States of the Gulf, known as the Gulf Cooperation Council, is a regional intergovernmental political and economic union consisting of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE. These countries are often referred to as the GCC states. The unified economic agreement between the countries of the GCC was signed on 11 November 1981 in Abu Dhabi. The six Gulf nations that make up the GCC region have considerable global influence but small populations. They all share similar socio-economic challenges and visions. A common market was launched on 1 January 2008, with plans to realize a fully integrated single market. It eased the movement of goods and services.

In January 2015 the common market was further integrated, allowing full equality among GCC citizens to work in the government and private sectors, social insurance and retirement coverage, real estate ownership, capital movement, access to education, health and other social services in all member states. However, some barriers remained in the free movement of goods and services. The coordination of taxation systems, accounting standards and civil legislation is currently in progress.

The interoperability of professional qualifications, insurance certificates and identity documents is also under way. To enable this to happen, increased mobility of labour is required to ensure that the most qualified people can support the collaborative development of the GCC region. Therefore, the context for a meta-framework of qualifications for the region was considered appropriate.

Level of development

On behalf of the GCC, the UAE National Qualifications Authority is leading the development of a meta-qualifications framework for the Gulf region, known as the Gulf Qualifications Framework (GQF).[15] The GQF will enable GCC countries to relate their national qualifications and systems to a common reference framework. It will have reference levels describing what a learner knows, understands and is able to do.

The future of GQF

The member countries are working to develop the vision, objectives and terms of participation for the GQF. The next step is to develop an action plan for implementation including all required policies, procedures and systems. A pilot project will then be launched. The GQF will also be submitted to all GCC countries for official approval.

Prepared by:
UNESCO

14 Special thanks are due to Nourah Abdulla Saeed Al Matrooshi for her review and input.

15 See details at www.nqa.gov.ae/En/OpenData/Pages/default.aspx

The Pacific Qualifications Framework[16]

Member states: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Marshall Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and Tokelau (15).

Background

The Pacific Community includes the 22 Pacific Island countries and territories along with four of the original founders (the Netherlands and United Kingdom withdrew in 1962 and 2004 respectively when they relinquished their Pacific interests). The Conference of the Pacific Community, which is held every two years, is the governing body of the Secretariat of the Pacific Community (SPC). The SPC works in a wide range of sectors with the aim of achieving three development outcomes: sustainable economic development, sustainable natural resource management and development, and sustainable human and social development.

The notion of a regional Pacific Qualifications Register (PQR) was first mooted in 2001 at the Pacific Islands Forum ministers of education meeting in Auckland, New Zealand. In meetings that followed, officials reaffirmed their commitment to develop a regional qualifications register, and proceeded to establish a dedicated unit within the South Pacific Board for Educational Assessment[17] (SPBEA) in February 2009 to champion the development of the PQR[18] (SPBEA, 2009).

The forum education ministers' initial expectation of a Pacific Qualifications Framework (PQF) was a regional commitment to continuous improvement of the quality of all forms of Pacific education and training (basic and primary, secondary, TVET and tertiary) that culminate in the award of internationally recognized qualifications.

Level of development

The PQF is a common reference framework that links to the Pacific Register of Qualifications and Standards (PQRS).[19] The PQF adopts the current international move to outcomes-based learning. This is expected to shift the focus from teaching and delivery to learner achievement of learning outcomes. The PQF is inclusive of qualifications and components of qualifications from the school sector, TVET and tertiary and higher education levels, as well as community-based training.

All qualifications to be entered onto the register are to be referenced against the PQF: for example, a volume and level profile is included in the information on the register. In particular, the PQF enables accredited qualifications (and components of qualifications) from diverse national educational and training systems to be listed on the PRQS, noting their assigned PQF level and credit value.

The PQF includes a set of ten level descriptors (see annex). The ten-level framework encompasses all forms of education and training, including general, adult education and community programmes; the school sector; TVET; and tertiary or higher education. The level descriptors include three domains: (i) knowledge and skills; (ii) application (deconstructed to type and problem solving); and (iii) autonomy (deconstructed to level of support and degree of judgement). The PQF level descriptors have been compared with the descriptors used in the Australian and New Zealand frameworks in 2012, as well as on an initial level with NQFs in the Pacific Island countries of Fiji, Papua New Guinea, Samoa, and Tonga.

The governing body for the PQF and PRQS is the Committee of Representatives of Governments and Administrations (CRGA) of SPC member countries. An advisory board for the PRQS was established in 2014 to provide advice, and help guide the administration and operations of the

16 Special thanks are due to Lemalu L. Sanerivi for his review and inputs.

17 SPBEA has now become the Education Quality and Assessment Programme (EQAP) within the SPC.

18 The PQR has been renamed the Pacific Register of Qualifications and Standards (PRQS).

19 See details at www.spbea.org.fj/getattachment/Our-Work/Projects/Pacific-Register-for-Qualifications-Standards/2--PQF-booklet-FINAL.pdf.aspx

register. Members of the advisory board are the heads of national and regional accrediting agencies from Pacific countries, including Australia and New Zealand.

The register and the framework are underpinned by a set of quality-assurance standards for agencies (including the registration of providers and accreditation processes for qualifications), and minimum standards for providers and programmes. The quality-assurance standards are supported by various policies and procedures, guidelines and criteria.

The PQF is supported by the Pacific Quality Assurance Framework (PQAF) which covers all forms of education and training, such as technical and vocational, tertiary and non-tertiary, and field-specific forms, such as theological and maritime education. The PQAF is intended to serve two important purposes. First, it provides broad quality principles on the roles and functions of accrediting agencies in monitoring and sustaining quality in post-school education and training institutions; and second, it acts as the EQAP's internal quality system.

The PQAF is not intended to standardize quality-assurance practices in the Pacific. It provides a broad base for accrediting agencies and institutions to compare and inform their own quality-assurance policies and processes. Where the opportunity arises to relate to regional initiatives such as the PQF and the PRQS, the PQAF provides a common standard for mutual understanding and implementation.

In the Pacific, Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu have made progress in their development of national qualifications agencies and NQFs. Cook Islands and Niue are aligned with the New Zealand Qualifications Framework. The Northern Pacific Countries (Federated States of Micronesia, Palau and Republic of the Marshall Islands) seek accreditation from the Western Association of Schools and Colleges of the United States. Kiribati, Nauru, Solomon Islands and Tuvalu are continuing to work with EQAP's Accreditation and Standards Unit to explore options most appropriate for their needs.

The future of the PQF

The Accreditation and Standards Unit which oversees the PRQS will further develop:

- the professional licensing and occupational standards (PLOS) domain, which hosts information on national and regional professional associations, occupational standards, licensing criteria and other related aspects that support the various Pacific trade agreements that have labour mobility components;
- procedures for regional and international qualification recognition;
- exploration of an external quality-assurance function for maintenance of the integrity and credibility of the PRQS;
- support for national and regional accrediting agencies;
- assistance to smaller island states (such as Kiribati and Tuvalu) in exploring best options for their frameworks and quality needs;
- review of the PRQS database over the next two-year period.

More detailed work is also envisaged once the descriptors in countries are fully developed. In the next phase, the PQF will be operationalized and tested with industry and employer groupings.

References

SPBEA. 2009. *R*eport on the regional consultation on the Pacific Qualifications Register. Nadi, Fiji, 28 September to 2 October 2009. Unpublished.

——. 2011. The Pacific Qualifications Framework. www.spbea.org.fji (Accessed 15 April 2015.

Prepared by:
UNESCO

Annex 3: Level descriptors for the Pacific Qualifications Framework

Level	Knowledge and skills	Application	Autonomy
10	Demonstrated knowledge and skills that: • involve critical understanding of a substantial and complex body of knowledge at the forefront of a discipline or area; • involve high-level critical analyses, reflection and independent and original thinking; • involve the creation and interpretation of new knowledge or practice, through original advanced research that satisfies formal academic review.	Applied in contexts that: • are subject to change with some complexity; • involve the formulation or adaptation of processes to resolve complex and sometimes abstract issues.	In conditions where there is: • minimal guidance and high-level autonomy, initiative, adaptability and self-direction; • authoritative judgement and high-level planning, management and innovation required.
9	Demonstrated knowledge and skills that: • involve mastery and integrated understanding of a complex body of knowledge some of which is at the forefront in one or more disciplines or areas; • involve high level critical analyses; • involve research as the basis for extending or redefining knowledge or practice in one or more disciplines or areas.	Applied in contexts that: • are complex and specialized, generally involving some new or evolving aspects; • involve the formulation and testing of theories and processes to resolve highly complex, abstract and emergent issues.	In conditions where there is: • minimal guidance and substantial autonomy, initiative, adaptability and self-direction; • expert judgement and high-level planning, management and innovation required.
8	Demonstrated knowledge and skills that: • are highly advanced, theoretical and technical, within one or more disciplines or areas; • involve critical, analytical and independent thinking.	Applied in contexts that: • are complex with some specialization; • involve the formulation of processes to resolve highly complex and abstract issues.	In conditions where there is: • minimal guidance and demonstrated self-direction or autonomy; • significant judgement, planning, coordination and organization required.
7	Demonstrated knowledge and skills that: • are highly theoretical and/or technical with significant underpinning knowledge, within one or more disciplines or areas; • involve critical and analytical thing.	Applied in contexts that: • are subject to complex change; • involve the formulation or substantial adaptation of processes to resolve complex and abstract issues.	In conditions where there is: • broad guidance and demonstrated self-direction; • significant judgement and high level planning, management and innovation required.
6	Demonstrated knowledge and skills that: • are highly theoretical and/or abstract or technical within a broad field or with depth in one area.	Applied in contexts that: • are subject to change with some complexity; • involve the formulation of or adaptation of processes to resolve complex and sometimes abstract issues.	In conditions where there is: • broad guidance or direction; • well-developed judgement planning required.

Level	Knowledge and skills	Application	Autonomy
5	Demonstrated knowledge and skills that: • are mainly technical and theoretical, within a broad field or with depth in one area.	Applied in contexts that: • are both known and changing; • involve unfamiliar issues that are addressed using a range of processes.	In conditions where there is: • general guidance or direction; • both judgement and planning required.
4	Demonstrated knowledge and skills that: • are broadly factual, within a broad field in one area.	Applied in contexts that: • are stable but sometimes unpredictable; • involve familiar and unfamiliar issues.	In conditions where there is: • routine guidance or direction; • judgement and some planning required.
3	Demonstrated knowledge and skills that: • are factual or procedural, technical, with some theoretical aspects.	Applied in contexts that: • are stable and predictable; • involve familiar issues that are addressed by selecting from known solutions	In conditions where there is: • routine supervision and guidance and direction; • some judgement and discretion required.
2	Demonstrated knowledge and skills that: • are factual or manual or operational.	Applied in contexts that: • are structured and stable; • involve straightforward issues that are addressed by set, known solutions.	In conditions where there is: • close support and guidance or direction; • minimal judgement or discretion required.
1	Demonstrated knowledge and skills that: • basic, foundational and explicit.	Applied in contexts that: • are highly structured, defined and repetitive; • involve straightforward and everyday issues that are addressed by simple and rehearsed procedures.	In conditions where there is: • immediate support and guidance or direction; • almost no judgement and planning required.

Source: SPBEA, 2011.

The Southern African Development Community Qualifications Framework[20]

Member states: Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe (15).

Background

The main objectives of the Southern African Development Community (SADC) are to achieve development, peace and security, and economic growth, to alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa, and support the socially disadvantaged through regional integration, built on democratic principles, and equitable and sustainable development.

In this context, in 1997, SADC countries adopted a Protocol on Education and Training which seeks to promote a regionally integrated and harmonized educational system, especially with regard to issues pertaining to access, equity, relevance, and quality of education interventions.

The SADC regional qualifications framework (RQF) is considered an important mechanism to implement the Protocol on Education and Training and to address the agenda for regional integration and the harmonization and standardization of the education and training systems in SADC, as well as the eventual achievement of qualification equivalences as required by the SADC Protocol on Education and Training.

Level of development

Following the signing of the SADC Protocol on Education and Training in 1997, a Technical Committee on Certification and Accreditation (TCCA) was established to oversee harmonization and standardization of education and training systems in the SADC region, including the development of an RQF. Following a period of consultation and research, a SADC RQF concept document was developed in 2005, and subsequently revised in 2011 (SADC, 2011). The concept document was endorsed by SADC ministers of education on 23 September 2011. Ministers also approved the strengthening of the Education and Skills Development Unit at the SADC Secretariat, as well as increased advocacy and consultations on the SADC RQF with key stakeholders.

A set of level descriptors for the SADC RQF, has been developed (see annex). Three domains are used: (i) knowledge, (ii) skills, and (iii) autonomy and responsibility. A number of activities have been also undertaken by the SADC TCCA, including:

- a review of existing qualifications;
- the development of SADC regional quality-assurance guidelines;
- the setting-up of a SADC qualifications portal.

To progress the implementation of the SADC RQF, a proposal was made for thematic working groups and coordination points in each of the member states. SADC member states were also encouraged to upload their qualifications to the SADC qualifications portal, which has been piloted with a few member states. In addition, in 2014, a desktop study was undertaken of policy documents on the recognition of prior learning (RPL) in three SADC member states, and this led to development of a draft strategy on RPL in 2015. The draft strategy will inform the development of regional guidelines on RPL in SADC.

At present, all fifteen SADC member states are involved in NQF development, albeit at different levels. DRC, Lesotho, Zimbabwe and Swaziland are at the earliest stages of national qualifications framework development. Although proposals to implement an NQF have been discussed, none of these countries has yet formalized the decision in approved policy and legislation. Therefore, the future development trajectories of these NQFs are not yet entirely clear. Four other countries are beginning to develop an NQF, having already

20 Special thanks are due to Lomthandazo Mavimbela for her review and inputs.

established a framework of qualifications for the TVET sector: Botswana (BNVQ), Malawi (TQF), Zambia (TEVET QF) and Tanzania. With policy and a pilot for a framework for technical and professional qualifications, Mozambique may be considered to fall into this 'developmental pathway', albeit at an earlier stage than other countries in this group. Four countries are already implementing an NQF, three for a decade or more: South Africa (since 1995), Namibia (since 1996), Mauritius (since 2001) and Seychelles (since 2005). These four countries have followed a developmental pathway based on establishing a comprehensive NQF from the outset.

The future of the SADC QF

Despite having started much earlier than the other regions (in 1999), the framework was not yet operational in 2014. This has been mainly due to a lack of capacity and resources at a regional level, but is also a result of the initial decision to first allow member states to develop their own NQFs before the RQF could be developed. This decision was later revised and the SADC RQF was formally established in 2011 (SADC, 2011). Even so, the region has been unable to take the process forward.

The following developments are planned for the next five years (2015–2020). The SADC RQF is expected to be approved and implementation initiated by 2017. This will entail:

- finalization and referencing of NQFs to RQF, and approval of the final RQF by SADC ministers of education and training;
- development of regional guidelines on RPL and assisting SADC member states to develop their national RPL policy or strategic plan;
- agreement on level descriptors for TVET qualifications;
- establishing equivalencies for TVET qualifications, in particular artisan and engineering qualifications;
- setting up a regional body for facilitating implementation of the RQF;
- upgrading and reviving the SADC portal on qualifications.

References

SADC. 2011. Towards a Southern African Development Community Qualifications Framework. Concept paper and implementation plan, Technical Committee on Certification and Accreditation. Unpublished.

Prepared by:
UNESCO

Annex 4: Level descriptors for the SADC Qualifications Framework

Level	Knowledge	Skills	Autonomy and responsibility
10	Makes a substantial and original contribution to knowledge in the field through research and scholarship	Conducts original research which is evaluated by independent experts against international standards; demonstrates problem-solving ability and critical evaluation of research findings for academic discussion	Demonstrates full responsibility and accountability for all aspects of advanced research work
9	Demonstrates mastery of theoretically sophisticated subject matter, showing critical awareness of current problems and new insights at the forefront of the discipline area	Conducts original research deploying appropriate research methods and processes, primary and secondary; sources information using rigorous intellectual analysis and independent thinking and applies knowledge in new situations; and demonstrates independent thinking, problem-solving, critical evaluation of research findings and ability to make judgements based on knowledge and evidence	Shows independence, initiative and originality and the ability to manage own and group outcomes in complex and unpredictable situations
8	Demonstrates critical understanding of the principles, theories, methodologies, current research and literature of the discipline	Demonstrates capacity to use a coherent and critical understanding of the principles, theories and methodologies of a particular discipline. Selects and applies appropriate research methods and techniques, and critical analysis and independent evaluation of information	Operates within the context of a strategic plan with complete accountability for management of resources and supervision of others
7	Demonstrates knowledge of a major discipline with possible areas of specialization, including command of the ideas, principles, concepts, chief research methods and problem-solving techniques of the recognized discipline	Demonstrates intellectual independence, critical thinking and analytical rigor, and advanced communication and collaborative skills in complex and variable contexts	Designs and manages processes and works with broad accountability for determining, achieving and evaluating personal and group outcomes
6	Demonstrates specialist knowledge in more than one area and ability to collate, analyse and synthesise a wide range of technical information	Demonstrates ability to apply specialist knowledge and skills in highly variable contexts and formulate responses to concrete and abstract problems	Manages processes and works with complete accountability for personal and group outcomes
5	Demonstrates a broad knowledge base with substantial depth in some areas, ability to analyse information and construct a coherent argument	Applies a wide range of technical and/or scholastic skills in variable contexts using standard and non-standard procedures, often in combination	Works independently under broad guidance and can take some responsibility for supervising the work of others and group outcomes
4	Demonstrates a broad knowledge base, incorporating some abstract and technical concepts, and ability to analyse information and make informed judgements	Applies a moderate range of technical and/or scholastic skills which are transferable in familiar and unfamiliar contexts, using routine and non-routine procedures	Shows ability for self-direction, requiring little supervision, and complete responsibility for own outcomes and some responsibility for group outcomes
3	Demonstrates basic operational and theoretical knowledge and ability to interpret information	Demonstrates a range of well-developed skills and ability to apply known solutions to familiar problems	Works under general supervision with some responsibility for quality and quantity of output
2	Demonstrates recall and a narrow range of knowledge and cognitive skills	Can carry out processes that are limited in range, repetitive and familiar	Applied in directed activity under close supervision
1	Demonstrates basic general knowledge and numeracy and literacy for everyday purposes	Can follow simple instructions and perform actions required to carry out simple concrete tasks requiring no special skills	Works under close supervision in familiar surroundings and structured contexts

Source: SADC, 2011.

The Transnational Qualifications Framework for the Virtual University of Small States of the Commonwealth[21]

Member states: Antigua and Barbuda, Bahamas, Barbados, Belize, Botswana, Brunei Darussalam, Cyprus, Dominica, Fiji, Gambia, Grenada, Guyana, Jamaica, Kiribati, Lesotho, Maldives, Malta, Mauritius, Namibia, Papua New Guinea, St Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Seychelles, Sierra Leone, Solomon Islands, Swaziland, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu (32)

Background

The Commonwealth of Nations, commonly known as the Commonwealth, is an inter-governmental organization of fifty-three member states that were mostly territories of the former British Empire. The Commonwealth operates by inter-governmental consensus of the member states, organized through the Commonwealth Secretariat, and non-governmental organizations, organized through the Commonwealth Foundation.

On request of Commonwealth heads of state, the Commonwealth of Learning (COL) initiated the development of a Virtual University of Small States of the Commonwealth (VUSSC) in 2003, premised on a virtual mode for distance education. This was expected to improve access to educational opportunities, enhance the quality of teaching and reduce costs. In addition, all participating VUSSC countries are small states that share at least some common challenges in the face of globalization and the increased mobility of highly skilled professionals. Participating VUSSC countries are located across the globe and represent a unique initiative that does not rely on geographical proximity.

After approval of the VUSSC concept in 2003 by the ministers, COL was asked to assist countries to collaborate and strengthen the capacity of national education institutions through VUSSC.

Following a period of four years of course development through VUSSC 'bootcamps', the small states proposed the development of a qualifications framework as a mechanism to support the development, international recognition, comparability and understanding of the VUSSC courses.

Level of development

The Transnational Qualifications Framework (TQF) is defined as 'a translation instrument for the classification of VUSSC qualifications according to set criteria for specified levels of learning achieved, to improve credit transfer and promote common accreditation mechanisms between participating VUSSC countries'.[22] The proposed architecture of the TQF includes a set of level descriptors (see annex). The level descriptors include three domains: (i) knowledge and understanding, (ii) skills, and (iii) wider personal and professional competencies.

A management committee for the TQF was appointed in October 2008, comprising two representatives from each of the three main regions in which the thirty-two countries are located. The management committee developed an implementation plan for the TQF in 2010 (COL and SAQA, 2010).

The TQF was officially launched in 2010 in Namibia. In 2011, work was initiated to register the first qualifications on the TQF. Standards for VUSSC courses have subsequently been developed in tourism, agriculture and ICT through consultative workshops held since 2010 in the Bahamas and Samoa, and in 2012 in the Seychelles. In 2015, the TQF management committee approved the registration of the following six VUSSC programmes in the TQF:
(i) Bachelor in Business and Entrepreneurship;
(ii) BSc (Hons) Business Entrepreneurship;

21 Special thanks are due to Franz Gertze and Kaylash Allgoo for their review and inputs.

22 See details at www.vussc.info/index.php?option=com_content&view=article&id=123&Itemid=2

(iii) Diploma in Sustainable Agriculture in Small States; (iv) Certificate in Tour Guiding; (v) BSc in Environmental Science; and (vi) Master in Educational Leadership.[23]

For quality-assurance the TQF relies entirely on the quality-assurance mechanism in countries where courses originate and/or are offered. The TQF design excludes the accreditation of providers but includes the registration of qualifications: a qualification that meets the transnational qualifications criteria is registered on the TQF and referred to as a 'TQF registered qualification'. Any education and training provider in a participating VUSSC country that meets the broad quality-assurance criteria, and is accredited on a sectoral, national and/or regional level, will be able to offer such a registered qualification. At most, the TQF is viewed as a mechanism that can provide guidance to national quality-assurance processes based on the existing UNESCO and other international guidelines on quality assurance. In certain cases, such as in some very small states where NQF development may not be pursued, and where very limited national quality-assurance systems are in place, the intention is to rely on regional bodies, or, where no regional body is in place, the TQF management committee itself.

NQF development among the 32 small states involved in the TQF varies greatly, but in most it is still at a very early stage. Only Malta, Mauritius, Namibia and Samoa have moved onto more advanced stages.

The future of VUSSC

The Open University of Malaysia hosted a meeting during the first week of March 2015 to finalize the review of the TQF and the referencing of NQFs against the TQF, and to approve the registration of six VUSSC programmes on the TQF. The announcement of the completed TQF is expected to provide small states with more up-to-date procedures and guidelines and a referencing tool for alignment of qualifications to the TQF.

References

COL; SAQA. 2010. *Transnational Qualifications Framework for the Virtual University of Small States of the Commonwealth*. Procedures and Guidelines. Pretoria, Commonwealth of Learning and South African Qualifications Authority.

Prepared by:
UNESCO

23 See www.col.org/news/current/Pages/2015-03-19_TQF.aspx

Annex 5: Proposed levels and level descriptors for the VUSSC Transnational Qualifications Framework

Level	Descriptors
10	Acquire and possess a systematic understanding of a substantial body of knowledge which is at the forefront of an academic discipline, field of study or area of professional practice; be able to create and interpret new knowledge at a most advanced frontier of a field of work or study through original and advanced research of a quality to satisfy peer review, extend the forefront of the discipline and merit publication; possess the most advanced and specialized skills and techniques to be able to conceptualize, design and implement a project for the generation of new knowledge or to solve critical problems or to refute or redefine existing knowledge; demonstrate authority, innovation, autonomy, integrity and personal responsibility to the production or development of innovative ideas or processes in the context of an academic discipline, field of study or area of professional practice.
9	Have a logical understanding of a body of highly specialized knowledge some of which is at the forefront of their academic discipline, field of study, or area of professional practice, as a basis for original thought and/or the conduct of research and/or enquiry; have a comprehensive understanding of the research skills and/or relevant established techniques applicable to their own research or to advanced scholarship that can be used to create and interpret knowledge; demonstrate originality in the application of knowledge to solve problems, together with a practical understanding of how knowledge can be managed to transform work or study; possess a conceptual understanding of how to analyse and critically evaluate current research in their academic discipline, field of study or work and to apply, where appropriate, to solve problems.
8	Have systematic, extensive and comparative knowledge of the key aspects of their academic discipline, field of study or work; possess an ability to deploy accurately established analytical tools and/or techniques and enquiry within their academic discipline, field of study or work; be able to use their knowledge, understanding and skills of a wide range of concepts, ideas and information to devise and sustain arguments and/or to solve problems; display a critical understanding of the uncertainty, ambiguity and limits of knowledge and how it is developed; possess the ability to manage their own learning and to make use of scholarly reviews and primary sources (e.g. refereed research articles and/or original materials appropriate to the discipline).
7	Have advanced knowledge of a field of work or study, involving a critical understanding of the well-established principles and including an understanding of some advanced aspect(s) of their area(s) of their field of work or study; where appropriate, the application of those principles in an employment context; have an understanding of the limits of that knowledge and how this influences analysis and interpretation based on that knowledge; possess advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in their specialized field of work or study; be able to manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts.
6	Possess an in-depth knowledge and critical understanding of the ideas, concepts and principles in their field of work or study; have knowledge of the methods of enquiry in the subject, and use a range of techniques to initiate and undertake critical analysis of information, proposing solutions to problems arising from that analysis; demonstrate an ability to critically evaluate and apply the appropriateness of different approaches to solving problems; apply those concepts and principles more widely; have an understanding of the limits of their knowledge, and how this influences analyses and interpretations; effectively communicate information, arguments and analysis, in a variety of forms, to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively; have the qualities necessary for employment in situations requiring the exercise of personal responsibility and decision-making.
5	Have broad knowledge and understanding of the main underlying ideas, concepts and principles in a field of work or study; be able to use their knowledge, understanding and skills to critically evaluate and determine appropriate methods and procedures to respond to a range of problems of a generally routine nature; display qualities and transferable knowledge and skills necessary for employment in situations requiring the exercise of some personal responsibility; communicate the results of their field of study or work accurately and reliably using a range of different modalities; identify and articulate their own learning needs within defined contexts and undertake guided further learning in new areas.
4	Have a broad knowledge and understanding of the main underlying concepts and principles in a field of work or study; demonstrate a basic understanding of the major theories, principles, ideas and concepts of their particular area of study; be able to use different approaches to identify, evaluate and solve problems of a generally routine nature; be able to use their knowledge, understanding of a particular subject area to communicate accurately and reliably with structured and coherent arguments; use their knowledge, understanding and skills to undertake further learning within a structured and managed environment; possess the qualities and transferable skills needed for employment in situations requiring the exercise of some personal responsibility.
3	Demonstrate a knowledge of basic concepts and principles in a field of work or study; have command of analytical interpretation of information; express informed judgement; be able to display a range of known responses to familiar problems.
2	Demonstrate a narrow range of applied knowledge and basic comprehension in a field of work or study; display a narrow range of skills in a field of work or study; be able to use known solutions to familiar problems.
1	Demonstrate basic literacy and numeracy skills.

Source: COL and SAQA, 2010.

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