

OpenQAsS

**Open Source Quality Assurance System for
Vocational Education**

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QA Practices

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Introduction

This document was written within the framework of the ERASMUS+ Strategic Partnership project OpenQAsS - *Open Source Quality Assurance System for Vocational Education*.

The OpenQAsS project vision is to utilise the potential of today's networking technology in all areas of the implementation of the EQAVET Reference Framework principles, and so make the resulting tools part of the daily practice of institutional Quality Assurance in our VET schools.

Target groups

- Teachers and headmasters of VET schools; managers and trainers of VET provider companies;
- VET schools and VET providers;
- Researchers working in the field of the vocational education;
- Software developers joining the OpenQAsS.org community.

Objectives

- To improve the culture of quality assurance by involvement of VET teachers and trainers into online consultation in the partner countries;
- To develop Open Source Software toolkit (Open QAsS) to promote and facilitate QA management in VET schools and adult educational VET providers;
- To develop a certificate – Institutional Quality Manager (IQAM) – for VET teachers and trainers who take responsibility for quality management tasks in institutions.

This report is a summary of educational and quality practices identified in the partner countries, and in three other selected EU states – The Netherlands, Finland and Denmark. The aim of this report is to reveal the state-of-art regarding QA practice in the European VET institutes for designing the OpenQAsS Toolkit and IQAM certificate.

Edinburgh, 16th April 2015

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1 The UK

1.1 Frameworks

1.1.1 The Qualification Framework in The UK

There is more than one qualifications framework in the UK, with each country (jurisdiction) potentially having its own.

- England and Northern Ireland share the National Qualifications Framework (NQF) and the Qualifications and Credit Framework (QCF)
- Wales has its own Credit and Qualifications Framework which aligns closely with the NQF and QCF
- Scotland has its own Credit and Qualifications Framework (SCQF).

All Vocational Qualifications in the UK are based on National Occupational Standards (NOS), which are governed by the cross-UK Sector Skills Councils. Frameworks for Apprenticeships are used across the UK as a whole, though there are some differences between the jurisdictions.

1.1.2 The Educational 'Cycles', e.g. primary, secondary, tertiary

Across the UK as a whole there are five stages of education:

1. early years: pre-school and nursery education
2. primary school: ages 5 – 11/12 approx., compulsory
3. secondary school: ages 12 – 16 compulsory, possibly to 17/18 approx
4. Further Education (FE): not compulsory and covers 'non-advanced' education which can be taken at further, including tertiary, education colleges and HE institutions -HEIs
5. Higher Education (HE): study beyond GCE 'A' levels and their equivalent, such as Scottish Higher Certificates, which, for most full-time students, takes place in universities and other HEIs and colleges.

1.1.3 The VQ Qualification System

The UK uses a system of Vocational Qualifications. National Vocational Qualifications (NVQs) are work based awards that are achieved through assessment and training.

To achieve an NVQ, candidates must prove that they have the ability (competence) to carry out their job to the required standard, where competences are based on National Occupational Standards (NOS) that describe the 'competencies' expected in any given job role.

- National Occupational Standards (NOS) specify UK standards of performance expected to be achieved in work, and the knowledge and skills to be performed effectively.

There are five levels of NVQ ranging from Level 1, which focuses on basic work activities, to Level 5 for senior management:

- Level 1 - basic, routine and repetitive work skills
- Level 2 - broad range of skills including non-routine activities and individual responsibility
- Level 3 - supervisory skills

- Level 4 - management skills
- Level 5 - senior management skills

In Scotland, Work is now underway to ensure that all Scottish VQs are credit rated within the Scottish Credit and Qualifications Framework (SCQF).

1.1.4 The Inspection System

The Office for Standards in Education, Children’s Services and Skills (Ofsted) inspects and regulates services providing education and skills for learners of all ages – in England. In Scotland their counterpart is Education Scotland.

Ofsted reports directly to the UK Parliament and is independent and impartial. Education Scotland report to the Scottish Government.

In education, Ofsted is responsible for:

- inspecting maintained schools and academies, some independent schools, and many other educational institutions and programmes outside of higher education
- publishing reports of findings, to improve the overall quality of education and training
- reporting to policymakers on the effectiveness of these services.

Some of Ofsted’s current priorities are:

- consulting on a mechanism for shorter but more regular inspections
- developing a common inspection framework for a more coherent and consistent approach, including with further education providers
- contract directly with more effectively sourced, trained and deployed inspectors for education and further education and skills.

1.2 Authorities & Agents

1.2.1 The QA Authorities in the UK

There are four main regulatory bodies in the UK who recognise:

- awarding organisations
- their qualifications.

They are:

- The Office of Qualifications and Examinations Regulation (Ofqual) regulates qualifications in England and vocational qualifications in Northern Ireland
- the Department for Children, Education, Lifelong Learning and Skills (DCELLS) is Wales’ qualifications regulator
- the Council for the Curriculum, Examinations and Assessment (CCEA) regulates qualifications with the exception of vocational in Northern Ireland
- the Scottish Qualifications Authority (SQA) regulates and awards all qualifications except of degrees in Scotland.

The regulars use several methods to ensure high quality of accredited qualifications before and after they are listed in the Register of Regulated Qualifications.

In order to be recognised and have their qualifications accredited by the regulators, the awarding organisations have to submit their proposition to the regulator which then carefully reviews both:

- the awarding organisation
- the proposed qualification.

If the qualification programme meets the regulator's criteria, it is recognised and listed in the Register. If they do not meet the set criteria, they are rejected. In order to make sure that the accredited qualifications maintain appropriate standards and quality, they are kept under review by the regulators who also have the power to withdraw accreditation.

1.2.2 The VET Delivery Agents

The main providers of further education and vocational training are the Further Education Institutions (in Scotland are the 17), or simply colleges, who provide education and training. The college sector is the largest provider of lifelong learning.

A typical college offers a wide range of courses from access level to highly specialised vocational education and training. They provide:

- continuing education beyond school
- preparation for further study and/or for entry into the labour market
- the needs of the UK workforce.

Courses are mainly vocational, including both theoretical and practical work, leading to awards including:

- Business and Technology Education Council (BTEC) secondary school leaving qualifications and Further Education qualification in England, Wales and Northern Ireland
- the Scottish Qualifications Certificate (SQC)
- Vocational Qualifications (VQs)
- advanced vocational courses – which are classed as higher education courses, leading to the award of a Higher National Certificate (HNC) or a Higher National Diploma (HND).

Students also have opportunities to work toward industry-specific Awards accredited by other nationally recognised Awarding Bodies, e.g. City & Guilds. Many colleges have also developed close links with particular universities or other higher education institutions to which some of their students may transfer (articulate) after gaining their HND/BTEC.

At non-advanced level, several different types of course meet the needs of industry and students:

- vocational and general education for post-16 students and trainees
- link courses for school pupils
- industrial pre-employment training, serving specific employer needs or the requirements of the Local Enterprise Companies

- off-the-job training for employees
- vocational and non-vocational evening classes.

1.3 QA Implementations

1.3.1 QA Manuals and QA Authorities

Focussing on Scotland on its own as an example of a national education system, there is a single body – the Scottish Qualifications Authority – responsible for QA in schools, further education colleges and other VET providers, and for Higher National (HN) and Vocational Qualification (VC) awards.

There are four stages in the SQA QA Process.

- Approval, divided into
 - Systems
 - Qualification
- Verification, also divided into
 - Systems
 - Qualifications

Any delivery agent must be an 'Approved Centre' in order to be able to offers qualifications.

1.3.1.1 Approval

- Systems Approval process.
The first stage of Approval confirms that a centre has the management structure and quality assurance system to support the assessment and internal verification of SQA qualifications.
- Qualification Approval process.
The second stage confirms that a centre has the necessary resources to meet SQA's approval criteria, as contained in the quality assurance criteria. This is carried out for each qualification that a centre applies for approval to offer.

Centres must demonstrate the potential to meet SQA's approval criteria, as laid out in the quality assurance criteria. After approval, a centre must continue to adhere to SQA's quality assurance criteria, which will be checked by the SQA who will carry out a series of systems verification and qualification verification visits.

A key document identified as being a necessary part of the System's Approval process, as well as for Internal Verification purposes, is a Quality Manual as a description of what activities are to be carried out, in what sequence, and by whom.

1.3.1.2 Verification

SQA carries out two types of verification visits:

- Systems verification ensures that a centre continues to have the management structure and quality assurance system to support the assessment and internal verification of SQA qualifications.
- Qualification verification ensures national consistency in assessment decisions.

Centres must continue to demonstrate compliance with SQA's quality assurance criteria.

1.3.1.3 EQAVET

The SQA take part in and monitor developments in VET across Europe, and has carried out an initial analysis and benchmarking of the EQAVET indicators. This has been presented to the Scottish Vocational Qualifications Board and this body has advised that the quality assurance mechanisms in place with regards to VET met most of the indicators, although there were some gaps.

Still to be published, it is unlikely that mapping to VET indicators will change current practice significantly. It will influence further development of existing systems, but should not be disruptive. It should be borne in mind that there is no single QA system across the UK as a whole.

1.3.2 QA Manuals and VET Delivery Agents

Systems and operational details are described in a Quality Manual, which should exist within a centre in some form or other. It must cover operational details of all aspects of a student's journey through study. All delivery agents will have a Quality Manual which will have been part of the Systems Approval process. The SQA's *Guide to Approval* sets out what should be in this.

The SQA criteria used for each of the four stages are very well documented (see [SQA QA Documents](#)). The four stages are measured against a set of clearly defined criteria, with a pre-determined rating of either: low, medium or high impact.

The findings of a systems or qualification verification visit will result in one of five outcome ratings from *Significant Strengths* to *Significant Weaknesses*, to each of the six categories of criteria. This will result in an overall outcome rating for the centre.

When an approved centre's management and quality assurance systems do not fully comply with the quality assurance criteria, the centre and the SQA agree on an action plan. Additionally, depending on the nature and level, the SQA we may invoke sanctions to protect qualification standards and to encourage compliance.

1.3.2.1 Inspection

Education Scotland Inspectors can also undertake independent reviews of the quality of provision in Scotland's colleges - on behalf of the Scottish Further and Higher Education Funding Council (SFC) under a service level agreement between that Council and Education Scotland.

During external reviews, members of the review teams:

- observe learning and teaching and hold discussions with learners, staff and stakeholders
- consider information on learner attainment and evaluate learner progress and outcomes
- meet with members of the Board of Management and obtain feedback from community groups, partners and employers who work with the college.

The purpose of this report is to convey the main outcomes arising from the external review, to acknowledge the college's strengths and to provide a clear agenda for future action to improve and enhance quality. This external review results in judgements of effective or limited effectiveness or not effective that expresses the external review team's overall evaluation of high quality learning, learner engagement and quality culture.

1.3.2.2 Validated self-evaluation

Validated self-evaluation (VSE) is not part of formal inspection. It is a voluntary process which aims to support and challenge the work of education authorities to improve the quality of provision and outcomes for learners. The purpose of this is to support, extend and challenge the education authority's own self-evaluation, and so affirm (or otherwise) and strengthen outcomes for learners.

Self-evaluation is increasingly well embedded across the Scottish educational sectors, and high quality self-evaluation can lead to continuous improvement for learners and the achievement of excellence in practice and provision.

1.3.3 IT implementation of QA Manuals

None are known.

2 Ireland

2.1 Frameworks

2.1.1 The Qualification Framework in Ireland

In Ireland the Ministry for Education and Skills established the state agency *Quality and Qualifications Ireland* (QQI) through the *Quality Assurance and Qualifications (Education and Training) Act 2012* to:

- promote the enhancement of quality in Ireland’s further & higher education and training
- quality assure education providers
- support and promote the national qualifications system.

QQI is an independent body working within the framework of governmental policy. Its goals are to:

- establish a comprehensive, coherent set of QQI policies and procedures with the NFQ National Framework of Qualifications (NQF)
- quality assure providers and support the enhancement of quality
- collaborate with stakeholders to create coherence between education & systems and qualifications.

QQI amalgamates the functions previously carried out by the Further Education and Training Awards Council (FETAC); the Higher Education and Training Awards Council (HETAC); the Irish Universities Quality Board (IUQB) and the National Qualifications Authority of Ireland (NQAI) into one body. In particular QQI is responsible:

- for maintaining the ten-level National Framework of Qualifications (NQF)
- as an awarding body and standard setter for awards made within the NFQ
- for validating education and training programmes
- for awards in Further Education and Training
- for awards in Higher Education, mainly for private providers (universities and institutes of technology make their own awards).

2.1.2 The Educational ‘Cycles’, e.g. primary, secondary, tertiary

Education is compulsory for children in Ireland from the ages of 6 to 16, or until students have completed three years of second-level education. The stages of education in Ireland are:

- Children attend primary school, national school, between the ages of 4 and 12
- Children from about 12 to 18 years attend second level education at a post-primary school
The post-primary education sector comprises:
 - Secondary schools - privately owned and managed
 - Vocational schools - state-established and administered by Education and Training Boards (ETBs)
 - Community and comprehensive schools - managed by Boards of Management of differing compositions.
- Higher Education, or Third Level education - provided by:
 - 7 Universities

- 14 Institutes of Technology
- 7 Colleges of Education.

2.1.3 The VQ Qualification System

Certification in the Further and Higher Education and Training Sector is usually in alignment with the ten-level National Framework of Qualifications.

The Quality and Qualifications Ireland (QQI) quality assures institutions of further and higher education and training, validates educational programmes and makes awards to learners.

The two organisations responsible in the main for further and adult education and training in Ireland are:

- the Education and Training Boards (ETBs)
- SOLAS, the new Further Education and Training Authority in Ireland

Ireland's further education and training sectors were developed separately over many years, largely through the predecessors to SOLAS and the Vocational Education Committees, though this has resulted in some unnecessary duplication and a waste of resources. SOLAS unifies and co-ordinates the local provision of training and further education programmes handled by 16 Education and Training Boards.

SOLAS works closely with a wide range of stakeholders including learners, employers, Education & Training Boards, Government departments, state bodies, Quality and Qualifications Ireland (QQI), the Higher Education Authority (HEA), Institutes of Technology (IOTs) and representative organisations. The aim is to build a clear, integrated pathway-to-work for learners through Further Education and Training.

2.1.4 The Inspection System

The Inspectorate is a division of the Department of Education and Skills responsible for the evaluation of centres for education, and for the provision of advice on a range of educational issues to school communities, policy makers in the Department and to the wider educational system.

All inspectors are either:

- experienced teachers, e.g. school principals or deputy principals, or
- have experience in curriculum design and the implementation of assessment practices, in school management and in educational research.

The Inspectorate:

- provides assurance of quality in the education system
- carries out inspections in schools and centres for education
- conducts national evaluations
- promotes best practice
- publishes inspection reports
- reports on curriculum provision, teaching, learning and assessment generally in the educational system.

2.2 Authorities & Agents

2.2.1 The QA Authorities in Ireland

Education providers must apply to QQI for approval to become a registered QQI provider.

If approved, a provider is then enabled to offer programmes that lead to QQI (Quality & Qualifications Ireland) awards within the National Framework of Qualifications in Ireland. QQI is also responsible for the maintenance, development and review of the National Framework of Qualifications (NFQ).

QQI, which incorporated the earlier FETAC, completes regular monitoring audits to ensure that all providers adhere to quality standards. The previous FETAC monitoring process, which is the basis of QQI monitoring, consists of:

- desk monitoring
- site visits
- reporting on the effectiveness of providers' quality systems
- follow-up and reviews.

The process involves a review of a provider's quality system and identifies good practice and areas for improvements as appropriate. A standard monitoring report is completed by the monitor and when complete is published on the QQI website.

These reports are heavily used in assisting learners to select a course provider.

2.2.2 The VET Delivery Agents

Traditionally the Vocational Educational Committees (VECs) were the main providers of further education in Ireland, but the Ministry for Education and Skills consolidated them in 2013 into sixteen Education and Training Boards. These new statutory education authorities are the vehicles for the delivery of coordinated education and training programmes across Ireland. The sixteen ETBs are:

- City of Dublin
- City of Cork and Co. Cork
- Co. Dublin and Dun Laoghaire
- City of Limerick, Co. Limerick and Co. Clare
- Co. Donegal
- Co. Kerry
- Co. Tipperary North and South
- City of Waterford, Co. Waterford and Co. Wexford
- City of Galway, Co. Galway and Co. Roscommon
- Co. Mayo, Co. Sligo and Co. Leitrim
- Co. Cavan and Co. Monaghan
- Co. Louth and Co. Meath
- Co. Longford and Co. Westmeath
- Co. Laois and Co. Offaly
- Co. Kildare and Co. Wicklow
- Co. Kilkenny and Co. Carlow

ETBs are statutory education authorities, which have responsibility for education and training, youth work and a range of other statutory functions. ETBs manage and operate:

- second-level schools
- further education colleges
- pilot community national schools
- arrange of adult and further education centres delivering education and training programmes.

In the same year SOLAS was established to work with the ETBs to support the development of appropriate further education and training programmes & curricula, and the sourcing of further education and training interventions from the private, public and not for profit sector.

2.3 QA Implementations

2.3.1 QA Manuals and QA Authorities

As an organisation, QQI is responsible for establishing and maintaining an internal quality assurance system. It is itself subject to external review by ENQA in accordance with Part 3 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area.

Principles

The principles underpinning the QQI approach to quality assurance in further education and training are:

- the primary responsibility for quality and its assurance lies with providers
- quality assurance requires planning, resources and commitment
- continuous improvement must be the goal of a quality assurance process
- quality systems should enhance transparency
- quality systems are context dependent i.e. the scale and scope of a provider's provision
- will impact on how it operates quality assurance
- ownership and understanding of a provider quality system by its management and staff
- are crucial.

The following points are indicative of headings, which must be addressed in quality assurance documentation:

- Governance
- Administration
- Information and Communications
- Institutional Research
- Academic Management
- General Provision, Collaborative Provision, Transnational Provision, Research Provision

2.3.2 QA Manuals and VET Delivery Agents

Every QQI registered provider must document in a Quality Manual the following:-

- Description of processes - i.e. documented policies and procedures

- Monitoring of processes - i.e. regular checks on the effectiveness of policies and procedures. It is important that providers develop indicators/data, which can be used to measure effectiveness.
- Self-Evaluation - a process to collect information and data from a range of sources, including learners, staff, independent experts, employers and other providers which will contribute to a substantive and realistic evaluation of the process or programme being reviewed.
- Governance structures

A provider should fully document, in hard / soft copy, its quality system. It will contain a QualityPolicy setting out the provider's commitment to deliver quality programmes and services and to review their effectiveness.

The policy should clarify:

- Management Responsibility: how management will exercise its responsibility to ensure effective resourcing and implementation of the quality system.
- Designated Responsibility: a specific role(s) with responsibility for quality management will be identified in the organisation chart.
- Information Systems: how controls and structures will be put in place to generate named data/reports which will be communicated to management for monitoring and planning purposes.
- The provider should identify appropriate quantitative measures, which can be used as benchmarks/indicators.

2.3.3 IT implementation of QA Manuals

None are known

3 Finland

3.1 Frameworks

3.1.1 The Qualification Framework in Finland

The Finnish National Board of Education is the National Coordination Point for the European Qualifications Framework, and appointed by the Ministry of Education and Culture. It supports and guides the relationship between:

- the national qualification system
- the European Qualifications Framework.

The Finnish National Framework for Qualifications and Other Learning improves the clarity and effectiveness of the Finnish qualifications system, increases the national and international transparency and comparability of qualifications and promotes national and international mobility.

It is an eight level framework based on the European Qualifications Framework (EQF), and describes the learning outcomes required by qualifications, syllabi and other extensive competence entities as knowledge, skills and competences, and by defining their interrelations. The competence-based description of qualifications is designed to support lifelong learning, improve employment prospects, increase mobility, and bridge the gap between education and the world of work.

3.1.2 The Educational 'Cycles', e.g. primary, secondary, tertiary

The stages of education in Finland are:

- pre-primary education – is part of the early childhood education and care system, and is the systematic education and instruction provided in the year preceding the start of compulsory education (though this will also become compulsory in 2015)
- basic education – which lasts for nine years and for all between 7 and 16 years. All school follow a national core curriculum.
- general upper secondary education – following basic education school-leavers opt for general or vocational upper secondary education. Both forms usually take three years and give eligibility for higher education
- vocational education and training - can be completed in upper secondary VET, apprenticeship training or as competence-based qualifications.
- higher education - provided by:
 - universities – which emphasise scientific research and instruction
 - polytechnics, or universities of applied sciences - which adopt a more practical approach.

3.1.3 The VQ Qualification System

Vocational education in Finland is separated into initial and further/continuing vocational education and training – I-VET and C-VET.

The aim of vocational education and training (VET) is to improve the skills of the work force, to respond to skills needs in the world of work and to support lifelong learning.

VET is the domain of the Ministry of Education and Culture, and about 40,000 students annually studying on 119 programmes, leading to 53 different vocational qualifications. The Ministry of Education and Culture is responsible for the strategic and normative steering of VET and leads national development.

The government determines the national objectives of VET, the structure of the qualifications and the core subjects included in them. The details of the qualification and the extent of training are determined by the Ministry of Education and Culture. The authorisations to provide VET are granted by the Ministry.

The National Board of Education designs the core curricula and sets the requirements of competence-based qualifications, which describe the aims and key content of the qualifications. I-VET vocational qualifications are designed to respond to labour market needs, and generally take three years of full-time study. Qualifications are based on working life occupations and the competencies required. A vocational qualification offers articulation routes for polytechnic and university study

3.1.4 The Inspection System

In Finland there are no school inspectors, no league tables, and no exams until the age of 16. However although the policy has proved to be a big success in Finland, some (Finnish) experts warn that life without inspection could pose risks in some countries, e.g. the UK. While inspection and inspectors may have been dispensed with, **inspection hasn't though now it is implemented as a self-evaluation process. Inspectors now play the role of supportive advisers to schools who now inspect themselves.**

While early attempts at school self-evaluation have lacked a whole-school strategy, ownership of the evaluation process by teachers, together with inputs from parental feedback and pupil self-assessment, have contributed to positive changes in classroom practice.

3.1.5 The QA Authorities in Finland

The Ministry of Education is responsible for the strategic direction for VET, including:

- national objectives for VET
- the structure of the qualifications
- core subjects included
- license to provide VET

The Finnish National Board of Education (FNBE) is the national agency in charge of education development in Finland with four main areas of operation:

- development of education (curricula development)
- evaluation of learning outcomes
- information services
- educational services .

With respect to the effectiveness and quality of vocational education the Finnish government introduced a performance-based funding system in 2002, which has four focus points:

- Effectiveness –measuring how well students transition from training to working
- Processes –monitoring rates for student drop out and completion of studies
- Teachers –aligned to how well teachers are trained and future training needs
- Finance –relating to an organisation’s financial situation.

3.1.6 The VET Delivery Agents

VET education and training can be organised within institutional learning environments and in workplaces – or, indeed, delivered online.

- Polytechnics can be public/municipal or private institutions, and both are authorised by the government. The authorisation determines their educational mission, fields of education, student numbers and location. Polytechnics have autonomy in their internal affairs. Polytechnics offer a wide range of education: degrees and master's degrees; professional specialisations and other adult education; open polytechnic education and vocational teacher training. The length of polytechnic degree studies is generally 3.5 - 4 years of full-time study, and arranged as degree programmes. Polytechnics also arrange adult education and open education geared to maintaining and upgrading competencies. Teaching arrangements in adult education are flexible and enable mature students to work alongside their studies.
- Vocational Special Education (VSE) institutions provide facilities and services for students with severe disabilities or chronic illnesses. Instruction is given in small groups and the main emphasis is on practice rather than theory. Students are also offered individual guidance and support for their studies and everyday lives.
- Some employers also train people for their own jobs, and give a job guarantee to students who complete the training.

3.2 QA Implementations

3.2.1 QA Manuals and QA Authorities

In 2010 the Finish Ministry of Education and Culture appointed a committee to prepare a proposal for a quality strategy for vocational education and training (VET), covering all sectors of the national quality assurance (QA) system and all forms of VET provision.

The outcomes were that quality management would become systematic at all levels of operation and all forms of VET by 2015. Tools are to be developed to support quality assurance and continuous improvement, and all VET providers will have effective, operation quality systems in place, including a set of criteria and a process to be developed for auditing QA systems.

It is intended that the evaluation of prerequisites for providing VET will be given a clearer role in QA, as well as in continuous quality improvement, via a set of criteria to be developed.

Similarly, systematic and long-term support will be given to VET providers at different stages of QA work in developing their quality management. This will primarily be through:

- self-evaluation and peer learning
- peer review
- recognition

- incentives.

Of interest to OpenQAsS is the intent to develop quality improvement tools to support VET providers at different stages of quality management. QA will use uniform operational principles, procedures and processes directed to achieve the aims set for VET, and based on continual learning and operational development.

QA will be developed in collaboration with national and international partners, with the aim of identifying good practices and the harmonising of procedures.

3.2.2 QA Manuals and VET Delivery Agents

Continuous improvement of the quality of vocational education and training is a key priority in Finland, as it is within the European Union., and one of the main objectives of the Copenhagen process.

The Finnish Ministry of Education has drafted a recommendation based on the Common Quality Assurance Framework (CQAF) to support and encourage VET providers to pursue excellence when improving the quality of their operations, and prepared by the Finnish National Board of Education in co-operation with VET providers, employers' representatives, and students.

Individual recommendations raise issues and policies that are important in terms of quality management in order to support development work. However it is just a set of recommendations. It does not present solutions or ready-made approaches and toolkits. It is left up to the individual VET providers to decide what is relevant, and what minimum criteria for quality management they should adopt. The recommendation also does not replace any existing quality assurance systems and it does not force users to apply any specific system.

Each VET provider draws up a documented operational system – basically a Quality Manual - that is used to plan and steer operations as a whole and to communicate information about the values, goals and objectives guiding operations to key stakeholders. This documented operational system also covers descriptions of processes and the organisational structures and approaches that support their development.

3.2.3 IT implementation of QA Manuals

There are many assessment models, including EFQM and CAF and CQAF. The CQAF model, on which the Finnish system is based, is about continuous learning and systematic improvement of operations.

The model guides VET providers to pay attention to aspects that are important in terms of quality, but it does not provide any answers about how providers should operate. There are no known national IT implementations of the model, though there may be individual institutional implementations that are supported by IT.

One reason is that VET providers make diverse use of various evaluation methods and data in order to develop their own specific operations.

4 The Netherlands

4.1 Frameworks

4.1.1 The Qualification Framework in The Netherlands

The Ministry of Education, Culture and Science of the Netherlands commissions the development of the Dutch Qualifications Framework (NLQF), though it is the responsibility of an independent body - The National Coordination Point NLQF (NCP) to actually develop and implement the NLQF.

The Dutch Qualifications Framework (NLQF) describes the Dutch qualification levels, from basic education at Level 1, to Master's degree at level 7 and Doctorate's at level 8.

The NLQF aims to facilitate students and labour market mobility by providing an insight into the levels of qualifications recorded by the National Coordination Point NLQF in the NCP register. The NLQF provides transparency in that it facilitates a comparison of qualification levels nationally and internationally, thus, labour market mobility.

The NCP records government-regulated qualifications (The qualifications of the Ministries of Education Culture and Sciences; and Economic Affairs; Food and Natural and Living Environment) in the National Coordination Point (NCP) Register of qualifications. All other qualifications are first assessed and level-determined by the NCP and then recorded in the Register.

The Dutch Qualifications Framework offers providers of qualifications which are not regulated by the Government the possibility of having such training programmes and qualifications classified at a level of the NLQF.

The NLQF is referenced to the European Qualifications Framework (EQF).

4.1.2 The Educational 'Cycles', e.g. primary, secondary, tertiary

Education is compulsory from the ages 5 to 18, and provided in public, religious and private schools.

- Full-time education is compulsory from the ages of 5 to 16.
- **From the age of 16 until 18 students are obligated to attain a starting qualification that is sufficient for entrance at the labour market.**

One of the distinct features of the Dutch education system is that pupils choose their path (type and level) of education in an early stage.

The education stages are:

- Primary education – from ages 6 to 12
- Secondary education - from 12 years of age. Secondary education comprises:
 - a period of basic secondary education, which lasts around two to three years
 - at the end of their second year student choose which pathway to take.
- The Dutch education system requires student to choose one of three main secondary pathways which determine the type of education received at post-secondary level:
 1. Pre-university academic
 2. Pre-university applied/vocational
 3. Preparatory vocational secondary education.

- Students can leave full time education at the age of 16, but must be in part time education until the age of 18 years old.

The Dutch education and training system therefore comprises the following main elements:

- primary education
- special education
- secondary education
- pre-vocational secondary education
- general secondary education (consisting of 2 phases)
- vocational education & training and adult continuing education
- higher education

4.1.3 The VQ Qualification System

The aim of VET and Adult education (WEB) is theoretical and practical preparation for the execution of occupations. This relies on having education-based courses that lead to a qualification.

The Dutch qualification framework is linked to IVET in twoways:

- within the Dutch education system VET is unique in operating with a qualification framework, rather than a diploma system as found in all other areas of education
- the qualification framework is therefore the 'diploma framework' for VET.

The qualification framework separates the definition of standards of VET, with qualification clusters, and the organisation of courses in VET, and this separation in turn divides responsibilities between schools and sector based social partners:

- the production of qualifications, i.e. what should be learned in VET, is the responsibility of sectorbased national bodies
- schools adapt programmes to these qualifications.

In essence the Dutch have a national standard based qualification framework that encourages social partners to add qualifications to their section of the framework, and which encourages private organisations to offer programmes in competition with publicly funded VET schools.

All qualifications are divided into certificated units, which build to the full diploma. Certificates provide flexibility to students to suspend, to move to another course, or to resume learning at a later stage.

A key aspect of the Dutch VET system is the concept of 'dualisation', i.e. qualifications, and the training that goes with them, contain both work and theoretical components. This raises the level of employers' involvement and interest in VET qualifications.

4.1.4 The Inspection System

There is no fixed system of quality assurance for assessment of senior secondary vocational education training. The regional education and training centres set their own assessment for both

school and work based components, as external awarding bodies are not involved. However centres are obliged to involve external, independent examination centres in the examination of at least 51 per cent of the training programme, to ensure objectivity and quality of examinations.

These centres are monitored by a national Inspectorate of Education that undertakes regular visits, depending on a centre's performance grading. This Inspectorate is similar to the UK's Ofsted. The College for Examinations maintains standards for the qualification framework.

4.2 Authorities & Agents

4.2.1 The QA Authorities in the Netherlands

The Ministry of Education, Culture and Science is responsible for strategic policy and oversight for VET (except for agriculture - a strategically important sector in its own right), supported by the Foundation for Cooperation on VET and the Labour Market which represents all social partners (employers, employees and training providers). The Foundation provides a unified voice on VET policy with which to advise the Ministry, working with the umbrella body for state funded training providers, the Association for Vocational and Adult Education.

The Foundation offers the Ministry a single point of contact that draws up recommendations and advice on behalf of education and the labour market, e.g. reviewing aspects of VET policy, its ability to meet labour market demands, and the regional structure of training provision and the quality of qualifications.

Employer and employee representation in Dutch VET is via the 17 Knowledge Centres that cover distinctive economic sectors. Knowledge centres are mandated by the 1996 WEB Act to perform certain activities for their respective sectors, including:

- Developing and maintaining qualifications
- Recruiting and accrediting employers so that they can engage in workplace training, by taking on trainees via apprenticeships or internships
- Coordinating and promoting sectoral training, e.g. recruiting new vocational education providers
- Conducting labour market intelligence.

Knowledge centres are also responsible for ensuring there are enough apprenticeship and have direct links to industry to determine what the skills demand is, and to the education sector, to direct the supply of training.

4.2.2 The VET Delivery Agents

Publicly funded senior secondary vocational education training, and also some continuing education for adults, is delivered by the 42 Regional Education and Training Centres (ROCs). These are similar to large Further Education colleges in the UK system.

These centres deliver sectoral VET, designed by Knowledge Centres, through a wide variety of training programme and with a regional dimension. So Knowledge Centres identify the competencies required by industry and feed these to the delivery centres who have significant flexibility in how they achieve this so long as:

- their core remit is fulfilled, as defined by the WEB Act
- they deliver what is required by the Knowledge Centres' development plans

Regional Centres cooperate closely with employers who they depend on for training opportunities for students, so study content has to be relevant to the workplace and up to date work.

ROCs have their own representative body to collectively represent their interests. The Association for Vocational and Adult Education acts as a national umbrella organisation for all 42 regional centres and other government funded institutions providing secondary VET and adult education, playing a major role in the modelling of vocational education to competence based vocational education and training.

5 Denmark

5.1 Frameworks

5.1.1 The Qualification Framework in Denmark

The Ministry of Education is the overall body responsible for the VET system having responsibility for all legal, policy and program definition aspects. It is responsible for:

- approving new VET qualifications on the basis of recommendations from the Advisory Council for Initial Vocational Education and Training (REU)
- approving the colleges that are to provide the basic and main courses in VET
- laying down the overall rules for VET – in cooperation with the REU
- drawing up the regulations on the individual VET programs – in cooperation with industry based trade committees who help formulate curricula.

All public approved degrees and certificates are classified within the National Qualification Framework (NQF).

- VET certificates are classified at Levels 3 to 5.

5.1.2 The Educational 'Cycles', e.g. primary, secondary, tertiary

Compulsory education in Denmark starts at Primary and lasts for a minimum of 10 years. The stages of education in Denmark are:

- Pre-school
- Primary and lower secondary education–full-time, compulsory education covering first (grade 1 to 6) and second (grade 7-9/10) stage basic education for ages 7 to 16/17.
- Upper secondary education for 16-19-year-olds - which divides into:
 - general education qualifying for access to higher education
 - vocational or technical education qualifying primarily for access to the labour market.
- Vocational education and training (I-VET) – which are sandwich-type programmes, where practical training in a company alternates with teaching at a vocational college.
- Higher education
- Adult learning (CVET) – includes both formal and informal training.

5.1.3 The VQ Qualification System

Denmark distinguishes between Initial VET (I-VET) and Continuing VET (C-VET), however the Ministry of Education is the overall body responsible for the VET system covering legal, policy and program definition aspects. It is responsible for:

- approving new VET qualifications on the basis of recommendations from the Advisory Council for Initial Vocational Education and Training
- approving the colleges who provide VET
- setting overall rules for VET, in cooperation with the Advisory Council

- drawing up the regulations for individual VET programs, in cooperation with industry based trade committees.

The Ministry of Education formulates the legal basis for the provision of VET in institutions and their financial arrangements. All VET program are regulated by specific program regulations stipulating duration, content, subject, competence levels, etc. Being responsible for general education policy, the Ministry of Education is responsible for ensuring that VET programmes are consistent with policy, which ensures that VET programs are developed with strong involvement of social partners, vocational colleges and enterprises. This cooperative approach ensures that curricula and methodologies are readily adapted to the needs of the labour market and trainees.

IVET takes place in vocational colleges approved by the Ministry of Education. CVET is offered by adult vocational training centres, as well as vocational colleges. Employees are given the opportunity to increase their skills and competencies regularly by following an adult vocational training centre programme.

VET in Denmark is dual in that periods of practical training are alternated with periods of school-based training:

- Two thirds of curricular time is, in general, spend on practical training within an enterprise
- one third is spent on school-based education.

Student must agree an apprenticeship contract with an employer before they can start a programme. Within a highly decentralised system, the Ministry of Education sets the overall framework for IVET as well as the overall objectives. However, VET institutions, together with boards and local trade committees, have a substantial autonomy in adapting VET curricula and teaching and learning methodologies, to meet local demands and needs.

5.1.4 The Inspection System

The Ministry of Education is responsible for inspection and quality assurance.

The Common Quality Assurance Framework (CQAF) is an integral part of the policy with freedom on how it is implemented by providers. Important aspects of the quality assurance process include:

- output monitoring in which providers are encouraged by the offer of additional funding to attain certain goals in pre-defined priority areas
- self-evaluation, which is required of all providers.

There are also quality rules stipulating the actions that providers must take with regard to quality assurance. Providers are monitored by the Ministry of Education through the data they provide, but also through inspection. Six output indicators that have been developed for the purpose of this monitoring:

- Test and examination results
- Completion rates
- Completion times
- Drop-out rates and times
- Transition rates to other education programmes

- Transition rates to the labour market.

All providers publish information about these indicators as well as on their pedagogical values and practices, strategy, and grades. The Danish Evaluation Institute is an external, independent body for quality assurance and to ensure that participation in international surveys and initiatives provide valuable comparative indicators.

5.2 Authorities & Agents

5.2.1 The QA Authorities in Denmark

Providers are responsible for meeting the needs of their local labour market, and the Ministry of Education supervises their provision and the quality of their training activities.

Providers also analyse the quality of training activities, i.e. the satisfaction rate is measured systematically by all participants and a representative segment of companies. Results are made public by the Ministry on their web site

The Ministry of Education is responsible for inspection as well as quality assurance. Although the Ministry has the overall responsibility, other actors play important roles:

- Social partners, in particular trade committees and local training committees
- trainees themselves
- enterprises through employer associations.

The Ministry of Education has a small number of full-time inspectors but they are involved mainly in policy formulation and administration.

In Denmark, the main emphasis in quality assurance is at the input stage through the curricular framework, laid down by the Ministry of Education, through the detailed curriculum, determined by each school board, and through examinations and certification. There is less emphasis on quality control of the curriculum.

Colleges do not normally have a designated quality manager. Externally accredited quality systems based on industrial models are not used. Questionnaires are widely used to obtain feedback from students.

Standards for vocational courses are set by the Council for Vocational Education and approved and enforced by central government. Vocational curricula are determined by the trades committees with equal representation from appropriate employee and employer organisations.

5.2.2 The VET Delivery Agents

Vocational education and training for young people are offered by the 50+ technical and 50+ commercial colleges and in specialist colleges of agriculture, home economics and marine engineering. These colleges offer sandwich training courses which alternate school-based training with periods of practical training in a firm. General social and health training programmes are also offered to qualify those who intend to work in the welfare, health care and nursing professions.

All VET schools are approved by the Ministry of Education to provide adult vocational training programmes all over the country. Training programmes are offered in all regions.

The providers are adult vocational training centres, vocational technical colleges, commercial colleges, agricultural colleges, social and health service schools etc. Most of the schools provide education programmes for adult as well as young people. The schools are mainly state schools, but also a number of private schools provide adult vocational training programmes.

6 Conclusions

Common conclusions are hard to draw, but here are some early pointers:

- The single, perhaps most significant conclusion, is that there is little, if any, evidence of an IT implementation of a QA system, e.g. a Quality Manual, in any member state. Quality Manuals do exist as all providers in certain state must have one, usually as evidence of a systems capability to act as an operating provider of VET.
- Self-evaluation is a feature common to many states, though again IT implementation evidence is thin. Self-evaluation may not be a formal requirement of a QA system, but it is encouraged for many reasons, e.g. in Scotland it is often part of the inspection process (which is different from QA, though with overlap), but it is more a requirement of the local authorities who are responsible for overall provision of education and not of the providers.
- Though many states do not distinguish between initial VET (I-VET) and continuing (C-VET), but where this is done there seems to be a better mapping of EQAVET to the needs of I-VET than C-VET. EQAVET should be applicable across the board, but C-VET tends to be more fragmented (e.g. many funding bodies, different providers) than I-VET.
- EQUAVET is obviously important as a guide to QA in VET. It is probably the only way of achieving common agreement across states (though EFMQ and ISO 9000 are alternatives), though only at systems (operational) level.
- Interpretation and implementations of EQAVET mappings in member states is patchy at best, though some (e.g. Finland) have developed their QA systems on the EQAVET ‘quality circle’ approach, and EQAVET indicators are included in systems level measures. It is early days for most countries. Even states with long established and very formal frameworks for VET are currently working through the implementations of EQAVET, e.g. Scotland is currently doing a mapping between EQAVET indicators and its own 4 Stage QA [Regulatory Principles](#). One problem is perhaps that EQAVET is optional so ‘do nothing’ is an acceptable response.
- When providers develop their Quality Manual it is their interpretation of their governing quality system as it applies to their specific circumstances as an operator, i.e. while there will be a loosely defined core set of requirements, there can be a great deal of diversity to the overall detail. The details of a Quality Manual are at least one step removed from EQAVET, with the specifics of a national system in between. Mapping backwards to the common EU core may be difficult. Findings are that the comparison of provider level quality assurance measures shows that overall there is a better fit between these and EQAVET than when looking at system level measures.

- Resource 2, below, shows that in most cases it is easier to compare EQAVET to the explicit quality assurance measures at provider level than to those at system level which are often based on a different logic than that behind the EQAVET cycle.
However few measures match EQAVET fully and some EQAVET descriptors are rarely addressed by the explicit quality assurance measures hence few QA implementations compare favourably to EQAVET.

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Links

- EQAVET: <http://www.eqavet.eu/WebBasedQA/GNS/Home.aspx>
- CVET Study:
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