Referencing the Credit and Qualifications Framework for Wales to the European Qualifications Framework

Report

October 2019

CREDIT & QUALIFICATIONS FRAMEWORK FOR WALES
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CQFW
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Contents

Glossary 5
Foreword 9
Executive summary 10
Chapter One – Introduction 16
1.1. Background 16
1.2. 2019 referencing of the CQFW to the EQF 16
1.3. Feedback from 2010 referencing 18
1.4. Process for referencing the CQFW to the EQF 18
A desk-based review of previous report and feedback 18
A desk-based review of level descriptors to map against EQF 19
A desk-based review of learning outcomes, including using qualification specifications from regulated qualifications 19
Overview of changes in the Welsh qualification system 19
Engaging with users of the CQFW 19
Engagement with international experts on report drafts and on targeted issues 20
1.5. Structure of this report 20
Chapter Two – Context for the CQFW 22
2.1. Education policy in Wales 23
Devolved government 23
Local government 24
UK government 24
Policy on the school curriculum 24
2.2. Schools in Wales 25
2.3. Further education in Wales 26
2.4. Work-based learning 26
2.5. Higher education 27
2.6 Qualifications 28
General Certificate of Secondary Education (GCSE) 28
The Welsh Baccalaureate 30
Vocational qualifications 31
Higher education qualifications 33
2.7. The UK context 34
Qualifications Can Cross Boundaries 37
Chapter Three - The Credit and Qualifications Framework for Wales 39

3.1. Aims of the CQFW 39
3.2. Structure of the CQFW 39
The Higher Education Pillar 42
The Regulated Qualifications Pillar 43
The Lifelong Learning Pillar 44
Levels 45
Awarding bodies 46
3.3. Governance of the CQFW 48
3.4. High Level Principles 50
3.5. Examples of the use of the CQFW 52
Higher-Level Apprenticeships 52
GCSE at levels 1 and 2 54
Bespoke Lifelong Learning units 54
Chapter Four – Changes to the CQFW since the 2010 referencing report 56
4.1. Changes to level descriptors in the Regulated Qualifications Pillar 56
4.2. Maturation of the CQFW 57
Chapter Five – Evidence against the Criteria for Referencing 61
Criterion 1 61
Criterion 2 63
Criterion 3 67
Criterion 4 76
Criterion 5 79
Criterion 6 90
Criterion 7 91
Criterion 8 92
Criterion 9 93
Criterion 10 94
Chapter Six – The future of the CQFW 95
References 96
Appendix 1 - Mapping of the CQFW Regulated Qualifications Pillar and Lifelong Learning Pillar to the EQF 99
Appendix 2 - Outcomes of Vertical progression review 125
Appendix 3 – Findings from the Learning Outcome Review 155
Appendix 4 – Letter of support from QAA 178

Appendix 5 – Statement from Dr John O'Connor, Quality and Qualifications Ireland (International expert) 179

Appendix 6 – Statement from Horacy Dębowski, Centralna Komisja Egzaminacyjna, Poland (International expert) 183

Appendix 7 – Members of the Steering Group for the referencing 190

Glossary

A level	General Certificate of Education Advanced Level, also known as a GCE A level. Qualifications taken, after GCSEs, in a range of subjects, usually taken at age 16-18 and typically a two-year course of study. They are used as a basis for admissions to higher education, further training or entry into employment.
Advanced Subsidiary (AS)	A qualification that forms the first part of an A level qualification. It may be taken as a freestanding qualification. In Wales and Northern Ireland, it contributes to the A level result. In England, AS qualifications cannot contribute to A levels.
Apprenticeship	At age 16+, publicly funded apprenticeships are delivered through work-based learning providers, where learners are employed as apprentices but also complete a programme of learning and assessment, at Level 2 or Level 3. There are also higher-level apprenticeships which may use qualifications regulated by the Regulated Qualifications Pillar or which may lead to degrees that are included in the Higher Education Pillar. Apprenticeships in Wales that are funded by Welsh Government must be compliant with the SASW (the specification for apprenticeship standards in Wales) which requires, amongst other things, that learners complete a regulated qualification.
Assessment	The evaluation, test, measurement and/or documentation of the acquisition of knowledge, skills and/or understanding.
Assessment Methods	The methods of assessment specified in the qualification specification e.g. portfolio of evidence, controlled assessment. Another term sometimes used to describe this is ‘assessment instruments’.
Award	A decision to give a candidate a result for a qualification or for part of a qualification.
Awarding Body	An organisation that develops qualifications, specifies and monitors assessments and issues awards to learners, formally recognising the learning outcomes (knowledge, skills and/or competences), following an assessment and validation procedure.
CEDEFOP	European Centre for the Development of Vocational Training
Centre	An organisation that enters candidates for qualifications. Centres will often be schools, colleges or work-based learning providers, who provide learning and / or assessment.

Credit	Credit is a way of recognising learning and a credit value given to a unit or qualification shows how much learning is expected. In the CQFW, a credit is 10 hours of learning time.
CQFW	Credit and Qualifications Framework for Wales The national qualifications framework for Wales
EQF	European Qualifications Framework
FEI	Further Education Institution Colleges and other providers of post-compulsory education and training
FHEQ	Framework for Higher Education Qualifications (England, Wales & Northern Ireland) The framework of level descriptors used in the design of programmes of higher education, which forms part of the Quality Assurance Agency's Quality Code.
HEFCW	Higher Education Funding Council for Wales HEFCW regulates fee levels at universities, ensures a framework is in place for assessing the quality of higher education and scrutinises the performance of universities and other designated providers.
HEI	Higher Education Institution Universities and other degree-awarding institutions.
GCSE	General Certificates of Secondary Education are available in a wide range of subjects. GCSEs are the main Level 1 and Level 2 general qualifications at age 14-16 in Wales. They can be used as a basis for higher-level study or training, or direct entry into employment.
General Qualification (GQ)	Describes qualifications that are taken typically by learners in school or college as part of their statutory or further education. This includes GCSEs, AS and A levels and the Welsh Baccalaureate and other qualifications that share some of the features common to GCSEs and A levels.
Learner	A person who is undertaking, planning to undertake or likely to undertake a programme of learning. The programme of learning may be designed to prepare learners for a qualification. Once a learner has entered, or been entered for a qualification, he or she is often referred to as a candidate.

Learning Provider	An organisation that provides learning opportunities to learners and which may be accredited by one or more awarding bodies to be able to do so. Typically, schools, colleges and work-based learning providers.
Level of demand	The degree of challenge that an assessment presents for the learner.
NCP	National Coordination Point National Coordination Point is the body responsible for maintaining the relationship of the national qualification system to the EQF. In the UK the NCP is made up of Ofqual – England; CCEA - Northern Ireland; SCQF – Scotland and ColegauCymru/CollegesWales – Wales
NHS	National Health Service (Wales) The state provider of healthcare in Wales
National Occupational Standards (NOS)	UK-wide statements of the standards of performance individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding. These are agreed standards across Wales, Northern Ireland and Scotland. Many vocational qualifications are based on these standards.
QiW	Qualifications in Wales The national database for qualifications in the Regulated Qualifications Pillar of the CQFW.
QAA	Quality Assurance Agency for Higher Education The independent body that monitors and advises on standards and quality in UK higher education.
Qualification Type	Qualification types refers to groups of qualifications that have been developed to meet common design requirements such as GCSEs, GCSE AS and A levels and vocational certificates, awards and diplomas.
Total Qualification Time (TQT)	The number of notional hours that represents an estimate of the total amount of time that could reasonably be expected to be required for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification. Total Qualification Time is comprised of the following two elements: (a) the number of hours which an awarding body has assigned to a qualification for Guided Learning, and (b) an estimate of the number of hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment,

	which takes place as directed by- but not under the Immediate Guidance or Supervision of- a lecturer, supervisor, tutor or other appropriate provider of education or training.
UCAS	University and Colleges Admissions Service UCAS is an independent charity providing information, advice, and admissions services to inspire and facilitate educational progression.
Vocational Qualification (VQ)	Qualifications that are awarded and certificated by an awarding body, taken by learners from the age of 14 upwards, and which assess knowledge, understanding and/or skills that relate explicitly to the world of work.

Foreword

ColegauCymru is pleased to publish this report referencing the Credit & Qualifications Framework for Wales (CQFW) to the European Qualifications Framework (EQF).

ColegauCymru acts for the Welsh Government as the National Contact/Reference Point (NCP) in Wales for the European Qualifications Framework (EQF), European Credit System for Vocational Education and Training (ECVET) and European Quality Assurance in Vocational Education and Training (EQAVET).

The EQF is a common reference framework whose purpose is to make qualifications more understandable across different countries and systems within and beyond Europe. The practical application of this report is that it will support the recognition of Wales' qualifications overseas and will facilitate the mobility of learners, students and workers from Wales to train, study and work in many different countries.

In these uncertain times, it is important that Wales remains globally competitive. By commissioning this report, ColegauCymru is highlighting the importance of aligning Wales' qualifications to the EQF in order to provide assurance to companies seeking to develop foreign direct investment that professional standards in Wales are comparable with standards elsewhere in the world.

ColegauCymru is grateful for the grant funding it received from the European Union via the EMPL Policy Network to commission this report. Our thanks also go to Qualifications Wales, Welsh Government, Higher Education Funding Council for Wales (HEFCW), the UK and international experts and everyone who gave their time and expertise to contribute to this report.

D Evans

Chair of the Board of ColegauCymru

October 2019

Executive Summary

This report presents the work completed in 2018-19 in Wales to reference the Credit and Qualifications Framework for Wales (CQFW) to the European Qualifications Framework (EQF). The report provides evidence against each of the 10 criteria for referencing set by the Council of the European Union and concludes that the CQFW does map onto the EQF and that the 10 criteria have been met.

The CQFW's strategic operational partnership commissioned the report. A Steering Group was formed to oversee the work, comprising the bodies responsible for the CQFW Pillars (Welsh Government, Qualifications Wales and the Higher Education Funding Council for Wales (HEFCW)) along with the Quality Assurance Agency for Higher Education (QAA), wider stakeholders from across the education sector in Wales and international experts. A list of the members of this Steering Group is included in Appendix 7.

The referencing exercise and the drafting of the report was undertaken by Qualifications Wales on behalf of the National Coordination Point (NCP) for Wales. Our approach to referencing to the EQF involved a number of evidence sources including reviewing level descriptors, learning outcomes in qualification specifications and engagement with stakeholders.

The Credit and Qualifications Framework for Wales

The CQFW is a national framework designed to improve access, flexibility and progression in learning, assessment and certification. The framework incorporates qualifications and learning that is credit-based. It encompasses a wide range of qualifications, including formal qualifications that assess learners at the end of standardised periods of learning, as well as non-formal learning opportunities.

This wide range of qualifications is organised into three Pillars:

- Higher Education;
- Regulated Qualifications; and
- Lifelong Learning.

As a 'meta-framework', the CQFW ensures that learning in each Pillar is comparable with learning in each of the other Pillars, in relation to its own levels of demand.

The CQFW includes three Entry Levels and eight further levels. These levels are designed to cover the range of learning in Wales from basic knowledge to mastery.

Context for the CQFW

The education and qualifications system in Wales is made up of Government, regulators, inspectors, awarding bodies, providers and learners. These bodies have distinct roles within the system, as follows:

- The Welsh Government sets national priorities, devises curriculum policy and provides funding. Local government distributes funding to and manages schools.
- Regulators and inspectors regulate and quality assure bodies that are able to award qualifications within the CQFW and monitor the quality of provision. There are different regulators for the different Pillars of the CQFW.
- Awarding bodies develop qualifications and units, deliver assessments and award qualifications.
- Learning providers design programmes of study, deliver teaching and learning opportunities and prepare learners for assessment.

Updates since the previous referencing in 2010

A referencing exercise was undertaken in 2010 of the different qualification frameworks of the UK to the EQF (Qualifications Frameworks in the UK, 2010).

Since that report, the education and qualifications system in Wales has evolved further, including establishing Qualifications Wales, the regulator of all regulated qualifications other than degrees.

The level descriptors used in the Regulated Qualifications Pillar have also been revised since 2010. New level descriptors were published in 2015 by Qualifications Wales, along with Ofqual in England and CCEA Regulation in Northern Ireland.

Since the last referencing report, the Council for Europe has updated the criteria for referencing in order to improve the quality and coherence of referencing. This ensures that referencing is carried out in a coherent way both at system and qualification level with explicit acknowledgement of the referencing criteria.

Given the changes to Wales' qualifications framework and broader education landscape, and the changes to the referencing criteria, it was considered timely to undertake an updated referencing exercise in 2018-19.

The report also concludes that there has been a change in the use of the CQFW within the Welsh education and skills system, from having a transformative influence on qualification development to playing a communicative role in describing the system to stakeholders.

Evidence against the criteria for referencing

The report sets out the 10 criteria in turn with our evidence against each. The report concludes that all criteria are met. The following section provides a high-level summary of the main findings.

Criterion 1 - The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

This criterion has been met. Each of the bodies involved in the referencing process, and each body with responsibilities relating to the CQFW, has clearly defined responsibilities and legal competence.

Criterion 2 - There is a clear and demonstrable link between the qualification levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.

This criterion has been met. Both the CQFW and EQF have clearly defined level descriptors that distinguish between different features of learning, including knowledge and skills. Both the CQFW and EQF have framework level descriptors in which the level of demand increases as learners progress through the framework, so that the higher the level, the more complex knowledge and skills the learners are required to demonstrate. Finally, both the CQFW and EQF have broadly comparable levels.

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.

This criterion has been met. The principle of learning outcomes is one of the eight high level principles of the CQFW and all learning must demonstrably meet this principle to be included on the framework. Learning outcomes are evident in qualification specifications produced by awarding bodies, as well as in individual assessments and in regulatory criteria and national standards (such as NOS) that inform the content of qualifications. This has been a feature of the Welsh qualifications system since the foundation of the CQFW, and even prior to that time.

Validation of non-formal learning is undertaken in the CQFW through three methods:

- Recognition of Prior Learning;
- the Lifelong Learning Pillar; and
- National Vocational Qualifications.

The report explains that informal learning is not validated within the scope of the CQFW, but is incorporated into formal assessment using varied methodologies. The 2014 review of the CQFW reported that awarding bodies would often require significant evidence from learning providers in order to be assured of learners' achievements. Various stakeholders therefore concluded that the process of validating informal learning had become effectively 'formalised', placing excessive burden on learning providers and learners themselves, and detracting from its original benefits.

It was therefore decided to remove the validation of informal learning from the CQFW so that the authenticity of the learning experience is retained for the learner, whilst also retaining the rigour and credibility associated with quality assurance processes of the CQFW. This change within the CQFW also reflects the approach to assessment within the Welsh qualification system. This means that awarding bodies and regulators ensure assessments are fair, valid, reliable in identifying learners' knowledge and skills, based on evidence produced by learners under robust conditions.

The CQFW recognises full and partial completion of qualifications through a credit system. It enables learners to transfer their knowledge and skills between pathways, providers and countries in a way

that aligns with principle 1 of Annex V of the 2017 Council Recommendation on the EQF: that 'credit systems should support flexible learning pathways, for the benefit of individual learners'.

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.

This criterion has been met. The qualifications and accredited learning that are included in the CQFW are developed by recognised awarding bodies and competent bodies, including universities, colleges, employers and the voluntary sector. For those awarding bodies to describe their qualifications or learning as having a CQFW level and as being included in the CQFW, they must meet a series of requirements. These requirements are set by the three regulatory bodies that oversee the three Pillars of the CQFW – the Welsh Government, Qualifications Wales and HEFCW.

Criterion 5 - The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this Recommendation.

This criterion has been met. There are quality assurance systems for qualifications across all Pillars of the CQFW. Both awarding bodies and learning providers are required to have quality assurance in place and regulators monitor them.

Criterion 6 - The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.

This criterion has been met. There has been engagement with Welsh Government and HEFCW through the CQFW Advisory Group, of which they are both members, to ensure that the evidence reported against Criterion 5 is consistent with their quality assurance arrangements, provisions and practice. They have confirmed through the Steering Group that the report is an accurate representation.

Criterion 7 - The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.

This criterion has been met. International experts have attended two scheduled Steering Group meetings to provide input. They have also provided comments in separate discussions and in writing relating to earlier drafts of the report. Their comments are incorporated in the report.

Criterion 8 - The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria.

This criterion has been met. Qualifications Wales, the Welsh Government and HEFCW are the competent bodies in respect of ownership of the CQFW. These bodies are all represented on the Steering Group for the referencing of the CQFW to the EQF. These bodies have all been involved in

the development of the report through this forum, as well as separately providing a written statement certifying the referencing to be included in the final report.

Criterion 9 - Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal

This criterion has been met. All relevant bodies have consented to the information contained in this report being added to the EQF platform and portal at the appropriate time so that it can be accessed widely in accordance with the agreed position. The referencing report will be made available on ColegauCymru's website and will be publicised by Qualifications Wales, HEFCW and the Welsh Government.

Criterion 10 - Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.

This criterion has been partially met. All certificates, specifications, marketing materials produced in respect of qualifications in the Regulated Qualifications Pillar must include reference to a CQFW level, as part of Qualifications Wales' regulatory requirements.

Next steps

To summarise, the referencing report provides the evidence that the CQFW maps onto the EQF and that the 10 criteria have been met.

Appendices to the report provide the detailed analysis as well as statements of confirmation and support from the international experts.

In terms of next steps, the members of the CQFW Advisory Group have received a presentation of the main findings of this report and remain committed to continue to promote and embed the framework widely amongst learners, FEIs, HEIs, schools and employers. The fan diagram, brochure and web animations will continue to be strategically distributed throughout the system in order to communicate the features of the CQFW and further embed the understanding of levels and Pillars.

The sector is preparing for ongoing reforms of Regulated Qualifications. Over the coming years, Qualifications Wales will continue a programme of sector reviews of vocational qualifications and skill needs with the potential that these reviews may lead to the development of new, Wales-only qualifications in these sectors. The CQFW will be an integral influence on these qualifications.

At the time of publishing, various stakeholders including the Welsh Government, Qualifications Wales, subject experts and representatives of the teaching profession are working on the development of a new National Curriculum for learners aged 4-16.

In an increasingly global labour market, learners, students and workers travel internationally for study, training and work opportunities. This referencing exercise is assurance that qualifications obtained in Wales are portable and have currency across the EU and further afield.

Chapter One – Introduction

1.1. Background

This report presents referencing of the Credit and Qualifications Framework for Wales (CQFW) to the European Qualifications Framework (EQF). The report presents evidence against the 10 criteria for referencing that were established by the Council of the European Union in May 2017 (as an update to previous criteria described in 2008). It was commissioned by the CQFW's strategic operational partnership. Stakeholders from across the Welsh qualification system have played a part in the referencing, including the Welsh Government, Qualifications Wales and the Higher Education Funding Council for Wales. Welsh Ministers, members of the CQFW Advisory Group and wider stakeholders from across the education sector in Wales as well as international experts. The referencing also had input from regulatory bodies in the other countries of the UK.

The CQFW is the national qualifications framework for Wales. It is a government-sponsored framework linked to national policy on Lifelong Learning, skills and economic development. It was designed to improve access, flexibility and progression in learning, assessment and certification, through qualifications and learning that is credit-based. The CQFW aims to provide a comprehensive framework of qualifications, credit and learning in Wales by incorporating learning from a variety of settings, including schools, further education, higher education and work-based learning.

The European Qualifications Framework (EQF) promotes transparency across existing European national and sectoral frameworks. It acts as a reference framework to enable the comparison of national qualifications systems. Individuals and employers can use the EQF to interpret and compare the qualification levels of different countries and different education and training systems. The EQF was adopted by the European Parliament and Council of Europe on 23 April 2008.

1.2. 2019 referencing of the CQFW to the EQF

A report was published in 2010 (Qualifications Frameworks in the UK, 2010) outlining the referencing of the three UK qualifications frameworks – the CQFW, the Qualifications and Credit Framework (England and Northern Ireland) and the Scottish Credit and Qualifications Framework (SCQF). This represented one of the first referencing exercises following the creation of the EQF.

In its 2017 recommendation on the EQF, the Council of the European Union noted that:

> *(13) National qualifications frameworks and systems change over time, therefore referencing to the EQF should be reviewed and updated, whenever relevant.*
>
> *Council of the European Union, 2017/C 189/03*

The 2017 recommendation was designed in order to improve the quality and coherence of referencing. This ensures that referencing is carried out in a coherent way both at system and qualification level, with explicit acknowledgement of the referencing criteria. Given the changes to Wales' qualifications framework, broader education landscape and the referencing criteria, it is considered timely to undertake a referencing exercise.

The Wales National Coordination Point (NCP) and the three regulatory bodies with responsibility for the CQFW agree that there is value in activities that strengthen our relationships with our European and other international partners and which, as a result, may bring benefits to Wales and its learners, employers, employees and institutions. These relationships will continue to be extremely important after Wales, as part of the UK, has left the European Union.

Referencing the level descriptors of the CQFW to the EQF can help learners and employers understand the relationships between our national framework and other national qualifications' systems and frameworks across Europe. Comparability and portability are important features of the qualification system in Wales, with established tools for comparison across the nations of the UK and Ireland, and with the key regulator of qualifications having a legal duty to have regard to the comparability of qualifications across Europe. Awarding bodies also recognise this comparability and portability, both within the UK and further afield, as an essential feature of the qualifications system in Wales:

> *At a time when it's never been more important for our students and graduates to be global citizens; for there to be stronger cultural and economic links between Wales and the world; and for even greater academic and employability outcomes of our students - we need to ensure that international opportunities are an aspiration for many more students.*
>
> Kirsty Williams, Minister for Education and Skills, Welsh Government.

> *The consistency of approach within the framework enables learners, education providers and employers to compare units and qualifications according to their size and level within Wales and across the rest of the UK and Europe.*
>
> Judith Archer, Agored Cymru (awarding body).

> *We also offer qualifications in over 60 countries around the world and knowing that the levels of the qualifications on offer can be mapped to levels in other countries is extremely helpful for transparency and portability. It is this ability to cross-reference levels and focus of qualifications that provides the currency with which learners can trade their achievements for access to employment or further education and training.*
>
> Patrick Craven, City and Guilds (awarding body).

We also recognise the value in undertaking a referencing exercise as a means of promoting the CQFW to an international audience and to stakeholders within Wales at an important point in the CQFW's evolution. We have recognised that the CQFW holds both 'communicative' and 'transformative' functions as a qualifications framework (UNESCO, ETF & CEDEFOP, 2015, p.7). This means that the CQFW both describes aspects of current practice so that they are well understood and promotes the adoption of those practices where they are not already. In reflecting on changes to the CQFW and to education in Wales between 2010 and 2019, we conclude that the CQFW has become more deeply embedded in policy and practice and thus more of a communicative framework and we will provide evidence of this throughout this report.

In light of the divergence between qualifications frameworks in England, Northern Ireland, Scotland and Wales, it was considered more appropriate to undertake entirely separate referencing reports for each framework in 2019.

1.3. Feedback from 2010 referencing

The Referencing of the Qualifications Frameworks of the UK to the EQF report in 2010 received helpful feedback from the EQF Advisory Group. Mike Coles, himself a UK member of the Advisory Group, provided additional feedback on how this report might better meet the needs of the EQF Advisory Group.

There is evidence that the CQFW level-to-level linkages with the EQF remain accurate and consistent with our findings in 2010. However, there have been a number of developments within Wales that have meant that the context described in 2010 is now out of date. This includes, in particular, changes to the level descriptors related to the Regulated Qualifications Pillar of the CQFW, the creation of Qualifications Wales as an independent regulator in relation to this Pillar and the distinction between different types of learning within the Lifelong Learning Pillar of the CQFW.

Feedback indicated that insufficient detail was provided in the 2010 report describing the context of the UK and the similarities and differences between the three national frameworks. This feedback has been addressed through the decision by the four NCPs of the UK to produce separate referencing reports for the CQFW (Wales), SCQF (Scotland) and RQF (England and Northern Ireland) and that each report would add more detail to describe their country's context.

Much of the evidence used to establish the referencing of the CQFW to the EQF in 2010 was not presented in the body of the report, but in separate reports published on the CQFW website. Feedback suggested that this made it more difficult to read the document and weakened its conclusions. This has been addressed by providing more of the evidence within this report and its appendices.

1.4. Process for referencing the CQFW to the EQF

The referencing exercise, including drafting the report, was undertaken by Qualifications Wales on behalf of the NCP for Wales. Our approach to referencing to the EQF involved a number of evidence sources.

A desk-based review of previous report and feedback

We began the update to the 2010 referencing of the CQFW to the EQF by reviewing the report of that referencing, specifically the Wales section of what was a UK-wide report. We highlighted areas of significant change in the Welsh qualification system since 2010.

We also reflected on the feedback that was provided by the EQF Advisory Group on the 2010 report, and on subsequent referencing reports that have been submitted. This suggested the need for a more thorough approach to referencing and a more transparent approach to reporting.

A desk-based review of level descriptors to map against EQF

Following a review of the 2010 report, we mapped the level descriptors of the CQFW against the EQF. This involved a textual analysis of the level descriptors to illustrate how levels of demand are described and subsequently how these compare with one another.

We have subsequently reviewed the vertical progression between these mapped levels within the CQFW and EQF. Because there are eleven Levels in the CQFW and only eight in the EQF, the progression between some CQFW levels in terms of demand and complexity was likely to be lesser than that between EQF Levels. This exercise was intended to compare these increases in demand and complexity and to further support the conclusions of the horizontal mapping. This was particularly valuable in understanding the 'continuum' nature of the Entry Levels, and the potential overlap of levels 4 and 5.

A desk-based review of learning outcomes, including using qualification specifications from regulated qualifications

We explored how the principle of learning outcomes is embedded in the CQFW by reviewing both the level descriptors and materials from a sample of regulated qualifications. We have noted the distinct ways in which learning outcomes are described in the separate Pillars of the CQFW. This has illustrated how deeply the principle of learning outcomes is embedded in the qualification system in Wales.

Overview of changes in the Welsh qualification system

In addition to reviewing the previous referencing, we also reflected on changes that have occurred in the Welsh qualification system since 2010, and how these would impact the findings of the referencing position established in 2010. This review activity was strongly informed by the findings of a qualitative impact review of the CQFW commissioned by the Welsh Government in 2014 (ARAD Research, 2014). This evaluation involved interviews with sixty stakeholders from across Wales to identify the impact of the CQFW on their practice.

Engaging with users of the CQFW

Throughout the referencing process, we engaged with the relevant persons and organisations that have an interest in the CQFW. This has included forming a Steering Group including:

- regulatory bodies with ownership of the Pillars of the CQFW to gain their support for our conclusions;
- representatives of awarding bodies
- representatives of colleges and training providers; and
- the National Union of Students Wales, representing learners.

The regulatory frameworks within which these bodies operate have changed since the referencing in 2010, with the formation of an independent regulator for the Regulated Qualifications Pillar

(Qualifications Wales) and the changes to the legislation relating to HEFCW in relation to the Higher Education Pillar, via the introduction of the Higher Education (Wales) Act 2015.

As the CQFW represents a meta-framework, comprising distinct Pillars for Regulated Qualifications, Higher Education and Lifelong Learning, we have reviewed a broad range of documentation and undertaken consultation with stakeholders. This has involved interviews and discussions, the formation of a Steering Group, sharing our work with international experts for their input, reviewing governance and policy documents and analysing information and data relating to qualifications, including specifications. The Steering Group met twice throughout the referencing and reviewed three drafts of the report before publication.

In addition to working with this Steering Group, we engaged individually with representatives of key bodies in the education and skills system in Wales. This included awarding bodies operating in the three Pillars of the CQFW – Regulated Qualifications, Lifelong Learning and Higher Education. Doing this helped us to gain an understanding of how they embed the principles of the CQFW in the design and award of qualifications.

Engagement with international experts on report drafts and on targeted issues

We have received input from two international experts, who were members of the Wales Steering Group as well as being representatives for their countries at the EQF Advisory Group. In addition to being members of the Wales Steering Group for the referencing work, we also held further discussions with the international experts. They reviewed our proposed approach to referencing and provided comments on drafts of our findings and the final report at different stages. The international experts provided insight as to the expectations associated with referencing to the EQF, as well as undertaking a 'critical friend' role in interpreting our description of the Welsh qualification system.

1.5. Structure of this report

Chapter 2 of this report provides an introduction to the education and skills context of Wales, including the roles of the Welsh Government and of education and training providers. This chapter also describes aspects of the Welsh context that are shared across the UK.

Chapter 3 of the report describes the CQFW in terms of its structure, the bodies involved in regulation and the types of learning that fit within it.

Chapter 4 highlights some of the key changes that have occurred in the Welsh education and skills system since the original referencing to the EQF in 2010. This chapter provides some examples of how the CQFW is being used in the present context.

Chapter 5 provides evidence against the ten criteria for referencing to the EQF. In this chapter, we address to what extent each criterion is met and summarise relevant findings of our review. This chapter also refers to evidence that is included in the appendices.

Chapter 6 presents some of the next steps for the CQFW and its future development.

Alongside this report, we have presented a number of appendices providing evidence of the approach taken to the referencing, and particularly of the three mapping activities that we have undertaken.

Chapter Two – Context for the CQFW

The education and qualifications system in Wales is made up of Government, regulators, inspectors, awarding bodies, providers and learners. Those most relevant to the referencing report are summarised below. More detail about each of the main stakeholders is provided later in this chapter.

Government	Welsh Government	- Sets priorities and national policy - Proposes legislation - Develops curriculum - Funds education provision - Funds and scrutinises public bodies, including regulators - Sets standards for apprenticeships - Has oversight of CQFW policy
Regulators / inspectors	Qualifications Wales	- Determines which bodies are recognised to award qualifications in the Regulated Qualifications Pillar - Sets, monitors and enforces regulatory requirements about the development, delivery and award of qualifications
	HEFCW	- Regulates fee levels at universities - Ensures a framework is in place for assessing the quality of higher education, - Scrutinises the performance of universities and other designated providers
	QAA	- Undertakes Quality Enhancement Review (QER) on behalf of higher education institutions - Manages the Framework for Higher Education Qualifications (FHEQ) and its alignment to the European Higher Education Area (EHEA)
	Estyn	- Estyn is the Office of Her Majesty's Inspectorate for Education and Training in Wales. As a Crown body, Estyn is independent of the Welsh Government. - Estyn's remit includes (but is not exclusive to) nurseries and non-maintained settings, primary schools, secondary schools, independent schools, pupil referrals units, further education, adult community learning, local government education services, work-

		based learning, and teacher education and training.
Awarding bodies	Exam boards Vocational expert bodies Charities Chartered bodies and societies Higher Education Institutions (HEIs)	- Meet regulators' requirements to be able to award qualifications - Develop qualifications, with reference to any relevant standards or rules - Prepare assessments, specifications and syllabi - Develop policies and approaches to validation and internal quality assurance - Undertake assessment of learners and certify achievement by awarding qualifications
Education providers	Schools Further Education Institutions (FEIs) and colleges, work-based learning	- Provide teaching and learning opportunities - Prepare learners for assessment for qualifications - In many cases, learning providers purchase qualifications on behalf of learners. Education providers may be funded by government, by learners or by employers or sponsors.
	HEIs	- Provide teaching and learning opportunities - Design programmes of study, assessments and qualifications - Prepare learners for assessment for degree-level qualifications

2.1. Education policy in Wales

Devolved Government

The National Assembly for Wales is a legislature with the competence to make laws in relation to education, training and skills, as well as all other areas that are not reserved for the UK Parliament, including health, agriculture, transport and the environment.

The Assembly is made up of sixty elected Assembly Members. Forty are chosen to represent individual constituencies and twenty are chosen to represent the five regions of Wales (North Wales, Mid and West Wales, South Wales West, South Wales Central, and South Wales East). Assembly Members represent their area as a member of a political party or as an independent.

The Welsh Government is the devolved administration or executive made up of Welsh Ministers, the Counsel General and the First Minister. Established by the Government of Wales Act 2006, the role of Welsh Ministers is to make decisions; develop and implement policy; exercise executive functions and

make statutory instruments. The Welsh Ministers propose Bills in the National Assembly for Wales, which can become laws if supported by a majority of Assembly Members.

The majority of policy relating to education and skills is devolved, being set by the Welsh Government rather than the UK government. This includes:

- Funding of educational provision;
- Accountability and performance management of educational provision;
- Development of curriculum; and
- Qualifications policy.

Non-governmental Public Bodies

A number of non-governmental bodies have been established by the Welsh Government to exercise certain functions in the governance of the Welsh education system. These include Qualifications Wales, which is the regulator of qualifications (other than degrees) and HEFCW is the regulator of higher education. Both are funded by Welsh Government but are independent of it.

In addition, the teaching and learning in pre-schools, schools, further education and work-based learning providers are inspected and quality assured by Estyn, Her Majesty's Inspectorate of Education and Training in Wales. Estyn is funded by the Welsh Government but is independent of it.

Local Government

Whilst education policy is decided by the Welsh Government, local governments distribute funding to and manage schools. Local government in Wales is carried out by 22 local authorities. Funding is provided to local authorities by the Welsh Government based on established formulae.

Local authorities have statutory responsibilities in relation to enacting national policy and education is a statutory duty they must undertake, and they must manage education institutions in such a way that educational provision is available to learners. This includes ensuring a requisite range of educational options, including language of instruction, and ensuring transport and accessibility.

UK Government

The UK Government provides funding settlement to Welsh Government. Welsh Government has new tax raising powers that will come into effect from 2020.

Policy on the School Curriculum

England and Wales introduced a National Curriculum in 1988 and state schools are required to adhere to it until learners reach the age of 16. However, independent schools are not obliged to follow the National Curriculum. National Curriculum core subjects are English, Mathematics, Science and Welsh. In Welsh-medium schools, learners will also learn most or all of the National Curriculum through the medium of Welsh.

The National Curriculum pre-dates the devolution of education policy to the Welsh Government in 1999. Since devolution, there have been regular updates and developments in curriculum although the structure has remained the same in England and Wales. Wales is currently developing a new curriculum that will be introduced in 2022. The Welsh Government has also previously introduced the Foundation Phase as a variant of the National Curriculum. The Foundation Phase is the statutory curriculum for all learners aged 3-7 years in Wales and is delivered by pre-schools and primary schools. This Foundation Phase curriculum framework is based on the holistic development of children and their skills, building on their previous learning experiences and knowledge.

2.2. Schools in Wales

By law, all children between the age of 5 and 16 must receive a full-time education. Learners in Wales begin school during the first September following their fifth birthday. There are 1,617 schools in Wales – 1,287 primary, 200 secondary and 70 independent schools. In 2018, there were over 260,000 learners in primary schools and over 150,000 learners in secondary schools in Wales. Primary and secondary schools are normally co-educational with both boys and girls although there are some single-sex schools in Wales.

More than 95 per cent of school-age learners in Wales attend publicly funded state schools. These schools are managed by local authorities and funded by the Welsh Government. The remaining school-age learners are educated at home or in independent schools. Independent schools do not receive statutory funding from the Welsh Government although they may receive specific grants or support for particular aspects of their work. Most independent schools in Wales are registered charities. No publicly funded schools in Wales decide admission based on entry examinations.

Around 21 per cent of the population of Wales speaks Welsh, rising to 59 per cent of 3-15-year olds (StatsWales, 2019c). Approximately one third of schools in Wales (covering a quarter of the school population) deliver most of their instruction to learners through the medium of the Welsh language. Each local authority in Wales has a statutory duty to make this provision available to learners living in that area.

In 2018, around 4,000 learners attended special schools for learners with additional learning needs, including learning difficulties and learning disabilities. Policy makers in Wales have pursued the aim of an inclusive education system, in which learners with Additional Learning Needs attend mainstream schools where possible. Learners with recognised Additional Learning Needs may be permitted reasonable adjustments and special considerations in the assessments they take for qualifications, and schools and colleges may use public funding to provide these learners with access to qualifications that would not normally be funded.

Learners in schools in Wales typically study towards qualifications in their final two years of compulsory education, at ages 14-16. These qualifications are subject based, and learners are able to choose certain options alongside ‘core’ subjects including English, Welsh, Mathematics and Sciences. Most of these qualifications are available through the medium of Welsh. The qualifications that learners take in their final years of schooling are subject to strict regulatory rules and criteria (as described in section 2.6 below).

2.3. Further Education in Wales

Education is compulsory up to age 16 in Wales. However, around 88 per cent of learners completing compulsory age schooling continue with their studies and enter tertiary education and training of some form immediately after leaving school (Careers Wales, 2018). Further education includes both general and vocational routes taught either in schools, colleges or in work-based learning.

There is no National Curriculum in post-16 education and there are no core subjects, meaning that learners can choose their qualifications from amongst those that are made available by awarding bodies via their schools, colleges, universities or training provider. Governments in Wales have focussed funding on a broader post-16 offering, and Qualifications Wales as a regulatory body works to ensure that demand is met within the qualification system. Further Education Institutions (FEIs) offer a broad range of qualifications for post-16 learners, including vocational, technical and competence-based qualifications.

2.4. Work-based Learning

In addition to studying in FEIs, many learners in Wales undertake work-based learning. This includes studying for qualifications through employment, continuing professional development and undertaking apprenticeships. These learners will typically work with their employer part-time and undertake learning at an FEI, with a training provider or at an HEI in the case of degree apprenticeships. Around 25 per cent of all learners in post-16 education, and six per cent of those aged 16-18, undertake work-based learning of some kind. At age 16-18, learners can undertake work-based learning through traineeships where they take vocational and other qualifications on programmes that combine learning with work experience, normally at Level 1, to prepare learners for progression into an apprenticeship or work. At age 16 and above, learners can undertake apprenticeships that are delivered through work-based learning, where learners are employed as apprentices but also complete a programme of learning and assessment at Level 2 or above. There are also higher-level apprenticeships and degree apprenticeships that are primarily studied by adult learners. Many adult learners enter further education and higher education either for vocational purposes, to develop new skills or, in some cases, to gain formal accreditation for skills and knowledge that they may have already developed through their experiences at work.

Apprenticeships in Wales are designed in accordance with the Specification for Apprenticeship Standards for Wales (SASW). The SASW sets outs the Welsh Government's requirements for publicly funded apprenticeship programmes, including the requirement that all apprenticeships be made up of qualifications from the CQFW and specifying the relative balance of competence and knowledge-based qualifications in programmes. The qualifications used in apprenticeships can be taken from within either the Regulated Qualifications Pillar (such as vocational certificates) or from the Higher Education Pillar (such as HNCs/HNDs). The SASW means that apprenticeship programmes can combine a mix of gaining work experience, college-based learning and a variety of assessment strategies.

Work-based learning also encompasses continuing professional development that is undertaken in employment. Employees may undertake learning leading to qualifications in order to improve their knowledge and skills to support their progression within, or beyond, their current job role. Learners in this group will often be working toward some kind of professional recognition or status within their current or future job roles. The learning might be undertaken 'on the job' and/or at a learning provider of any description.

2.5. Higher Education

Higher education is a devolved area, which means that most decisions that are made about higher education in Wales are taken by the Welsh Government, with funding and regulation managed by HEFCW. Higher Education Institutions (HEIs) in Wales are charities and independent of government. They receive their income from a number of sources, including student fees, research grants and via income-generating partnerships with public, private or third sector organisations. They also receive a portion of their income from public funds with Welsh Government funding distributed by HEFCW. Through funding, regulation, influence, and working in partnership with students, HEFCW creates the environment within which higher education providers deliver sustainable, accessible and internationally recognised higher education in Wales.

HEIs design, deliver and award their qualifications, as well as delivering teaching and learning. In this respect, higher education differs from much of the learning included in the Regulated Qualifications Pillar, where awarding bodies and learning providers are distinct from one another. In line with the UK Quality Code for Higher Education, all degree-awarding bodies are required to demonstrate that their qualifications are awarded in accordance with the relevant framework for any programmes that started after 2003.

In order to be regulated by HEFCW, higher education institutions in Wales must apply and provide evidence to demonstrate to HEFCW that they:

- are an institution;
- are located principally or wholly in Wales;
- provide higher education;
- are a charity;
- are financially viable;
- are financially well managed;
- can demonstrate appropriate quality; and
- are committed to promoting equality of opportunity and higher education in Wales.

As of 2019, Wales has ten regulated higher education providers. In the 2017/18 academic year, there were around 129,000 enrolments onto higher education courses in Wales. The majority of students enter HEIs in the years following upper secondary education, although around 40,000 were mature students, beginning their studies after the age of 25 (StatsWales, 2019a).

Around half of students studying at Welsh HEIs are not from Wales ('Welsh-domiciled') but come to Wales to study. Although a significant number of Welsh-domiciled students study in England, there is a net inflow of students each year to Wales. In 2016/17, around 17,000 students came to Wales from outside of the UK (StatsWales, 2019b).

2.6 Qualifications

The forms of educational provision outlined above are designed to provide education to learners across their lives, from childhood to adulthood. Whilst some educational programmes are formative, for example in primary education and in some adult learning, many programmes of learning are targeted at the attainment of qualifications and at preparing learners for assessment.

Increasing the percentage of the population who have attained qualifications is a national policy aim of the Welsh Government and informs practice across the whole of the system. As of 2018, an estimated 8 per cent of working age adults in Wales reported having no qualifications, 79 per cent of working age adults in Wales held at least level 2 qualifications while 59 per cent of working age adults in Wales were qualified to level 3. The proportion holding higher education or equivalent level qualifications (CQFW level 4 or above) was 38 per cent.

Amongst these qualifications, there are a number of key qualification types that are well established and form part of education provision at different stages. Some of these are detailed below.

General Certificate of Secondary Education (GCSE)

GCSEs are typically awarded at the end of compulsory schooling at age 16 and are included in the Regulated Qualification Pillar of the CQFW. GCSEs in Wales are graded from A*-G. Depending on which grade is attained, GCSEs can be awarded at either CQFW Levels 1 or 2 depending on the grade achieved by the learner. The level of GCSEs on the CQFW and EQF is addressed in section 4.4 of this report.

GCSEs were introduced in Wales, England and Northern Ireland in 1986. The purpose of this reform was to create a more egalitarian system in which qualifications attained in vocational/technical and general/academic subjects could be considered as directly comparable in size and level, enabling greater bridging between academic and vocational pathways. As a result, GCSEs have been made available in a broad range of subjects. Learners gain specific qualifications in each subject studied rather than gaining a grouped award certificate for all learning at that stage of education. This model of school-based qualifications is distinct from other models such as a leaving certificate, Baccalaureate or matriculation (Hogson & Spours, 2003).

The GCSE remains the most used qualification in Wales. Most learners in Wales study towards gaining GCSE qualifications between the ages of 14-16, in the final two years of compulsory schooling. Learners typically sit between 5 and 10 GCSEs in different subject areas. The following subjects are termed 'core' subjects by the Welsh Government and schools are encouraged to deliver these for every learner:

- English Language and/or Welsh Language
- English Literature and/or Welsh Literature
- Mathematics
- Mathematics Numeracy
- Sciences
- Welsh as a second language (for learners in English medium provision)

In addition to these core subjects, learners select a number of optional subjects. Each school provides a range of subject options from which learners can choose. By law, local authorities are required to provide a range of choices. In the 2018 summer examination series, the most popular entries for GCSE qualifications, outside of the core subjects, were religious studies, history, geography and art & design.

GCSE assessment tasks can include coursework components, in which learners produce portfolios, essays or projects, as well as examinations that are typically taken at the end of the programme of study in the summer exam series at the end of the learner's final year.

The GCSE qualification type is jointly owned by Qualifications Wales, Ofqual (the regulator in England) and CCEA Regulation (the regulator in Northern Ireland). This reflects the history of the qualification as being offered across the three countries. However, since 2016 both Wales and England & Northern Ireland have further developed their GCSE qualifications as shown below:

In Wales:

- grading scale is A* to G;
- some GCSEs are linear with all exams taken at the end of the course, whilst some are modular, incorporating assessment throughout the course;
- learners must retake all of their examinations when retaking a linear GCSE: non-exam assessment marks can be reused;
- learners can only retake each unit once in modular GCSEs.

In England:

- grading scale is 9 to 1 (9 being the highest grade).
- all examinations are taken at the end of the course (linear qualifications).
- learners must retake all their examinations when retaking the qualification: non-exam assessment marks can be reused.

In Northern Ireland:

- in general, learners take GCSEs graded A* to G (including a new grade C*) and those graded 9 to 1
- learners must retake all their exams when retaking the qualification: non-exam assessment marks can be reused.

General Certificate of Education (GCE AS and A Level)

GCE AS and A Level qualification are designed for post-16 learners. An 'Advanced level' or A-level is a qualification offered across a range of subjects to school-leavers and are graded A*-E.

A-levels are intended to be studied over two years: an AS in the first year and an A2 in the second year. This separation into two years and two qualifications means that learners take assessments throughout their first year of study and can be accredited with a qualification at that point. In many instances, learners will study four subjects in their AS year, then drop one, in which they achieve an AS-level qualification, and then continue with the other three in their A2 year to achieve full A-level qualifications in these. Three A Levels form part of many universities' entrance requirements for undergraduate degrees. Like GCSEs, GCE AS / A Levels may have both examined components and coursework components.

AS / A Levels are used, alongside other qualifications taken post-16, as entry requirements for academic higher education, with higher education providers setting entry requirements based on the attainment of specific AS / A Level qualifications (for instance, in a subject relevant to the higher education programme). Higher education providers base entry requirements on a more general point score that is derived from these and other qualifications. This tariff score is calculated using a formula that uses the size, or credit, of the qualification, and the grade achieved.

A levels across the three countries are of the same size, rigour, and portability; however, there are some key differences.

In Wales, A level qualifications:

- consist of Advanced Subsidiary (AS) and A2 units. The AS is a stand-alone qualification and also contributes 40 per cent towards the full A level qualification;
- share the same content as A levels in England, and in addition, include a Welsh dimension where appropriate;
- retain practical or non-examination assessments where they are assessing an important part of the subject, with these assessments contributing towards the final grade;
- are subject to requirements that individual units can only be retaken once; and
- are designed so that AS exams can be taken at the end of the AS course or alongside A2.

In 2017, Qualifications Wales commissioned a survey of a sample of the general population in Wales on their confidence and understanding of AS / A Level qualifications. Seventy-six per cent of a representative sample of over 1,000 people stated that AS / A Levels were a good preparation for further study, and 72 per cent stated their trust in these qualifications.

The Welsh Baccalaureate

The Welsh Baccalaureate is a programme for 14 to 19-year-old learners in Wales. The Welsh Baccalaureate is awarded where learners attain a set of core qualifications – including GCSE and GCE AS / A Levels – including an additional qualification, the Skills Challenge Certificate. The Skills Challenge Certificate includes four 'Challenges' through which learners demonstrate a variety of skills.

It can be gained at CQFW Level 2 (equivalent to GCSE) and is taken by learners in the final year of compulsory schooling. Similarly, the Welsh Baccalaureate can also be awarded at CQFW Level 3 (equivalent to GCSE A Level) and is taken by many learners in post-16 education. It combines personal development skills with existing qualifications like A levels, NVQs and GCSEs to make one wider award

that indicates the kinds of personal development and critical thinking skills valued by employers and universities.

The Welsh Baccalaureate aims to achieve a broader, more balanced curriculum for 14-19-year olds, with an emphasis on practical learning and on demonstrating skills:

> *It provides young people in Wales with greater breadth to their learning and supports the acquisition of knowledge and skills critical to successful higher education study and through to employment. It enables Welsh students to develop independence in a range of skills and depth of knowledge that will be of great benefit to their future studies at University.*
>
> Kirsty Williams AM, Minister for Education and Skills, Welsh Government

Vocational Qualifications

Vocational qualifications are those whose content relates to a particular employment sector, or to general preparedness for the world of work. Such qualifications within the Welsh qualification system can either be Initial Vocational Education and Training (IVET), or Continuing Vocational Education and Training (CVET).

Whilst general qualifications fall into three broad categories, as described above, the range of vocational qualifications made available to learners in Wales is much more varied in terms of subjects and levels. Vocational qualifications in Wales constitute a broad offer to learners that covers a wide range of employment sectors and levels. Many vocational qualifications are developed by awarding bodies who have expertise in relevant sectors and extensive experience of delivering assessment.

Many learners study towards vocational qualifications at CQFW Levels 2 and 3. This can include study in school or in FEIs. In schools, learners may take initial vocational qualifications alongside more traditional GCSEs. Sometimes these vocational options are also GCSEs; sometimes they are other qualifications such as Pearson's Business and Technology Education Council (BTEC) Certificates, Diplomas and Awards. The courses leading to these qualifications provide an introduction to areas of work, but they do not require the assessment of competence that would be required for work, (as determined by their status as IVET qualifications).

A 2017 survey by Qualifications Wales demonstrated that three quarters of adults (75 per cent) and around two thirds of young people believed that vocational qualifications taken in school were valuable for young people's futures. A majority of the Welsh public (67 per cent) felt that achieving a vocational qualification instead of A levels at age 18 was at least as valuable for young people's futures as achieving A levels, demonstrating the public confidence that is held in vocational qualifications.

Following the attainment of Level 3 qualifications, learners either progress into employment, on to higher education or continue vocational education through studying for Level 4 qualifications in an FEI

or work based learning settings. As Table 3 below shows, the greatest numbers of certifications for vocational qualifications in Wales are typically at levels 2 and 3.

Table 3. Certification for vocational qualifications, by CQFW Level

CQFW Level	EQF level	Certifications, July 2017 to June 2018
Entry Level	1	32,780
Level 1	2	61,470
Level 1/2	2/3	63,885
Level 2	3	140,370
Level 3	4	105,455
Level 4	5	4,630
Level 5	5	5,085
Level 6	6	854
Level 7	7	375
Level 8	8	5
Total		**414,909**

Learners study towards vocational qualifications relating to a variety of subjects and sectors. Many vocational qualifications assess learning that is specific to a job role or employment sector and are often part of work-based learning, in-work training or accreditation to work in specified roles. Others provide more general preparation for employment and progression in learning. The sectors with the highest numbers of certifications are illustrated in Table 4 below.

Table 4. Certifications for vocational qualifications, by Subject Sector Area

Sector Subject Area, Vocational qualifications	Certifications, Oct 2017 to Sep 2018
Preparation for Life and Work	170,970
Health, Public Services and Care	73,205
Retail and Commercial Enterprise	28,690
Arts, Media and Publishing	28,395
Business, Administration and Law	23,680
Construction, Planning and the Built Environment	22,425
Engineering and Manufacturing Technologies	21,960
Leisure, Travel and Tourism	15,725
Languages, Literature and Culture	10,630
Information and Communication Technology	7,180
Agriculture, Horticulture and Animal Care	6,850

Science and Mathematics	6,180
Education and Training	4,245
Social Sciences	390
History, Philosophy and Theology	135
Total	**420,665**

Vocational qualifications in Wales are designed by awarding bodies. FEIs or work-based learning providers will typically purchase qualifications on behalf of their learners and those learners will be assessed either by the awarding body or by the learning provider on behalf of the awarding body. The content of these qualifications is based on a number of sources, including the following:

- Many awarding bodies are themselves trade bodies that hold extensive subject expertise in their field, such as the Chartered Institutes, Royal Societies, national societies and guilds. These bodies incorporate the expertise that they and their members hold in the development of content for vocational qualifications.

- Many vocational qualifications are informed by defined standards, such as National Occupational Standards (NOS). NOS are informed by standard-setting organisations that represent employers and employees within certain vocational sectors. This ensures that content is relevant to the labour market and most sectors have NOS for their vocational area.

- Vocational qualifications must also meet the CQFW high level principles (described in Chapter 3) and any relevant regulatory criteria or rules set by Qualifications Wales. This ensures that they are at an appropriate size and level, as well as meeting relevant purposes, such as providing access into work.

- More recently, Qualifications Wales has commissioned awarding bodies to develop vocational qualifications in order to address learner needs and ensure that content is relevant to the public policy and labour market context of Wales, setting regulatory criteria and content requirements that awarding bodies must meet.

- In some instances, particularly in developing units and qualifications targeting specific vocational knowledge and skills, awarding bodies, such as Agored Cymru, will engage with individual employers and Trade Unions to develop vocational qualifications and stand-alone units to meet specific needs.

Higher Education Qualifications

HEIs provide a range of qualifications in terms of levels and types. These range from Access to Higher Education programmes, which are at Level 3 of the CQFW, through to Doctorates which sit at Level 8:

- foundation degrees, which are combined with workplace learning;

- certificates, or graduate certificates and diplomas;
- full-time and part-time undergraduate bachelor's degrees, including degree apprenticeships;
- taught or research master's degrees;
- postgraduate certificates and diplomas;
- doctorates; and
- adult and continuing education

Most students completing degree level qualifications do so at universities and these will usually be completed following three-four years of full-time study. Some FEIs deliver higher education qualifications through franchising arrangements with HEIs. Post-graduate master's degree programmes are typically completed in one or two years, whilst PhD programmes, both research-based and practical/professional, are completed between three years full-time and 7 years part-time.

Experts in the academic disciplines design teaching programmes at HEIs. This ensures that the content of HE programmes is closely linked to the most recent literature in the field and prepares learners for a career working in that discipline.

Credits and levels are embedded in the higher education system and they are well established and used whenever HE programmes are designed and developed. Subject experts will design and develop a programme knowing the level on the CQFW clearly. The number of credits and size of the HE programme (or module within a programme) normally fits within well-established patterns of provision at the HEI.

When developing programmes, subject experts normally seek the views of other subject peers within their institution as well as often from other HEIs. Relevant faculties will oversee the development of the programme and, in some cases, external peer review is commissioned to add independent and expert review and rigour to the work.

Once the new programme is designed, it will go through a quality assurance process that is well established by the university. Once operational, the HEIs have quality assurance systems in place to maintain standards over time, including regular reviews of qualifications.

HEIs design and deliver their own assessments in order to accurately determine the performance of each learner on completion of their course. There are varied methods of assessment including end of module and end of course essay-based examinations. However, there is also a range of practical assessments, portfolio and project-based assessments as well as on-line assessments in use.

HE qualifications are awarded and certified by the institution and transcripts must include credits and level. This ensures that learners can use the transcript as proof of the qualification they have obtained to progress to further study and/or employment.

2.7. The UK Context

The responsibility for education and skills in the UK lies with the governing bodies for the four administrations in England, Wales, Northern Ireland and Scotland. There are various similarities and differences between education and skills systems in these four countries.

As described above, learners in Wales, England and Northern Ireland study towards the same qualification types in school, and often in further education. These include GCSEs and GCE A Levels.

Most learners in all four UK nations wishing to attend higher education must make applications through the University and College Admissions Service (UCAS) and must meet any entry requirements set by individual higher education providers. Undergraduate degrees in England, Northern Ireland and Wales most commonly take three years. Many learners move between the countries of the UK to study programmes of higher education, and qualifications awarded in Scotland, Northern Ireland, England and Wales are recognised by employers and other bodies across all nations.

Like academic qualifications, vocational and technical qualifications also have a common UK context but with increasing divergence between the different systems. Traditionally, National Vocational Qualifications (NVQs) in England, Northern Ireland and Wales and Scottish Vocational Qualifications in Scotland have been developed for a wide range of vocational sectors. These can be awarded at different levels, allowing learners the opportunity to progress from basic introductory knowledge and skills at lower levels up to occupational competence and on to mastery in a vocational field.

NVQs in England, Northern Ireland and Wales have increasingly become supplemented by other vocational qualifications that are assessed and awarded as whole qualifications rather than units. Vocational education is in a process of reform at present with Qualifications Wales developing and commissioning new vocational qualifications for Wales and the Institute for Apprenticeships in England developing new vocational and technical qualifications.

As detailed in section 2.6 above, many vocational qualifications are informed by UK-wide NOS. NOS are the responsibility of devolved administrations in Wales, Scotland and Northern Ireland. The NOS Governance Group manages NOS to ensure that standards remain reflective of industry needs across the whole of the UK and are applied consistently. The Welsh Minister for Skills and Science has confirmed the continuing commitment of the Welsh Government to the UK's national occupational standards and the inclusion of qualifications in apprenticeship frameworks (information provided by Welsh Government, August 2016).

NOS have an extensive influence on vocational education and training in Wales. The Welsh Government estimates that around 56 per cent of the occupations that are recorded by the Office for National Statistics are addressed by NOS. NOS have a strong influence on occupations where Level 3 qualifications and below are more appropriate and around 94 per cent of such occupations are covered by NOS. For many occupations requiring higher-level qualifications, NOS may be replaced by industry-specific standards set by professional and regulatory bodies, such as the General Medical Council Standards or Primary Education Teaching Standards. Employers and representative groups generally support the use of NOS, and of other industry-specific standards for employees, including Trade Unions and professional bodies.

Whilst England, Northern Ireland and Wales maintain regular discussions in order to maintain comparability, common standards and the portability of qualifications across boundaries, there is increasing distinctness between the three countries.

- There are three independent regulators of qualifications in Wales, England, and Northern Ireland and they reflect the national legislation and circumstances in which they operate, taking different approaches to securing the provision of qualifications and informing their content.

- In Wales, both government and regulatory bodies have sought to secure the provision of qualifications that assess knowledge that is relevant to the Welsh context. This is being achieved through selection and commissioning processes, working with awarding bodies to identify Wales-specific content for new qualifications, as well as by taking a strategic overview of the provision of further and higher education to ensure that local provision meets the needs of learners. In recent years, Qualifications Wales' development and commissioning of qualifications has created a greater number of Wales-only qualifications;

- Governments and employers in the different nations of the UK have identified different skills needs and economic priorities, both at national and regional/local levels, and these have been reflected in policy, funding and qualification development;

- Whilst the GCSE trademark is shared between Qualifications Wales, Ofqual and CCEA, the content and character of GCSE qualifications has become distinctive in each country, as detailed in section 2.6 above.

In terms of qualification frameworks, the following features are shared between England, Northern Ireland and Wales:

- Level descriptors for regulated qualifications and higher education;
- Regulatory rules; and
- Large numbers of qualifications are available across all three countries.

The CQFW's Regulated Qualifications Pillar and the Regulated Qualifications Framework in England and Northern Ireland share a set of level descriptors. In drafting descriptors, the regulatory bodies (Qualifications Wales, Ofqual and CCEA Regulation) recognised the use of common qualification types across the three nations and recognised the benefits of easily comparable frameworks. This ensures that all regulated qualifications across the three nations are compliant with each regulator's requirements and are easily referenced, allowing holders to move easily between the nations for employment and to progress into higher levels of learning.

Similarly, the frameworks in all three countries incorporate a shared set of level descriptors in the form of the Framework for Higher Education for England, Wales and Northern Ireland (FHEQ-EWNI). This framework has been designed to recognise extensive movement of learners between the three nations in order to access higher education. The FHEQ has been incorporated into the CQFW as the Higher Education Pillar.

Aside from level descriptors, Qualifications Wales, Ofqual and CCEA regulation work closely together to align regulatory frameworks in many instances, whilst retaining the ability to address the specific

needs of their respective systems. This means that rules for awarding bodies are comparable, where relevant, thereby allowing awarding bodies to operate easily across national boundaries and to allow qualifications to be offered in three countries where there is a demand.

Nonetheless, there are some important differences between the qualifications' frameworks in Wales, England and Northern Ireland. The CQFW operates as a meta-framework that incorporates different sub-frameworks for regulated qualifications, higher education and lifelong learning. By contrast, in England and Northern Ireland, regulated qualifications and higher education are included in distinct frameworks. Furthermore, the inclusion of Lifelong Learning in the CQFW (see section 3.2 below) reflects a policy interest in Wales in including units and qualifications that are flexible in the development and delivery, to promote accessibility and to be responsive to the needs of individual employers. There is increasing divergence in terms of the qualifications offered in the different frameworks, as Qualifications Wales is promoting the development of qualifications specific to Wales.

Qualifications Can Cross Boundaries

'Qualifications Can Cross Boundaries' is a document reflecting a formal agreement that ensures that qualifications frameworks across the UK refer to one another. The UK is a single labour market, and qualifications are recognised in each country. With the creation of a shared market for goods and services with Ireland, the National Framework of Qualifications for Ireland is also included in this five-country referencing. The 2014 Impact Review found that stakeholders recognised the good level of referencing between the CQFW and other frameworks in the UK and internationally. This, stakeholders felt, enabled potential progression and mobility for learners. Stakeholders continue to recognise the comparability of the CQFW to frameworks across the UK and Ireland as a strength.

The 'Qualifications Can Cross Boundaries' document provides a communicative tool aimed at learners, learning providers and employers to explain how qualifications gained in each of the five NQFs can be compared. A summary table showing comparability between the levels of the five NQFs and the EQF is presented below, alongside a table illustrating the mapping of the frameworks for higher education and the Bologna cycles.

Table 1. Qualifications Can Cross Boundaries

European Qualifications Framework (EQF)	Regulated Qualifications Framework England/ Northern Ireland (RQF)	Credit and Qualifications Framework for Wales (CQFW)	Scottish Credit and Qualifications Framework (SCQF)	The National Framework of Qualifications for Ireland (NFQ IE)
8	8	8	12	10
7	7	7	11	9
6	6	6	10/9	8/7
5	5/4	5/4	8/7	6
4	3	3	6	5
3	2	2	5	4
2	1	1	4	3
1	E3	E3	3	2/1
	E2	E2	2	
	E1	E1	1	

Typical higher education qualifications within each level	FHEQ level	FQHEIS/ SCQF level	NFQ IE level	Corresponding FQ-EHEA cycle
Doctoral degrees	8	12	10	Third cycle (end of cycle) qualifications
Master's degrees (including Integrated Master's)	7	11	9	Second cycle (end of cycle) qualifications
Postgraduate diplomas				Intermediate qualifications within the second cycle
Postgraduate certificates				
Bachelor's degrees with honours /Honours Bachelor Degrees	6	10	8	First cycle (end of cycle) qualifications
Irish Higher Diplomas				
Bachelor's degrees/ Ordinary Bachelor Degree		9	7	
Graduate diplomas				Intermediate qualifications within the first cycle
Graduate certificates				
Foundation Degrees (for example FdA, FdSc)	5	8	6	Short cycle (within or linked to the first cycle) qualifications
Diplomas of Higher Education (DipHE)				
Higher National Diplomas (HND)				
Irish Higher Certificates				
Higher National Certificates (HNC)	4	7		Intermediate qualifications within the short cycle
Certificates of Higher Education (CertHE)				

Chapter Three - The Credit and Qualifications Framework for Wales

3.1. Aims of the CQFW

The CQFW is an all-inclusive meta-framework designed to provide greater clarity on the qualifications system in Wales. The CQFW was designed to improve access, flexibility and progression in learning, assessment and certification, through qualifications and learning that is credit-based. It encompasses a wide range of qualifications and credit-based accredited training. This means that the framework incorporates formal qualifications that assess learners at the end of standardised periods of learning, as well as more flexible, less formal learning opportunities.

Since its foundation in 2003, the aims of the CQFW have evolved. The CQFW started out as a regulatory instrument intended to define the scope of qualifications and accredited learning, setting our key regulatory requirements. The independent review of the CQFW ten years after its foundation (ARAD Research, 2014) made a number of recommendations and identified the benefits of the CQFW as a tool for providing clarity on qualifications offered in Wales, on pathways for progression and an approach to the accreditation of smaller volumes of learning. The review recommended that future development of the CQFW should focus on realistic, achievable and measurable goals for its design and implementation. The aims and objectives were revised so it acts as a 'functional', communicative national qualifications framework, i.e. a framework that assists understanding of a qualifications system and the qualifications within it.

3.2. Structure of the CQFW

Pillars

The CQFW is designed to incorporate learning delivered in a variety of settings. It is designed to recognise that distinct types of learning have particular characteristics and contexts that require specific arrangements for inclusion on a framework. As a result, the CQFW has three distinct Pillars. All types of learning can be included in these three Pillars, meaning that the CQFW provides a comprehensive framework of qualifications, credit and learning in Wales. As a 'meta-framework', the CQFW ensures that learning in each Pillar is comparable with learning in each other Pillar, in relation to its own levels of demand. This is assured by the comparability between level descriptors designed for each Pillar and by the ongoing work of the key regulatory bodies to ensure comparability between qualifications in each Pillar. In particular, the comparability between the Regulated Qualifications Pillar and Higher Education Pillar is assured in the entry requirements set for higher education programmes, which typically include regulated qualifications.

The three Pillars of the CQFW are:

- Higher Education;
- Regulated Qualifications; and
- Lifelong Learning.

Each of these Pillars has distinct types of learning providers, awarding bodies and quality assurance arrangements, and some bodies will offer qualifications in more than one Pillar. The Pillars are described in Figure 1 below.

Figure 1. Pillars of the CQFW[1]

PILLARS					
Higher Education	Example Type of Learning	HE Certificates & Diplomas, Degrees, Post Graduate Certificates, Masters/Doctorates	Regulated Qualifications	Example Type of Learning	Learning Programmes for 14-19 learners (such as GCSE, A/AS level, VQs, Welsh Bacc), regulated qualifications within apprenticeship programmes
	Information Source	HEI websites, UCAS, FHEQ, Unistats		Information Source	QIW (for publicly funded qualifications), Awarding Body websites
	Delivery	HEIs, FEIs		Delivery	Schools, FEIs, HEIs, Training Providers
	Standards	QAA Quality Enhancement Review		Standards	NOS, Qualifications Wales' Standard Conditions of Recognition, Designation and Approval Criteria (where applicable) and regulatory documents
	Quality Assurance	HE Review: Wales		Quality Assurance	Qualifications Wales, QAA (Access to HE)
	Awarded by	HEIs		Awarded by	Awarding Bodies (recognised by regulators)
	Guidance	FHEQ guidance		Guidance	Specifications/Design Principles, NOS for VQs
	Oversight	HEFCW		Oversight	Qualifications Wales, QAA (Access to HE)

Lifelong Learning	Unitised Accredited Learning	Vendor / Industry / Professional Learning
Example type of learning	CQFW units of Credit	Vendor/Professional courses, Continuous Personal and Professional Development
Information Source	Lifelong learning units on HEI and Awarding Body websites	HEI, FEI, Vendor/Industry/Professional Body websites
Delivery	HEIs, FEIs, Awarding Bodies, Third Sector, Training Providers, Employers	HEIs, FEIs, Training Providers, Vendor/Industry/Professional Bodies, Awarding Bodies, Employers
Standards	CQFW High Level Principles	NOS, Industry/Professional Standards
Quality Assurance	CQFW competent bodies – HEIs and Awarding Bodies	Sector, Vendor, Industry or Professional Bodies
Awarded by	CQFW competent bodies - HEIs and Awarding Bodies	HEI or Awarding Bodies, Vendor/Industry/Professional Bodies
Guidance	CQFW High Level Principles	Sector, Vendor, Industry or Professional Bodies
Oversight	CQFW competent bodies - HEIs and Awarding Bodies	Sector, Vendor, Industry or Professional Bodies

1

The Higher Education Pillar

The Higher Education Pillar of the CQFW includes qualifications that are awarded by HEIs and sometimes through FEIs. HEIs are autonomous organisations and, those that have degree awarding powers design, deliver and assess learning and award qualifications. Qualifications in the Higher Education Pillar are awarded at CQFW Levels 4 to 8.

HEFCW regulates fee levels at universities, ensures a framework is in place for assessing the quality of higher education, scrutinises the performance of universities and other designated providers and manages the inclusion of learning onto the Higher Education Pillar of the CQFW. HEFCW has responsibilities for the following:

- promoting learning and teaching development, particularly the quality of the learning experience;
- investing in a strong research base and developing research excellence;
- encouraging activities in higher education that support business and the community;
- widening access to higher education;
- ensuring that funds received from HEFCW are spent appropriately;
- the effective financial management arrangements and that regulated institutions are sustainable for the future
- supporting development of Welsh language higher education; and
- strengthening the HE sector - with an emphasis on encouraging reconfiguration and collaboration, effective leadership and governance, European and international developments, and maintaining the estate

HEFCW also liaises with other regulatory bodies in the higher education sector across the UK. HEFCW is a member of the UK Standing Committee for Quality Assessment, which sets baseline regulatory requirements for the governance and practice of HE providers (both HEIs and FEIs) and informs the Quality Code, incorporating level descriptors for higher education qualifications, the Framework for Higher Education Qualifications for England, Wales and Northern Ireland (FHEQ-EWNI). These descriptors are used by degree-awarding bodies to inform the design and award of their qualifications.

QAA undertakes Quality Enhancement Reviews (QER) on behalf of HEIs to meet HEFCW's external quality assurance review requirements as set out in the Quality Assessment Framework (QER) for Wales. QER assesses providers against agreed baseline regulatory requirements and Part 1 of European Standards and Guidelines 2.

QAA also undertakes Gateway Quality Reviews to test the provision of providers of higher education who are seeking to become regulated against baseline regulatory requirements.

The structure of the CQFW provides an internal referencing of the FHEQ-EWNI to the other Pillars of the CQFW. This ensures that levels are directly comparable between Regulated Qualifications,

[2] https://www.qaa.ac.uk/reviewing-higher-education/types-of-review/quality-enhancement-review

Lifelong Learning and Higher Education. A separate self-certification to the Qualifications Framework of the European Higher Education Area has also been undertaken, ensuring that the FHEQ-EWNI is aligned to the cycles of the Bologna Process. As part of the 2019 referencing of the CQFW to the EQF, and the parallel referencing of the frameworks of England and Northern Ireland, QAA has concluded that this certification remains valid and is consistent with the referencing of levels of the FHEQ to the EQF.

Qualifications included in the Higher Education Pillar include undergraduate and post-graduate degrees, such as master's degrees and Doctorates. These types of qualifications are well understood and have historical precedent. Undergraduate honours degrees in Wales are typically be completed across a three-year full-time programme of study and are equivalent to CQFW Level 6, whilst post-graduate master's degrees are awarded at Level 7, and Doctorates at Level 8.

The Pillar also includes other types of qualifications that have origins that are more recent. The review has highlighted that Level 4 qualifications in higher education are a feature of UK qualification systems that are less common elsewhere in Europe. The key qualifications associated with these levels were designed to facilitate access to, and progression within, higher education.

The principal qualification types associated with CQFW Level 4 are Higher National Certificates (HNCs). HNCs have an equivalent level and size to the first year of an undergraduate degree. There are, in addition, qualifications at Level 5 such as Foundation Degrees and Higher National Diplomas (HNDs), that similarly are deemed equivalent to part of an undergraduate degree.

HNC qualifications can be taken as part of learner's progression to higher levels, rather than as an end in themselves. Learners completing an HNC can use this towards an HND by completing one further year of study in a programme with relevant content. These qualifications also have status and value in their own right particularly in field such as Engineering.

These qualification types originated as part of a policy drive in the 1990s to make higher education more accessible to those from less typical academic backgrounds or those whose attainment of school-leaving qualifications had been lower. HNCs and HNDs, at Levels 4 and 5, provide a step-by-step approach through the levels of learning available in higher education. They are often considered more vocational or practical in nature than three-year undergraduate degrees and honours programmes, and can provide a route for people with vocational experience, or interest in a particular vocational sector, to work towards higher education (and higher-level) qualifications through programmes which include practical learning and assessment.

HNCs and HNDs are included in both the Higher Education and Regulated Qualification Pillars of the CQFW. This reflects their purposes of being partly academic and vocational, and as bridging between different types of educational provision. They can be offered by HEIs or by recognised awarding bodies. Foundation degrees are only awarded by HEIs.

The Regulated Qualifications Pillar

The Regulated Qualifications Pillar of the CQFW includes qualifications awarded by awarding bodies that are recognised and regulated by Qualifications Wales, other than those that fit into the Higher Education Pillar such as degrees.

Awarding bodies apply to Qualifications Wales for recognition, during which they have to provide evidence that they meet a set of regulatory criteria. Once recognised, awarding bodies can develop, deliver and award qualifications. In doing so, awarding bodies must comply with Conditions of Recognition that set out regulatory requirements relating to, among other factors, their governance structures, the fitness for purpose of qualifications, delivering assessments, appeals and issuing results and certificates. In instances of non-compliance, Qualifications Wales can issue awarding bodies with directions to act in a particular way and can issue monetary penalties or remove recognition from an awarding body. These awarding bodies are typically independent organisations, charities or sector bodies who have been recognised by Qualifications Wales to develop, deliver and/or award qualifications to learners in Wales. Through this recognition, they must design and award qualifications in line with the regulatory requirements.

Generally, the teaching that prepares learners for assessment for these qualifications is not provided by awarding bodies but by schools or FEIs. Schools and FEIs will typically purchase qualifications from awarding bodies on behalf of their learners. For any qualification to be eligible to be used on publicly funded programmes of learning it must be included within the Regulated Qualifications Pillar and meet additional regulatory requirements. Ultimately, funding decisions rest with the Welsh Government, which sets additional parameters as to what is eligible to be funded, and with individual learning providers, who purchase on behalf of learners.

The level descriptors for the Regulated Qualifications Pillar are published by Qualifications Wales as the Qualification and Component Levels. Recognised awarding bodies are required to design all qualifications with reference to these level descriptors[3].

The Lifelong Learning Pillar

The Lifelong Learning Pillar of the CQFW includes learning that does not fit into either Regulated Qualifications or Higher Education. This can include accredited units of learning and courses of professional development.

As Figure 1 above illustrates, since the referencing of the CQFW to the EQF in 2010, the Lifelong Learning Pillar has been refined to consist of the following forms of learning:

- Unitised Accredited learning (UAL); and
- Vendor/Industry/Professional learning (VIP).

These forms of learning may be developed by learning providers in HEIs, FEIs, the voluntary sector and employers, as well as by awarding bodies who offer qualifications in the Regulated Qualification or Higher Education Pillars. This learning will be based on expertise that providers have in a specified field and may be designed with a specific group of learners in mind.

The distinction between these two forms of learning within the Lifelong Learning Pillar is intended to allow a more flexible quality assurance process for qualifications that are developed by stakeholders

[3] More detail on how learning is included in the Regulated pillar can be found in the response to Criterion 4.

within the qualifications system other than recognised awarding bodies. This includes voluntary sector bodies and trade bodies with expertise in vocational sectors, allowing them to respond to change, promote transfer and progression and create relevant and tailor-made learning opportunities.

The CQFW Review (2014) noted concerns about the bureaucracy and time taken for the recognition of (informal) unitised accredited learning and the onerous requirements put on learning providers. Management of the Lifelong Learning Pillar was subsequently moved from Government back to the sector in an attempt to make it less bureaucratic and more accessible. Quality is assured through the awarding body's own existing internal quality assurance practices and processes. These quality assurance arrangements are described in more detail in our response to Criterion 5 in this report.

Levels

The CQFW is designed to reflect a distinct number of levels. The CQFW includes three levels which are defined as Entry Levels and eight further levels. These levels are designed to cover the range of learning in Wales, from basic knowledge to mastery. The range of levels used is a long-standing practice in the Welsh education and skills system, reflecting the range of educational provision (see sections 2.2-2.5 above).

Figure 2 presents the CQFW fan diagram. As the diagram shows, some qualification types are associated with particular levels on the framework, such as GCSE (Levels 1 and 2), GCE AS/A Level (Level 3) and Honours Degree (Level 6). However, other qualification types can be awarded at different levels. For instance, vocational qualifications in the form of certificates or diplomas can be awarded at any level. Learners studying vocational qualifications will undertake a programme of learning and an assessment set at a particular level, enabling them to progress to a higher level once this has been achieved.

The CQFW fan diagram also illustrates that qualifications at different levels can be gained through different types of educational provision and educational settings. In many cases these overlap, meaning that the same qualification can be studied in different settings. For instance, learners study toward gaining GCSEs in schools, FEIs and in lifelong learning settings.

One feature of the CQFW that is less common across Europe is the inclusion of Entry Levels. In particular, both the 2010 and the 2019 referencing of the CQFW to the EQF have concluded that Entry Levels 1 and 2 describe knowledge and skills at levels of demand that sit below EQF Level 1. Entry Levels 1, 2 and 3 have been incorporated into the CQFW since its development. Qualifications and units awarded at these levels serve a valuable function within the Welsh education and skills system, offering an opportunity to access and accredit learning as part of a progression through levels of the framework. In particular, as noted by one awarding body:

> *[Qualifications and units at Entry Levels] are suitable for a wide range of individuals including learners for whom GCSEs and Vocational Awards are not suitable, adult returners or community learners who want to develop their interest in a particular area.*
>
> Welsh Joint Education Controller, (WJEC) (n.d.)

Awarding Bodies

Qualifications and credit in the CQFW can only be awarded by a CQFW Competent Body. Competent Body status can be gained by being regulated by a regulatory body, including Qualifications Wales and HEFCW.

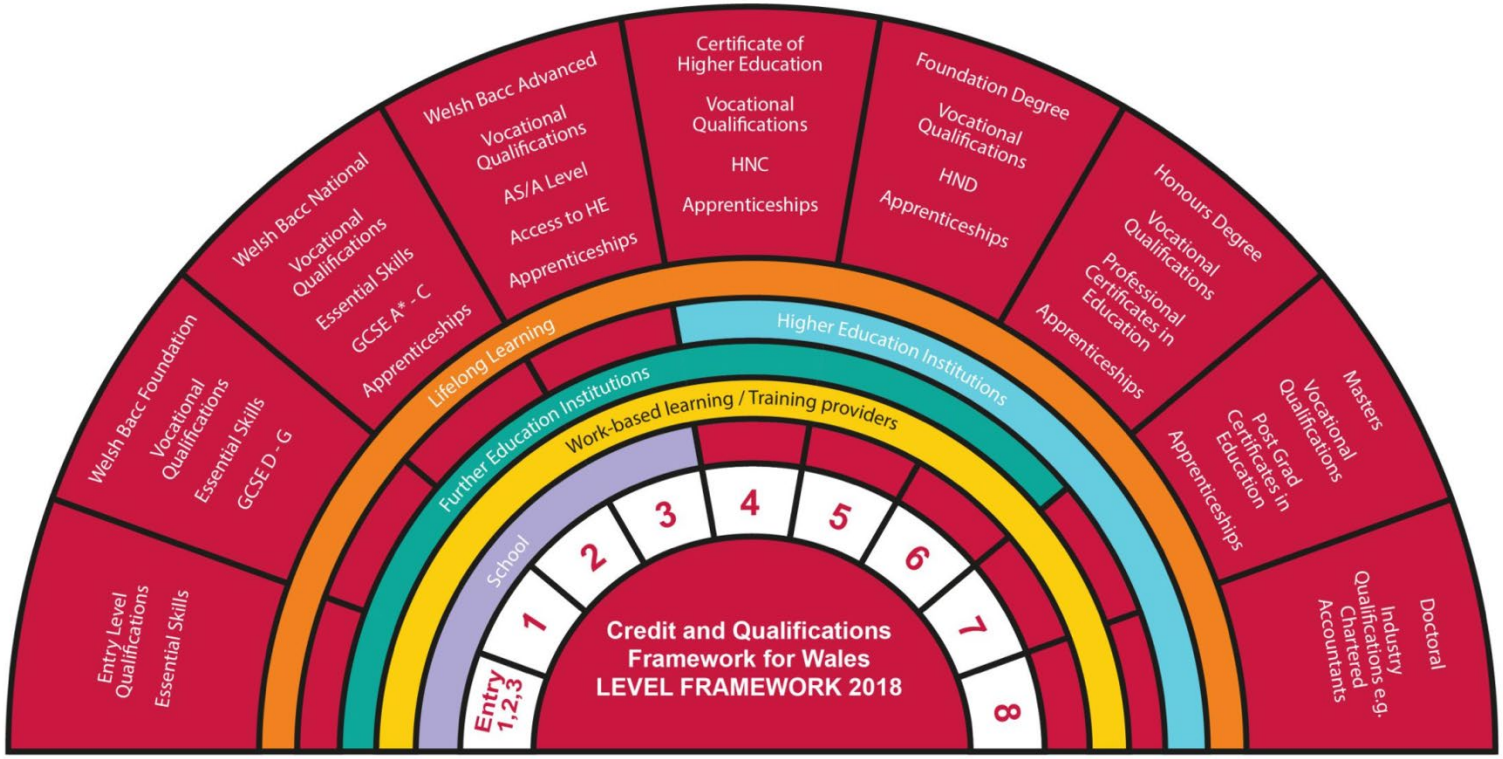
The Welsh qualification system is a decentralised system in which independent, non-governmental bodies develop and award qualifications.

This means that, in many instances, learners and learning providers can choose which qualifications to purchase. In some vocational sectors in Wales, learners and learning providers may be able to choose from several providers for comparable qualifications at the same level and with similar content. A competitive market for qualifications, when combined with effective regulation, has been seen as providing a mechanism for innovation and quality control (Sahlgren, 2016), whilst the regulatory requirements of inclusion in the CQFW enable standards to be maintained. However, in other sectors, including in relation to core subjects for the main school-leaving qualifications in Wales, there is only one provider available. In these instances, awarding bodies are often subject to higher levels of regulatory requirements and scrutiny.

The awarding body system is a legacy of historical developments in education in the UK. Throughout the twentieth century, school-leaving examinations were provided by regional examination boards, and over time, through successive policy changes these have developed into the awarding bodies that provide such qualifications today. WJEC is one such body and is the single supplier of GCSE and GCE qualifications in the core curriculum subjects in Wales, as well as providing a wide range of vocational and technical qualifications. WJEC is a registered charity and its governing body is made up of representatives of each of the 22 local authorities in Wales.

Many vocational qualifications are provided by bodies with expertise in relevant sectors. This ensures a link between the knowledge and skills assessed through qualifications and the requirements of the labour market. Awarding bodies combine sector-specific knowledge with expertise in assessment, working within a framework of regulatory oversight provided by the three bodies with responsibility for managing the CQFW, the Welsh Government, HEFCW and Qualifications Wales.

Figure 2. CQFW diagram



3.3. Governance of the CQFW

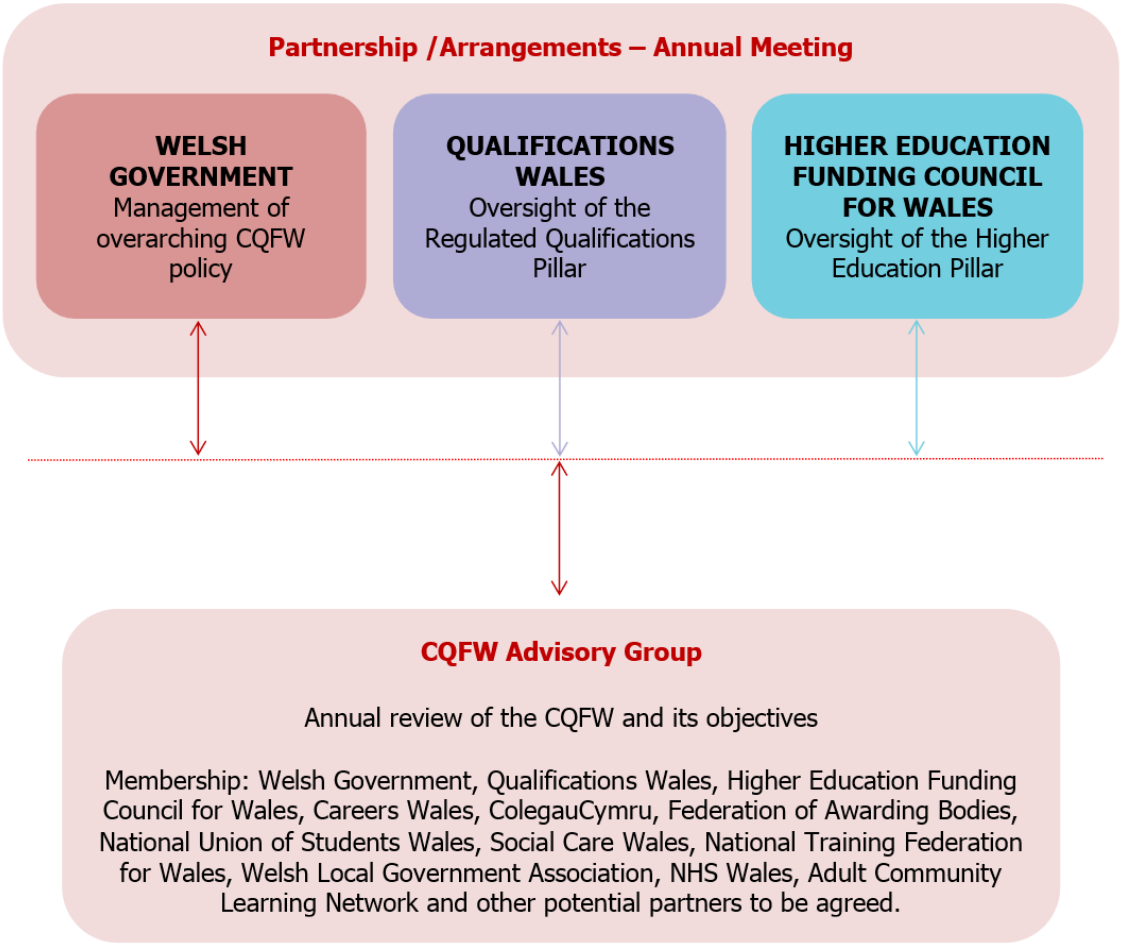
The CQFW is managed by a strategic operational partnership comprising the Welsh Government, HEFCW and Qualifications Wales. An external advisory group, established in 2015, to ensure more effective strategic development, promotion and implementation of the CQFW, supports the partnership. The group is chaired by Welsh Government and includes within its membership, the different regulatory bodies associated with the CQFW, a selection of awarding bodies, representatives of colleges and universities, representatives of public sector employers and learner representatives.

The CQFW Advisory Group annually agrees specific, measurable and achievable objectives, examples of which include commissioning animated video clips to explain and publicise the CQFW and developing e-learning modules. Doing so allows for focussed and effective evaluation of delivery, in line with the overall aims and objectives. This is reflected in Figure 3 below.

The Welsh Government retains overall ownership and oversight of the CQFW and coordinates activity on behalf of the strategic partnership. This is on the basis that the Welsh Government's activity affects all parts of the education and learning sector in Wales and the CQFW's biggest potential strength is that it can be implemented across the education sector on a nationwide basis.

Welsh Government responsibility for Education and Skills policy, including the CQFW, is split between *Education and Public Services* and *Economy Skills and Natural Resources* Departments. The CQFW team within the Welsh Government also manages EU vocational education and training (EUVET) policy, including EQF activity. This ensures a joined-up approach between the CQFW and EU VET policies in Wales. ColegauCymru acts as the NCP on behalf of the Welsh Government for EU VET activity that includes the EQF.

Figure 3. Governance of the CQFW



3.4. High Level Principles

In order to be included within the CQFW, learning provision must be developed in accordance with a set of eight high level principles, which underpin all three Pillars of learning.

The high-level principles, as set out in the CQFW brochure, provide a consistent set of expectations for bodies awarding qualifications and units across the Pillars of the CQFW. They were developed as part of a common accord including the Welsh Government, Qualifications Wales and HEFCW, the three bodies responsible for the three Pillars of the CQFW.

Compliance with these principles is achieved through different mechanisms in the different Pillars.

- In the Regulated Qualifications Pillar, the high level principles are reflected in Qualifications Wales' regulatory Conditions of Recognition, meaning that every recognised awarding body must comply with them on an ongoing basis;
- In the Higher Education Pillar, the high level principles are reflected in both the Framework for Higher Education Qualifications and in HEFCWs baseline regulatory requirements for HEIs in Wales.
- In the UAL area of the Lifelong Learning Pillar, expectations are not enforced through regulatory conditions but by proxy, as bodies developing this learning must be deemed Competent Bodies, requiring them to be recognised by Qualifications Wales or by HEFCW. This means that, while the learning itself is not pro-actively regulated, the competence of the awarding body is assured along with their established quality assurance processes, whilst allowing flexibility and adaptability in developing learning in this Pillar.

The eight high level principles, which underpin all three Pillars of learning, are outlined in turn below:

1. Credit

Credit is a measure of the notional learning time that may be assigned to a set of learning outcomes. Credit may be awarded to a learner in recognition of the achievement of designated learning outcomes at a specified credit level. Credit can be awarded for the achievement of learning outcomes that have been verified through the appropriate rules, regulations and assessment for each of the Pillars.

Credit value must be based on:

- one credit for those learning outcomes achievable in 10 hours of learning time;
- learning time being defined as the time taken by learners at the level of the unit, on average, to complete the learning outcome[s] of the unit or qualification to the standard determined by the assessment criteria; and
- the credit value remaining constant, regardless of the method of assessment used.

2. Learning Time

Learning time is defined as the time taken by the learners at the level of the learning, on average, to complete the learning outcomes to the standard determined by the assessment criteria. It takes

account of all learning not just contact time and/or guided learning. Learning time informs credit values, as described in principle 1 above.

3. Recognised Standards

All learning must be based on recognised standards or criteria. These may be National Occupational Standards or criteria applied by the bodies that regulate or quality assure the qualifications, or professional standards, or international frameworks for measuring learning, such as the Common European Framework of Reference for languages.

This ensures that the resulting assessment focuses on the appropriate knowledge, skills and understanding which, applied together, form the competence required by employers for certain roles and functions.

4. Levels/Level Descriptors

Level is an indicator of the relative demand, complexity and depth of learning. Learning autonomy and accountability is also a component part of learning within the Higher Education and Lifelong Learning Pillars. The CQFW incorporates nine levels:

- Entry level, which is subdivided into Entry Levels 1, 2 and 3; and
- Levels 1-8

The levels are differentiated by sets of level descriptors and are aligned to the EQF levels.

5. Title

The titles for any learning included on the CQFW must be clear, concise, reflect the content of the learning and be meaningful in its own right. Useful, precise titles are important and easier to find and give transparency to learners and employers. There are additional requirements for titling for learning in the Regulated Qualification and Higher Education Pillars.

6. Purpose

All learning must express its purpose for the learner and must contain one of the purposes stated below:

- to recognise personal growth and engagement in learning;
- to prepare for further learning or training and/or develop knowledge and/or skills in the same or another subject area;
- to prepare for employment;
- to confirm occupational competence and/or ‘licence to practise’ (to perform a supporting role in the workplace); and
- to update continuing professional development (CPD).

7. Learning Outcomes

Learning outcomes are statements of the knowledge, skills and understanding that will be assessed as part of a learning experience. Learning outcomes are supported by assessment criteria. These are used for assessing whether the outcome has been achieved.

8. Assessment Criteria.

Assessment criteria are discrete, assessable descriptions of what the learner is expected to achieve in order to demonstrate that a learning outcome has been met. It is the responsibility of any competent bodies offering qualifications and learning within the CQFW to have established policies and practices in place in relation to assessment and standards.

3.5. Examples of the use of the CQFW

As we have identified, we consider the CQFW to have matured in terms of its use within the qualification system in Wales, moving from being a 'transformative' framework to becoming a 'communicative' framework, whose requirements are now firmly embedded in the practice of awarding bodies, learning providers and employers. The following section provides some illustrative examples of how the CQFW is being used in the development and award of qualifications.

Higher-Level Apprenticeships

The Welsh Government regulates the provision of apprenticeship programmes by requiring publicly funded apprenticeships to follow a set of recognised standards. The Standards for Apprenticeship Specifications for Wales (SASW) are explicitly based on the CQFW:

> *An apprenticeship framework must specify its level using the national level descriptors described in the Credit and Qualifications Framework for Wales ('CQFW'). A framework must be at Level 2 to qualify as a Foundation Apprenticeship, be at Level 3 to qualify as an Apprenticeship and be at a Level between 4 and 7 to qualify as a Higher Apprenticeship.*
>
> Welsh Government, 2016

Recent developments in apprenticeships policy in Wales has seen the CQFW levels used to further target programmes and funding. The Welsh Government has sought to increase the number and range of apprenticeships offered at higher levels. Recent targets, based on analyses of future needs, use the CQFW:

> *'Looking forward' data projections tell us that between 2004 and 2024, the proportion of those in employment who need to be qualified at Credit and Qualifications Framework for Wales (CQFW) levels 4-6 is projected to almost double from 22 per cent to 40 per cent. By 2024, it is projected that over half (51 per cent) of those in employment in Wales will hold qualifications at level 4 or above. This is in contrast to around a quarter in 2004 (28 per cent).*
>
> Welsh Government, 2018

Within the basic requirements of the SASW, there is scope to include a broad range of qualifications at various levels, including higher levels. Apprenticeships at higher levels can therefore incorporate, for example, vocational certificates at Level 7 alongside extensive work experience. Such programmes

are increasingly promoted as a way of employers raising and formalising the skills of their workforces, particularly within highly specialised fields, as an alternative to more traditional academic higher education. The success of these apprenticeships provides evidence that high-level, innovative knowledge and skills, as well as competence and, where necessary, autonomy, can be demonstrated outside of a higher education setting.

Table 2 below provides examples of higher-level apprenticeships offered in Wales.

Table 2. Higher-level apprenticeships in Wales

Sector	Provider	CQFW Levels
Agriculture (Wales)	Lantra	2,3,4
Automotive Management and Leadership - non statutory (Wales)	Institute of the Motor Industry	5
Creative and Digital Media (Wales)	Creative Skillset	3,4
Design Practice (Wales)	Creative and Cultural Skills	5
Engineering Environmental Technologies (Wales)	SEMTA	4
Equine (Wales)	Lantra	2,3,4
Express Logistics (Wales)	Institute of the Motor Industry	5
Fashion and Textiles: Technical (Wales)	UK Fashion & Textile Association	4
Food and Drink - Non-Statutory (Wales)	Improve	2,3,4
Health (Informatics) (Wales)	Skills for Health	2,3,4
Higher Apprenticeship in Banking - Level 4 (Wales)	Financial Skills Partnership	4
Higher Apprenticeship in Playwork (Wales)	SkillsActive	5
Higher Apprenticeship in Hairdressing (Wales)	SkillsActive	4
Higher Apprenticeship in Conveyancing (Wales)	Skills for Justice (Justice, Community Safety and Legal Services)	4,6
Higher Apprenticeship in Health (Dental Technology) (Wales)	Skills for Health	5
Higher Apprenticeship in Insurance - Level 4 (Wales)	Financial Skills Partnership	4
Horticulture (Wales)	Lantra	2,3,4
Information Advice and Guidance (Wales)	Learning and Skills Improvement Service	3,4
Accounting (Wales)	Financial Skills Partnership	2,3,4
Master Craftsperson Level 4 Recognition Scheme (Wales)	SEMTA	4
Advanced Manufacturing Engineering (Wales)	SEMTA	4
Information Security (Wales)	Instructus	3,4
Digital Degree Apprenticeship (Wales)	Instructus	6
Higher Apprenticeship in Construction Management Level 4, 5 and 6 (Wales)	CITB	4,5,6

GCSE at Levels 1 and 2

GCSE qualifications in Wales are graded from A*-G. This is because Wales wants its national school leaving age qualifications to be as accessible to as wide a range of learners as possible. The nationally awarded GCSEs capture as wide a range of attainment as possible with the qualifications being awarded at both Level 1 [grades D-G] and Level 2 [grades A* -C], depending on the learner's performance in the assessments. The distinction between GCSE at level 1 and 2 is an embedded feature of the qualification system in Wales that is well understood by stakeholders. Being awarded at either level 1 or level 2 ensures that GCSEs allow for learning to be accredited, even where attainment falls below a certain level.

This distinction is reflected in performance measures used by the Welsh Government, in the targets set for school leaders. The level 2 inclusive threshold is a key performance measure for schools, measuring the attainment of GCSEs or other comparable qualifications at grades A*-C. Similarly, the level 1 / level 2 distinction in GCSE attainment is used by FEIs and HEIs to determine their entry requirements for learner progression.

The ability to distinguish learners' attainment against these important school-leaving qualifications across two separate levels of the CQFW illustrates the embedded understanding of levels in the qualification system. By allowing a broad range of attainment within one established and well-understood qualification type, the system ensures that learners' attainment is accurately reflected, whilst enabling learners to access and attain qualifications.

Bespoke Lifelong Learning Units

The Lifelong Learning Pillar of the CQFW is designed to facilitate the development of learning that is accessible and responsive to specified needs within the education system. The Pillar has been well utilised by awarding bodies and by employers via awarding bodies, who have recognised specific skill needs in target groups of learners and have developed units to assess and accredit their learning.

One example of this development has been the Driver Certificate of Professional Competence (CPC), a project instigated by employers and trade associations within the transport industry in Wales. The project took place in 2013 and enabled bus, coach and lorry drivers to gain national recognition through the CQFW for the knowledge they gained through mandatory training undertaken throughout their professional careers.

Discussions with employers and drivers in Wales showed a desire to have formal recognition within qualifications frameworks for this training in order to add value to the driver's periodic training experience and support the industry goal of raising levels of self-esteem and professionalism in the sector. It was noted that many employees in the sector had low levels of formal learning and qualifications and accrediting professional learning would provide transferable qualifications.

The project saw employers work jointly with an awarding body to develop nine CQFW units mapped against the most popular training subjects offered by employers and training organisations in Wales. These units were delivered and assessed by employers, as a form of Vendor/Industry/Professional

learning as part of the Lifelong Learning Pillar and quality assured by the awarding body, Agored Cymru, which operates solely in Wales.

Agored Cymru has extensive experience of developing units as part of the Lifelong Learning Pillar. They have worked with employers who have identified rapid changes in skill needs, often in emerging fields such as high technology manufacturing and drone piloting, or in fields that have experienced regulatory changes, such as the installation of fire safety equipment to meet new Welsh Government housing standards. Agored Cymru work with employers to identify key knowledge and skills and adapt this into deliverable learning, drawing on experience of delivering qualifications in the Regulated Pillar to inform approaches to assessment.

> *The Lifelong Learning Pillar is particularly useful for sectors or organisations that need bespoke accreditation to address a specific need. The number of learners need not necessarily be large, or the range of the subject content widely scoping, but the units undergo the same rigour in their development and assessment as any other qualification in Wales.*
>
> Judith Archer, Agored Cymru

The National Health Service (NHS) Wales, the state provider of healthcare, has also utilised the Lifelong Learning Pillar of the CQFW in the development of bespoke units for staff. By working with awarding bodies to develop units related to highly specialised skills and knowledge, NHS Wales has been able to respond to changing requirements quickly and in a way that upskills current staff:

> The NHS in Wales finds the Lifelong Learning Pillar extremely useful in being responsive and flexible to the needs of our existing staff, as recognised bespoke learning can be developed to meet service requirements.
>
> Stephen Griffiths, Director of Nursing, Health Education and Improvement Wales

Chapter Four – Changes to the CQFW since the 2010 referencing report

As part of updating the 2010 referencing, we have reflected on changes that have occurred in the qualification system in Wales since 2010 and considered how these would impact on the findings of that referencing. This section outlines the key changes and outlines how we have addressed these as part of our referencing work in 2019.

4.1. Changes to Level Descriptors in the Regulated Qualifications Pillar

Qualifications Wales, Ofqual and CCEA use a common set of level descriptors to describe the Regulated Qualifications Framework in England and Northern Ireland and the Regulated Qualifications Pillar of the CQFW. Having common descriptors ensures that qualifications that are designed for use in one country can easily be delivered, in others. Shared level descriptors also further facilitate the portability of qualifications, ensuring that qualifications gained in one country are recognised and understood by employers and learning providers elsewhere. This is clearly in the interests of learners as their qualifications are easily recognised in terms of their volume and level of demand by interested parties throughout the UK.

Between 2008 and 2015, the Qualifications and Credit Framework (QCF) was used to describe qualifications and credit in England and Northern Ireland, as well as for describing the regulated Pillar of the CQFW. The QCF was designed to prescribe specific units and content to be included in particular qualifications, particularly vocational qualifications. In 2015, the QCF was replaced with the Regulated Qualifications Framework (RQF). The RQF was designed to remove some of the prescriptiveness associated with the QCF.

New level descriptors were published in 2015 by all three regulators. The decision was taken to remove autonomy and accountability from the level descriptors for Regulated Qualifications. This was informed by reflection on the regulatory frameworks that Qualifications Wales and other regulators follow. By removing specific descriptors for autonomy and accountability at each level, whilst also maintaining further requirements for the content of qualifications through other regulatory means, Qualifications Wales has simplified its regulatory requirements without losing rigour.

The level descriptors for Regulated Qualifications form a regulatory requirement, which, alongside other regulatory conditions and criteria and other influences on content such as NOS and subject principles, prescribe much of the design of qualifications. The structure and language of the level descriptors in a domain concerned with autonomy and accountability were considered by regulators to be less well defined as those in the knowledge and skills descriptors, therefore making them less suitable for use in the regulatory process. Beyond these established regulatory rules, Qualifications Wales aims to allow awarding bodies to innovate and utilise their expertise in designing qualifications. Therefore, whilst autonomy and accountability are expected to be included, they are not prescribed in specific descriptors. Awarding bodies are advised to refer to the other CQFW descriptors for guidance on how to apply autonomy and accountability across levels.

Qualifications Wales regulates the development, delivery and award of qualifications by recognised awarding bodies, through a series of conditions, criteria, policies and procedures. The Qualification and Component Levels are part of the regulatory criteria and must be applied in the development of all qualifications. The level descriptors are prescribed in such a way that the terminology associated with knowledge and skills must be evident in qualification specifications and other materials (for

examples of how this is achieved, see Appendix 1). In this sense, awarding bodies are afforded relatively little scope in how they interpret the knowledge and skills that are appropriate at particular levels and this helps with consistency and fairness to learners.

We reflected on the potential challenges of applying the same kind of prescriptive approach to the assessment of autonomy and accountability. Reviewing awarding body practice, we observed that specific expectations for autonomy and accountability, and how they may be evidenced and assessed, vary depending on whether qualifications are vocational or academic, and depending on whether they incorporate practical or written assessment. By removing specific descriptors for autonomy and accountability at each level, we expect awarding bodies to develop their own approaches that are based on the subject area and method of assessment.

Nonetheless, removing autonomy and accountability descriptors does not mean that we do not expect these features of learning to be assessed in regulated qualifications. We would expect awarding bodies to build on the baseline requirements set out in the level descriptors by including autonomy and accountability in qualification specifications. Awarding bodies can refer to the autonomy and accountability descriptors used in the Lifelong Learning Pillar of the CQFW when developing qualifications for the Regulated Qualifications Pillar. Expectations for autonomy and accountability are addressed through further regulatory requirements in Qualifications Wales' Standard Conditions of Recognition. One such Condition states the following:

> E1.2 The objective of a qualification must be such as to lead to a benefit for learners who have reached a specified level of attainment, and may include:
>
> a) preparing learners to progress to a qualification in the same subject area but at a higher level or requiring more specific knowledge, skills and understanding;
> b) preparing learners to progress to a qualification in another subject area;
> c) meeting relevant programmes of learning;
> d) preparing learners for employment;
> e) supporting a role in the workplace, or
> f) giving learners personal growth and engagement in learning.

This Condition requires awarding bodies to ensure that their qualifications go beyond the basic requirements of the level descriptors, by setting an objective for the qualification that is based on the general expectations of what learners should be able to do or to progress onto following attainment of that qualification. This ensures that relevant expectations for autonomy and accountability at specified levels of attainment are incorporated into qualifications, but in a less prescriptive and a more bespoke way.

At the time of completing this review, there is no evidence that the exclusion of autonomy detracted from the functioning of the CQFW as a device for levelling qualifications. Therefore, whilst having autonomy may add value to the general concept of a qualification level, as it does in the EQF, in a simplified version of a framework such as is found in the descriptors for the Regulated Qualifications Pillar of the CQFW, it was decided that its absence would not affect the process of levelling of qualifications.

4.2. Maturation of the CQFW

Both the present referencing of the CQFW to the EQF and the 2014 review of the CQFW involved reflection on the purposes of the CQFW in light of a recognised typology of qualifications framework presented by UNESCO, ETF & CEDEFOP, (2015). This typology describes the distinction between the 'communication' and 'transformation' functions of qualifications framework.

We have recognised that the CQFW holds both 'communication' and 'transformation' functions as a qualifications framework. This means that the CQFW both describes aspects of current practice so that they are well understood and promotes those practices to be taken up where they are not already. The relative balance of these communication and transformation functions can be seen as having changed over time.

Following the introduction of the CQFW, the framework performed a number of transformative functions. By incorporating lifelong learning into a framework alongside regulated qualifications and higher education, requirements were placed on bodies awarding or accrediting lifelong learning to ensure that they used valid criteria, reviewed evidence and conformed with the CQFW's high level principles and, in many cases, to meet the criteria to become CQFW competent bodies. This provided a form of quality assurance that constituted a formal change to practice and to how those bodies were regulated.

By the time of the 2014 review of the CQFW, it was noted that the requirements for inclusion on the framework had become established practice among awarding bodies. Use of levels in the design of regulated qualifications was further embedded after 2015 by the creation of Qualifications Wales as an independent regulator, and particularly through the development and commissioning of new qualifications bespoke for Wales that were commissioned at particular levels. For example, a suite of nineteen qualifications in health and social care were procured at levels 2 to 5 and awarding bodies and HEIs were able to submit bids to design and offer these qualifications on a national basis to all health and social care learners in Wales for a period of up to seven years. Similarly, updates to the QAA Quality Code in 2018, emphasised the importance of programmes of higher education requiring appropriate levels of demand in line with the established higher education levels. Finally, changes to the Lifelong Learning Pillar in 2018 saw a change of emphasis, with the CQFW high level principles and competent body status becoming the principal indicators of quality with less regulatory oversight.

The views of stakeholders in relation to the CQFW have been explored by Qualifications Wales through research into public confidence in the qualifications system (York Consulting, 2017). Through interviews with learners, parents, teachers in schools and FEIs and employers, this work has demonstrated that general qualifications and their relative levels (particularly GCSEs at levels 1 and 2 and GCSE A Levels at level 3) are well understood and it is considered that effective judgements about comparability can be made within these qualifications. This demonstrates the embeddedness of these qualification types and of the framework of levels associated with them into the Welsh education system. This research has also highlighted the ongoing work on the development of new vocational qualifications for Wales, and how this work is informed by the CQFW. As the research is an annual study, it also emphasises the importance that is attached to listening to the views of citizens and stakeholder groups in relation to qualifications in Wales.

As a result, the CQFW in 2019 takes less of a transformative role but continues to play a key role in promoting communications and transparency about credit and qualifications. The principles of learning outcomes, levels, comparability and portability are well-established in the Welsh qualification system, with awarding bodies and learning providers across all three Pillars demonstrating knowledge and application of these principles. The system also allows comparability with England and Northern Ireland for learners, employers, colleges and universities as all three countries adopt the same level descriptors for Regulated Qualifications. The CQFW in 2018 holds important communicative functions.

The communication functions of the CQFW are intended to help learners, parents, educators and employers to understand the value and demands of learning at particular levels and how to progress between levels. As noted in the 2014 review:

> *[The CQFW's] main goals are to provide a language and route map to make it easier for learners, parents, education professionals and employers to understand progression routes between qualifications and the relative demands of qualifications. A functional NQF can also provide a common currency which can be used to increase the consistency and accountability of credit transfer and as a tool for the accreditation of prior and informal learning.*
>
> ARAD Research, 2014, p.13.

These goals have been reflected in feedback provided as part of the 2014 review:

> *It's an attempt to bring qualifications into some sort of coherent relationship. It gives a common language and makes them understandable.*
>
> FE College representative.

> *It's enormously beneficial. It enables standards – commonality – acceptance. It helps with the management of programmes; it keeps them on track and in line with standardisation and gives clarity to the landscape in Wales. It links to levels, learning outcomes and assessment criteria, they're all key aspects of it.* HEI representative.

Respondents to the 2014 review described the value of a 'common language' of qualifications and credit that can be used to compare learning across a variety of settings. The impact of the CQFW was seen as giving coordination and structure to a system of qualifications that was otherwise seen as formless.

An example of how the CQFW achieves this communication function is through the fan diagram (Figure 2). The CQFW fan diagram is an illustrative tool designed with the specific purposes of summarising the complexity of the Welsh qualification system, illustrating levels, Pillars and learning settings in one place. This simple illustration is easily replicated and is available through the brochure and web materials to all stakeholders within the system. Due to its popularity, it has been reprinted and reissued many times already.

In addition, to promote the CQFW to learners, learning providers and employers, the CQF Advisory Group commissioned a helpful video published on the CQFW website and through social media. This can be found here:

https://www.youtube.com/watch?v=_n8XpDa3sS4

Chapter Five – Evidence against the Criteria for Referencing

As outlined in Chapter One of this report, we undertook an update to the referencing of the CQFW to the EQF using the following methods:

- a desk-based review of previous report and feedback;
- a desk-based review of level descriptors to map against EQF;
- a desk-based review of learning outcomes, using qualification specifications from regulated qualifications;
- overview of changes in the Welsh qualification system;
- the formation of a Wales Steering Group to discuss an approach and share drafts; and
- engagement with international experts on report drafts and on targeted issues.

Following this activity, we have addressed the 10 criteria for referencing to the EQF, incorporating the evidence found.

Criterion 1

The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

This criterion has been met. Each of the bodies involved in the referencing process, and each body with responsibilities relating to the CQFW, has clearly defined responsibilities and legal competence.

The CQFW is managed by a strategic operational partnership comprising the Welsh Government, HEFCW and Qualifications Wales. They are supported by an external advisory group, established in 2015 to ensure more effective strategic development, promotion and implementation of the CQFW. This Advisory Group membership includes representatives of the strategic partners, as well as a selection of awarding bodies, representatives of colleges and universities, representatives of public sector employers and learner representatives. The Welsh Government chairs this group and manages its Terms of Reference. The governance of the CQFW is described in more detail in section 3.3 of this report.

The legal competence of the Welsh Government in respect of education and skills in Wales is defined by the Government of Wales Act 2006, which devolved powers previously held by the UK Government. Schedule 5, Part 1 of that Act provides the Welsh Government with powers in respect of local authority-maintained schools, curriculum, further education and higher education.

In terms of responsibilities for European education and training initiatives, the Welsh Government has commissioned ColegauCymru to act as the National Coordination Point for Wales. ColegauCymru is a national non-governmental organisation that represents Wales' Further Education Institutions (FEIs). An agreement[4] exists between the Welsh Government and ColegauCymru that confirms this

[4] This can be found at: http://www.collegeswales.ac.uk/uploads/img/NCP%20work%202018.pdf

relationship. In the 2019 referencing, ColegauCymrucoordinated the procurement of Qualifications Wales to undertake review activity and coordinated the Wales Steering Group.

HEFCW regulates fee levels at universities, ensures a pan-Wales framework is in place for assessing the quality of higher education and scrutinises the performance of regulated institutions. HEFCW was established by the Further and Higher Education Act 1992. HEFCW was given regulatory powers through the introduction of the Higher Education (Wales) Act 2015, with specific duties relating to:

- monitoring higher education institutions' compliance with fee and access plans;
- assessing the quality of education;
- monitoring institutions' compliance with HEFCW's Financial Management Code; and
- providing information and advice to Welsh Ministers.

The legal competence of Qualifications Wales is defined by the Qualifications Wales Act 2015. This Act defines Qualifications Wales' responsibilities and powers in recognising awarding bodies and approving and designating regulated qualifications [other than degrees] for award in Wales, as well as being able to take enforcement action against the awarding bodies that it recognises in instances of non-compliance with its regulatory requirements. Qualifications Wales is independent of Welsh Government and is accountable to the National Assembly for Wales to whom it reports annually in the form of an annual report.

The present referencing report has also had extensive input from other bodies with regulatory and other responsibilities within the Welsh qualification system, including QAA. QAA's inclusion as part of the European Quality Assurance Register (EQAR) has been confirmed until 2023. This referencing has taken place in the context of other referencing reports being produced across the UK, and regular discussions have been held to ensure that shared contexts are reflected accurately and consistently across these reports.

Criterion 2

There is a clear and demonstrable link between the qualification levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.

Summary

This criterion has been met. Both the CQFW and EQF have clearly defined level descriptors that distinguish between different features of learning, including knowledge and skills. Both the CQFW and EQF have framework level descriptors in which the level of demand increases as learners progress through the framework, so that higher framework levels require learners to demonstrate more complex knowledge and skills. Finally, both the CQFW and EQF have levels which are broadly comparable to one another even where they are assigned different numbers within the framework.

Methodology

Our review incorporated three mapping tasks:

- A side-by-side 'best fit' textual comparison of the three sets of CQFW level descriptors to the EQF level descriptors (Appendix 1)
- A comparison of vertical progression, in terms of complexity, between the CQFW level descriptors and EQF level descriptors (Appendix 2)
- A review to identify the use of learning outcomes across a randomly selected sample of regulated qualifications (Appendix 3)

To compare the CQFW and the EQF, we reviewed the different sets of level descriptors associated with each Pillar in the CQFW. As documented in section 3.2. of this report, each Pillar of the CQFW has its own level descriptors:

- the Higher Education Pillar descriptors are the FHEQ, which is maintained by QAA on behalf of UKSCGQ;
- the Regulated Qualifications Pillar descriptors are published as the 'Qualification and Component Levels', which are maintained by Qualifications Wales; and
- the Lifelong Learning Pillar descriptors are found in the CQFW level descriptors that are maintained by the Welsh Government.

Table 4. Level Descriptors for Each Pillar of the CQFW

Pillar	Level descriptors	Body responsible for maintaining level descriptors
Higher Education	FHEQ	QAA managed on behalf of UKSCQA
Regulated Qualifications	Qualification and Component Levels	Qualifications Wales (adapted from the Regulated Qualifications Framework used in England and Northern Ireland)
Lifelong Learning	Lifelong Learning Pillar descriptors	Welsh Government

Summary of Findings

The outcome of the activity provided sufficient evidence of a clear and demonstrable link between the expectations of the levels of demand in both the CQFW and EQF frameworks/ models.

Table 5. Outcome of Mapping Levels of the CQFW and EQF

CQFW	EQF
Level 8	Level 8
Level 7	Level 7
Level 6	Level 6
Level 5	Level 5
Level 4	Level 5
Level 3	Level 4
Level 2	Level 3
Level 1	Level 2
Entry 3	Level 1
Entry 2	
Entry 1	

The mapping of levels between the frameworks was undertaken on a best-fit basis, meaning that each CQFW level was compared with multiple EQF levels to identify the closest comparison. The side-by-side best-fit comparison identified similar terminology used in both frameworks to describe the levels of demand in knowledge and skills associated with particular levels. Both frameworks have well-defined levels, and comparability is evident in how knowledge and skills are defined in each.

The findings of the best-fit mapping were tested through the use of a mapping exercise that considered the degree of complexity of knowledge and skills required at each level. This was particularly valuable in instances where level-to-level linkages between the frameworks were less immediately clear, such as at CQFW Level 4 and 5 to EQF Level 5.

These findings concur with those found in the previous referencing exercise in 2010. Despite changes to level descriptors, assigned level numbers and the commensurate levels of demand have remained the same. The levels of the CQFW have been consolidated in the period following the 2010 referencing, with levels forming part of education policy and practice, and being recognised and understood by learners and employers (as illustrated in the examples cited in section 4.4 of this report). The decision to maintain these levels reflects the degree to which CQFW levels are well understood and embedded within the education system. We therefore consider the CQFW to be a valued feature of the Welsh education and training system that also maintains comparability with the international framework of the EQF.

As illustrated in Table 5 above, there were notable instances where level to level linkages were less immediately clear.

CQFW Entry Levels 1 and 2

We concluded that Entry Levels 1 and 2 do not map to any of the EQF Levels. This conclusion is the same as that reached in the previous referencing. These levels intentionally describe forms of knowledge and skills at levels lower than that of EQF Level 1. These levels are designed to provide a point of entry into learning for learners who have atypical experiences in relation to education. This includes learners with recognised Additional Learning Needs, including learning difficulties and disabilities.

We consider CQFW Entry Level 3 to be broadly comparable to EQF Level 1. It is worth noting that the distinction of three Entry Levels within the CQFW is intended to allow for a continuum of learning, in which learners progress and build from a low starting point whilst having their learning accredited as they progress. As such, Entry Level 3 represents a summation of the cumulative learning that takes place across Entry Levels 1 and 2.

CQFW Levels 4 and 5

As illustrated above, CQFW Levels 4 and 5 both map to EQF Level 5, based on our best-fit analysis. To consider this mapping in more detail, we paid closer attention to how each constituent Pillar mapped to the EQF. We consider the descriptors of the Higher Education Pillar to map more closely to EQF Level 4, whilst the descriptors for the Regulated Qualification and Lifelong Learning Pillars map more closely to EQF Level 5.

This is the result of the distinction made in the CQFW descriptors as to the complexity of problems to which learners are expected to respond. In the Regulated Qualifications and Lifelong Learning Pillars, these are ‘well defined but complex and non-routine’, and in the Higher Education Pillar, they are related to specific disciplines and sectors.

In concluding that CQFW Level 4 maps to EQF Level 5, and not EQF Level 4, we considered the following factors.

- The CQFW exists as a meta-framework, in the sense that it incorporates three distinct Pillars. The way in which the CQFW is communicated to learners, such as through the diagram

included in Figure 2 of this report, the Pillars are combined into one set of levels. This is possible because of the coordination between the bodies responsible for each of the Pillars, and in particular, the regular movement of learners through these Pillars as they progress in their learning. The fact that two of three Pillars mapped more evidently to EQF Level 5 suggested that the 'best-fit' judgement that CQFW Level 4 maps to EQF Level 5 was appropriate.

- As documented in Appendix 2, we conducted a 'vertical' mapping of levels, analysing the extent of progression between each level of the CQFW and of the EQF. This was then used to support the judgements made as part of the best-fit, horizontal analysis. In this instance, we identified that the progression in demand between CQFW Levels 4 and 5, including in higher education, was less than the progression between EQF Levels 5 and 6. This satisfied us that both CQFW levels could be mapped to EQF Level 5.

- Many of the qualifications offered at CQFW Level 4 are offered as part of 'bridging' or progression between learning in schools and colleges and higher education degrees. By including reference to academic disciplines and preparation for future study, the level descriptors for the Higher Education Pillar at CQFW Level 4 are reflecting the specificities of these qualifications.

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.

This criterion has been met.

The principle of learning outcomes is one of the eight high-level principles of the CQFW and all learning must demonstrably meet this principle to be included on the framework. Learning outcomes are evident in qualification specifications produced by awarding bodies, as well as in individual assessments and in regulatory criteria and national standards (such as NOS) that inform the content of qualifications. This has been a feature of the Welsh qualifications system since the foundation of the CQFW and even prior to that time

.

CEDEFOP defines learning outcomes as:

> *What a learner is expected to know, be able to do and understand at the end of a learning process or sequence.*
>
> CEDEFOP, 2017, p.5

The CQFW describes learning outcomes as:

> *…statements of the knowledge, skills and understanding which will be assessed as part of a learning experience.*
>
> CQFW brochure, 2018, p.3

These descriptions are broadly similar, though the CQFW description makes explicit reference to assessment. This is due to the focus of the CQFW on qualifications and credit awards, of which assessment is an essential part.

Learning outcomes have been a feature of qualifications in Wales since 1987, and the introduction at that time, alongside England, Northern Ireland and Scotland, of National Vocational Qualifications (Allais *et al.*, 2009). Historically, qualifications had tended to be based on inputs, such as syllabi and teaching time. Vocational qualifications, in addition, had often referred to 'competence' implying a measure of being able to 'do' the requirements of a particular job. Following the introduction of NVQs and of a framework for qualifications in the late 1980s, the term 'outcomes' has been used to describe qualifications, being a broader and more general term that includes the concept of competence whilst also addressing knowledge, autonomy and learner development.

Within the CQFW, learning outcomes are used by awarding bodies to describe the level of demand required of learners that is assessed through qualifications. Awarding bodies formulate learning outcomes that describe levels of demand that map on a 'best-fit' basis to the level descriptors within the appropriate Pillar. The level descriptors are an influence on learning outcomes, alongside regulatory criteria and professional standards, as the terminology of level descriptors may be reflected in the stated outcome for a qualification. This allows for a range of qualifications with

different purposes to be assigned an appropriate level in accordance with how they best fit the level descriptors, ensuring that qualifications and other learning in the CQFW is comparable and therefore, is portable. Use of learning outcomes is, therefore, a feature of qualification design and of the description of learning within the CQFW.

The CQFW approach to learning outcomes, as set out in the high level principles, allows for flexibility in how learning outcomes are expressed. This is to ensure that the wide range of learning which is included in the framework can comply with this principle and to allow agencies across the three Pillars to apply them within their own context.

We conducted a review of how learning outcomes are included in qualifications within the CQFW. This review is presented in Appendix 3 – Outcomes of the Review of Learning Outcomes

Learning Outcomes in the Lifelong Learning Pillar

The Lifelong Learning Pillar of the CQFW includes level descriptors that are framed as learning outcomes, describing what learners will achieve at the completion of their learning.

These level descriptors are set out as the outcomes that learners will achieve where qualifications are attained and, as such, begin with similar verbs to the EQF at each level, so that they follow on from the phrase 'The learner is able to…'

Learning Outcomes in the Regulated Qualifications Pillar

The level descriptors for the Regulated Qualifications Pillar are written from a slightly different perspective than the EQF and Lifelong Learning Pillar level descriptors and describe in declarative fashion what is expected of 'the holder…' , i.e. 'The holder/learner can…'. These descriptions are found in qualification specifications that are required for each regulated qualification. These specifications are used by teachers and learners to understand the requirements of qualifications.

Learning outcomes in the Regulated Outcomes Pillar form part of regulatory requirements. Qualifications Wales' Conditions of Recognition require qualifications to have stated objectives and for their specifications to describe outcomes. Qualifications are also required to be assigned levels in accordance with the level descriptors for this Pillar, which are formulated as learning outcomes.

As part of this referencing to the EQF, activity was undertaken to evidence the extent to which learning outcomes were used in qualifications assigned to the Regulated Qualification Pillar of the CQFW. A set of qualifications were randomly selected at each level of the Regulated Qualification Pillar. A desk-based review of associated documentation was undertaken for each qualification to identify evidence of the use of learning outcomes[5].

Descriptions of learning outcomes, which were formatted as standards of achievement, were identified in the majority of qualifications within the sample taken. The way learning outcomes were presented, however, did vary in format between qualifications.

[5] These included: Specifications, Qualification Aims, Guidance (Assessment and delivery), and Sample Assessment materials.

Vocational qualifications used learning outcomes more explicitly than other qualification types. This may be in part due to the unitisation of such qualifications to focus on requirements of achievement of required competence-based standards, set by standards bodies and interested parties.

General qualifications often have their learning outcomes prescribed via regulatory qualification criteria. These are set by Qualifications Wales and determine certain expectations for what a learner must demonstrate in order to be awarded a qualification.

Some outcomes referenced National Occupational Standards or guidance from standard setting bodies. These required achievement outcomes, which would also be useful indicators when designing a qualification, of its fitness for purpose and so would inform assessment specifications, the choice of assessment instrument and associated controls on delivery and testing.

Some outcomes were identified in alternative ways to traditional learning outcomes. We found examples of 'qualification aims' or published progression paths within specifications or guidance. These were drafted to capture the depth and breadth of learning required of learners.

On the whole, command verbs used within the identified learning outcomes were appropriate to the level assigned to the qualification. The qualification learning outcomes reviewed did reflect the demand and complexity of the level of demand included in the descriptors.

Validation

Validation has been described as:

> *…a process of confirmation by an authorised body that an individual has acquired learning outcomes measured against a relevant standard.*
>
> CEDEFOP, 2015, p. 14

Validation is principally about recognising diverse forms of learning, particularly those that occur outside of formal settings.

CEDEFOP recognises four distinct phases of validation:

1. *"Identification of an individual's learning outcomes acquired through non-formal and informal learning;*
2. *Documentation of an individual's learning outcomes acquired through non-formal and informal learning;*
3. *Assessment of an individual's learning outcomes acquired through non-formal and informal learning;*
4. *Certification of the results of the assessment of an individual's learning outcomes acquired through non-formal and informal learning in the form of a qualification, or credits leading to a qualification, or in another form, as appropriate."*

CEDEFOP, 2015, p.14-15

Non-formal Learning

Non-formal learning is defined by CEDEFOP as follows:

> *Learning which is embedded in planned activities not explicitly designated as learning (in terms of learning objectives, learning time or learning support), but which contain an important learning element. Non-formal learning is intentional from the learner's point of view. It typically does not lead to certification.*
>
> CEDEFOP, 2014.

Validation of non-formal learning is undertaken in the CQFW through three methods:

- Recognition of Prior Learning
- the Lifelong Learning Pillar
- National Vocational Qualifications

Firstly, recognition of prior learning (RPL) is possible for individuals by way of using their previously acquired learning to obtain or access formal qualifications on the Credit and Qualifications Framework for Wales (CQFW), including higher education and vocational qualifications. Opportunities for RPL are developed from a sectoral perspective, with different approaches for VET, HE and adult learning. A bottom-up approach is taken, in the sense that awarding organisations and learning providers develop their own policies (and practices in the case of providers) for RPL.

For the Regulated Qualifications Pillar, Qualifications Wales states that recognised awarding bodies may set their own policies for RPL, but that where they do, they must publish and comply with them so that learners are aware of potential requirements. One particular set of regulated qualifications allows a framework for validation of non-formal learning, in the form of National Vocational Qualifications. In attaining these qualifications, learners can have their knowledge and skills accredited based on their professional experience, as well as being able to use credit for particular units to contribute to gaining qualifications. This allows for validation and portability.

In higher education, HEIs are permitted to develop their own policies and procedures for RPL. RPL is a form of assessment, in that it recognises learning that has been achieved. The Expectations, Core and Common Practices in the UK Quality Code make implicit reference to RPL at admissions and for assessment. In addition, advice and guidance on RPL are incorporated within the Assessment theme of the UK Quality Code (QAA, 2018) which recommends:

> "information on opportunities for the recognition of prior learning (RPL) is readily accessible, and guidance and support in applying for RPL is provided" and that RPL "is consistent with national reference points."

The UK Quality Code also proposes that regulations and requirements for RPL should be clear and explicit with guidance on information that should be included e.g.

1. minimum and maximum limits for credit awarded through RPL,

2. whether and how RPL will be graded,
3. how credit and exemptions will be used for the award and classification,
4. process for investigating alleged fraud,
5. processes for considering appeals.

There is no single policy for RPL that covers all learning within the CQFW. The CQFW Advisory Group considers this a strength of the Welsh qualification system. By allowing competent bodies and delivery bodies the freedom to devise their own systems and processes to suit different audiences, RPL can be undertaken with specific reference to the characteristics of each Pillar. As of a 2015-17 update on validation for CEDEFOP (CEDEFOP, 2018), it was reported that RPL use across Wales was varied.

Looking ahead, the development of a new strategic commissioning and regulatory body for Post Compulsory Education and Training provides an opportunity to develop a single RPL policy position for the whole of the post compulsory sector. The Welsh Government has consulted on the formation of this new body and it is expected to become operational in 2020. Qualifications Wales is also considering ways of making awarding bodies' RPL practice clearer to learners in respect of the Regulated Qualifications Pillar.

A second method for validating non-formal learning is through the Lifelong Learning Pillar of the CQFW that is intended to recognise non-formal learning provision. Units or modules of learning can be delivered and assessed through non-formal settings, including through work. However, learning in the CQFW must meet the High-Level Principles, which means that it must be able to have credit assigned to it and subsequently, be able to be certified. This can be done through awarding bodies and learning providers working to identify how knowledge and skills can be observed in such a way that provides evidence that learners have met the assessment criteria for relevant units or qualifications.

Thirdly, National Vocational Qualifications (NVQs) represent an opportunity to validate workplace learning. They are aimed mainly at people in work and lead to a nationally recognised qualification, proving the ability to perform an occupation to a nationally recognised occupational standard.

Informal Learning

Informal learning is defined by CEDEFOP as follows:

> *Learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support. Informal learning is in most cases unintentional from the learner's perspective.*
>
> CEDEFOP, 2014

It is generally referred to as learning by experience, e.g. through social interaction – learning by 'pitching in', getting involved in a task/activity. Frequently, it occurs 'accidentally' and is unplanned. It has no set objectives in terms of learning outcomes.

The CQFW was originally designed to allow for validation of both informal and non-formal learning through what was described as the Lifelong Learning Pillar. This meant that informal learning, such as family learning, could be accredited by awarding bodies. There is some evidence that this was successful in providing learners with confidence, introducing them to notion of assessment and providing evidence of their learning (ARAD Research, 2014: Burns, 2013).

As CEDEFOP recognises, identifying skills, knowledge and competence acquired through non-formal and informal learning is methodologically challenging (CEDEFOP, 2012). The separation between awarding bodies and learning providers adds further complexity in the Welsh context, as in many instances, awarding bodies are not in a position to undertake the 'identification' and 'documentation' phases of the process of validation (Council of the EU, 2012). These phases are undertaken by learning providers such as colleges.

The 2014 review of the CQFW found that where awarding bodies were not in a position to undertake the earlier phases of validation, this responsibility fell on learning providers. Awarding bodies would often require significant evidence from learning providers in order to be assured of learners' achievements. In addition, quality assurance systems associated with the Regulated Qualifications Pillar meant that awarding bodies had to be able to verify learners' achievements in ways that are valid, reliable, comparable, manageable and which minimise bias. Various stakeholders therefore concluded that the process of validating informal learning had become effectively 'formalised', placing excessive burden on learning providers and learners themselves, and detracting from its original benefits.

It was therefore decided to remove the validation of informal learning from the CQFW so that the authenticity of the learning experience is retained for the learner, whilst also retaining the rigour and credibility associated with quality assurance processes of the CQFW. This change within the CQFW also reflects the approach to assessment within the Welsh qualification system. This means that awarding bodies and regulators ensure assessments are fair, valid, reliable in identifying learners' knowledge and skills, being based on evidence produced by learners under robust conditions.

Concurrently, employers and other stakeholders hold external assessment in high regard as a reliable mechanism for demonstrating achievement. Nonetheless, the strategic aim of increasing access to learning, which motivated the previous attempts to validate informal learning, remains a core influence on the design and functioning of the CQFW. Recognising the value that is placed on assessment by various stakeholders, regulators and awarding bodies undertake consistent work to develop innovative approaches to assessment, including e-assessment, portfolio and project work and learner observation.

Guidance on the implementation of the CQFW notes that assessment and verification of achievement is key to the award of credit and qualifications and advises that organisations use assessment methods that are appropriate for learners.

> *Organisations when developing their assessment policy to guide the assessment strategies of the respective learning programmes and units they are developing should seriously consider these principles when considering fitness for purpose:*

- *Assessment strategy must be clearly linked to the aim of the programme and the learners.*
- *Assessment activities used should be appropriate to the learner, the learning and the level. Any assessment strategy should include a variety of assessment methods appropriate to the target group and subject.*

Welsh Government, 2009, p.91

These approaches ensure that assessment is accessible as well as robust.

The incorporation of the Lifelong Learning Pillar into the CQFW is also intended to achieve many of the same aims that informal learning provision seek to achieve but in a manner that can be quality assured. The Lifelong Learning Pillar:

> *enables providers to develop innovative and quality assured curriculum offers for non-traditional groups, e.g. those not in employment, education or training group (NEETs).*
>
> CQFW Brochure

One of the CQFW's main impacts, identified by stakeholders, is greater recognition of prior learning through this Pillar, with particular benefits for disadvantaged learner groups, helping to raise aspirations and promote progression opportunities.

The inclusion of three Entry Levels within the CQFW is also designed in order to make learning accessible to non-traditional learners and to ensure that such learning can be accredited formally through assessment.

Credit Value

The CQFW recognises full and partial completion of qualifications through a credit system. It enables learners to transfer their knowledge and skills between career pathways, providers and countries (Arad Research Ltd, 2014), in a way which aligns with principle 1 of Annex V of the 2017 Council Recommendation on the EQF, that 'credit systems should support flexible learning pathways, for the benefit of individual learners'.

Credit is understood as:

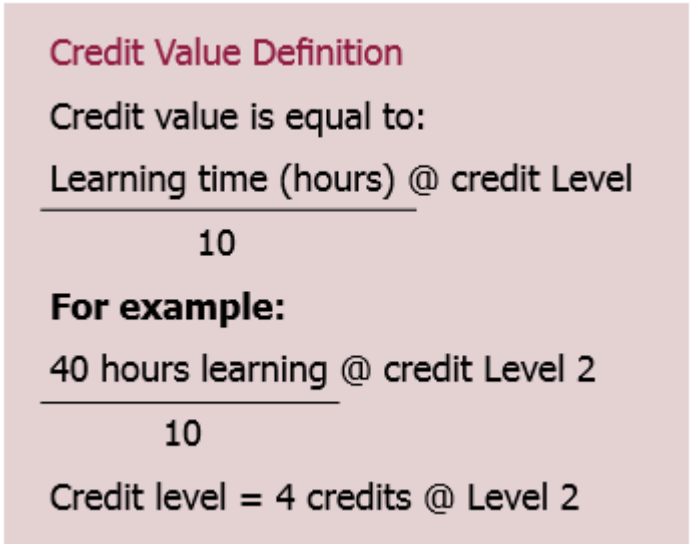
> *…an award made to a learner in recognition of the achievement of designated learning outcomes at a specified credit level. The amount of credit attributed is based upon an estimation of the learning time it would take the average learner to achieve the learning outcomes specified. Credit is a measure of the learning time assigned to a set of learning outcomes.*
>
> CQFW Brochure

Credit is awarded for the achievement of learning outcomes and this is done through the achievement of CQFW units, in line with principle 2 of Annex V of the 2017 Council Recommendation.

Policies and practices for RPL are informed by credit value because bodies awarding qualifications can recognise learning based on credit. All learning that is included across the three Pillars of the CQFW must have credit assigned to it and compliance with this is one of the eight high level principles.

For the purposes of the CQFW, credit values are determined based on a mixture of guided learning time and self-directed learning time. This notional learning time is assigned credit based on one credit at the appropriate level for every 10 hours of learning time. An example is presented below:

Within this relatively simple framework, a degree of variation exists between different qualification



and unit types in terms of the relative balance of teaching and self-direction. Awarding bodies are free to determine this balance for each of their qualifications. However, some generalised patterns can be observed:

- competence-based qualifications tend to require more self-directed learning and less face to face teaching time;
- certain subject areas that require a complex practical skill, such as music, tend to require more self-directed learning;
- qualifications at higher levels, such as post-graduate higher education qualifications, tend to require a higher proportion of self-directed learning;
- teaching and learning methods vary and will impact on the proportion of teacher-led/ directed and self-directed learning. Examples of programmes with more self-directed learning include distance learning and extra-mural provision outside of FEIs or HEIs.

All regulated qualifications have documented Total Qualification Time (TQT), which provides evidence of the credit attained by a learner who completes that qualification, in line with principle 5 of Annex V of the 2017 Council Recommendation.

Higher education in the UK has a modular credit-based structure. The credit system is integrated into the qualifications framework. The FHEQ credit specification and guidance document states that the amount of credit allocated to any particular achievement must be independent of the mode of the learning but focuses on level and volume and that credit can be awarded through a process of accreditation of prior learning (APL), experiential learning (APEL) or RPL. Again, there may be limits to the proportion of the award that can be achieved through RPL.

University credits awarded through RPL can be either 'general' or 'specific'. 'General credit' is usually given to reflective writing or a portfolio that can be mapped against a given level in the CQFW framework – from level 4 to level 7. 'Specific credit' can be mapped against the framework and into a named academic pathway and academic module[s] (Treadwell, 2014). As defined by the CQFW:

> *General credit refers to the credit attributed to a group or cluster of learning outcomes; specific credit refers to that amount of general credit which can be accepted as contributing to a particular programme.*
>
> (Welsh Government, 2009)

The linking of credit to the learning outcomes approach aligns with Principle 2 of Annex V of the 2017 Council Recommendation.

There is evidence that most HEIs in Wales have made some use of the European Credit Transfer System, with one HEI noting that the use of ECTS is a central policy of the university and has helped in the development of a number of articulation agreements with overseas universities (Souto-Outero, 2012). Credit transfer arrangements in higher education in Wales have been described as operating cohesively across different institutions (Junor & Asher, 2008), in line with Principle 3 of Annex V.

Credit transfer is also used within the Lifelong Learning Pillar in order to avoid duplication of learning in instances where achievement of a particular unit is relevant for the potential achievement of a full qualification.

Whilst there is no national policy determining that credit must be accepted by awarding bodies, or how much credit can be put towards different qualifications, awarding bodies have quality assurance processes that ensure credit is assigned appropriately, as is explained below:

> *Claims for RPL and credit transfer will only be considered as valid in cases where any previous achievement, skills, knowledge and/or experience can demonstrate currency. An acceptable period of time between the acquisition of prior learning and achievement and the claim for RPL or credit transfer is dependant of the nature of the qualification to which it will apply.*
>
> Agored, Recognition of Prior Learning and Credit Transfer Policy

Such decisions are informed by the distinction made between General and Specific credit. General credit refers to the credit attributed to a group or cluster of learning outcomes; specific credit refers to that amount of general credit that can be accepted as contributing to a particular programme.

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.

As described in Chapter 3 of this report, the qualifications and accredited learning that are included in the CQFW are developed by independent awarding bodies, including universities, employers, the third sector and FE colleges. For those awarding bodies to describe their qualifications or learning as having a CQFW level and as being included in the CQFW, they must meet a series of requirements. These requirements are set by the three regulatory bodies that oversee the three Pillars of the CQFW – the Welsh Government, Qualifications Wales and HEFCW. Regulatory bodies do not charge awarding bodies to have qualifications included in the CQFW.

Inclusion of qualifications and learning in the CQFW represents a symbiotic development over time. Many of the qualifications available to learners in Wales today have evolved from historical qualifications, particularly school-leaving qualifications. The concept of levels, which informed the development of the CQFW, was in turn influenced by these existing qualifications and their relationships to one another. In the present day, where levels are well-established and described within the framework, new qualifications are developed by awarding bodies and HEIs in accordance with the requirements of the CQFW and of other regulatory requirements set by regulators. Qualifications can be included in the CQFW once these requirements have been met. Regulatory bodies, including Qualifications Wales, HEFCW and QAA, monitor qualifications to ensure that they meet the required standards.

Inclusion in the Regulated Qualifications Pillar

For a qualification to be included in the Regulated Qualifications Pillar, three requirements must be met:

- the awarding body offering the qualification must be recognised by Qualifications Wales;
- the qualification must be included in their scope of recognition; and
- the qualification must have a CQFW level.

In order to offer regulated qualifications in Wales, an awarding body must be ‘recognised’ by Qualifications Wales. Before it can be recognised, an awarding body must demonstrate compliance against recognition criteria and provide evidence that it has the appropriate resources, systems and arrangements in place to design, deliver and award qualifications in Wales in compliance with regulatory conditions, procedures and policies.

Awarding bodies seek recognition, which places their qualifications in the Regulated Qualifications Pillar, for a number of reasons, including the following:

- inclusion provides a mark of quality assurance;
- in order for qualifications to be offered to learners under the age of 16 and be included within Apprenticeship programmes, they must sit on the Regulated Pillar of the CQFW; and

- inclusion in this Pillar is one of the requirements for accessing public funding through schools, FEIs and work-based learning.

Finally, in order to ensure that a qualification that is offered by a recognised awarding body is included in the Regulated Qualifications Pillar of the CQFW, that qualification must be assigned a level. Assigning a CQFW level to a qualification is a regulatory requirement placed on all awarding bodies. This level must be stated in all qualification materials and on certificates along with each qualification's unique reference number.

Awarding bodies assign levels during the process of designing qualifications. In the case of general, school-based qualifications, associated levels of demand in knowledge and skills are well-established over time, and are reflected in additional regulatory criteria that specify content. In the case of vocational qualifications, as described in section 2.6 above, content is informed by a variety of sources, including NOS, which describe the knowledge and skills associated with different levels.

Inclusion in the Higher Education Pillar

For learning to be included in the Higher Education Pillar of the CQFW, it must meet regulatory rules that are set by HEFCW and the mandatory elements of the UK Quality Code, which includes the FHEQ; both of which are managed and maintained by QAA on behalf of the UKSCQA and the HE sector.

HEIs in Wales deliver learning programmes (including research opportunities) in a wide range of academic and vocationally oriented subject areas. As described in section 2.6 above, HEIs develop programmes of learning and qualifications based on subject expertise. Learning that is included on the Higher Education Pillar is typically based on the FHEQ-EWNI. As described in section 3.2 of this report, the FHEQ-EWNI is maintained in Wales by QAA, and HEFCW regulated institutions must ensure that it is established and adhered to in the design of their programmes in Wales. This ensures that programmes of higher education have appropriate levels and an appropriate size, and therefore meet the requirements of inclusion in the CQFW.

HEFCW sets rules that regulated HE providers must meet in order for its courses to be designated for student support, regulates the fees charged to learners and ensures that a framework is in place to quality assure higher education. HEFCW has regulatory powers to intervene when it has been assessed that the quality of a course delivered by, or on behalf of a regulated institution, is inadequate or is likely to become inadequate.

QAA also quality assures programmes of access to higher education, to ensure that programmes are designed and awarded with reference to the FHEQ level descriptors. Courses are designed and awarded to align with the qualification frameworks throughout the UK as noted in 'Qualifications can cross boundaries' and the UK Government website (https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels).

Inclusion in the Lifelong Learning Pillar

Lifelong learning can be included in the CQFW in a number of ways depending on how it is developed and awarded.

Those offering Lifelong Learning under this Pillar must be competent bodies and meet the high-level principles outlined in the CQFW guidance. CQFW Competent Bodies include awarding bodies recognised by Qualifications Wales as well as HEIs that are regulated by HEFCW. Such bodies can develop lifelong learning units or qualifications that are distinct from any units or qualifications that they offer in the Regulated Qualifications Pillar. In doing so, they can develop programmes of learning that sit outside of the Regulated Qualifications Pillar and can therefore respond to individual needs. In many cases, awarding bodies developing lifelong learning will work with employers, FEIs or the voluntary sector to identify needs for particular units of learning and to develop content.

Lifelong Learning can also be developed by FEIs or by Vendor, Industry or Professional bodies (VIP). In the first instance, such bodies are encouraged to work with CQFW Competent Bodies to collaborate in qualification design. However, there may be instances where a CQFW Competent Body cannot be identified with relevant knowledge of the content of the proposed learning. In such instances, FEIs or VIP bodies must demonstrate that their proposed learning is developed and assessed in a way that meets the eight high level principles of the CQFW, and funders will often require these to have been met. These principles ensure that any proposed learning has a credit value, a CQFW level and is portable.

Criterion 5

The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this Recommendation.

This criterion has been met.

Quality assurance systems for qualifications in Wales are organised in parallel to the Pillars of the CQFW. Quality assurance generally has both internal and external dimensions with awarding bodies working across the Pillars expected to quality assure their own work in the development and award of qualifications, and to provide assurance that learning providers are delivering in line with qualification specifications. In addition, the regulatory bodies that work across the three Pillars have distinct external quality assurance remits.

Quality Assurance in the Regulated Qualifications Pillar

Qualifications Wales quality assures the Regulated Qualifications Pillar. Qualifications Wales recognises awarding bodies and this is a formal process that requires applications to be made against a set of criteria relating to governance, capacity and capability to design and award qualifications. Once recognised, awarding bodies must comply with Conditions of Recognition that relate to specific processes in the development, delivery and / or award of qualifications and certain qualifications must meet additional specific criteria to be awarded to learners. Qualifications Wales monitors compliance with these requirements and can take enforcement action in cases of non-compliance.

Quality Assurance in the Higher Education Pillar

HEIs must design programmes of learning and assessments that conform to the UK Quality Code, which is set and managed by QAA on behalf of the UKSCQA and the higher education sector, and to the level descriptors of the FHEQ. This Code specifies academic standards and is aligned to the quality assurance principles of the Bologna Process.

HEFCW provides funding to HEIs on behalf of the Welsh Government. HEFCW also regulates fees that are charged by regulated institutions. In doing so, HEFCW requires HEIs to provide evidence that the UK Quality Code is being followed as well as that programmes are accessible to learners. HEFCW requires HEIs to commission reviews of their programmes through QAA in order to meet the requirements of Fee and Access Plans.

Quality Assurance of Lifelong Learning

Quality assurance of learning in the Lifelong Learning Pillar is shared between awarding bodies' own internal quality assurance, Qualifications Wales' quality assurance of awarding bodies, the CQFW Advisory Group's general oversight of the CQFW and oversight of publicly funded Lifelong Learning by the Welsh Government.

The Lifelong Learning Pillar is intended to allow flexible and responsive development of units. As such, since 2015, the quality assurance of this Pillar has been delegated to the sector and to awarding bodies to ensure that their internal processes are effective. Awarding bodies are expected to exercise

their own internal quality assurance arrangements in developing and awarding qualifications. Many of the awarding bodies operating in the Lifelong Learning Pillar also operate in other Pillars of the CQFW and their internal quality assurance arrangements are informed by the regulatory controls used in those Pillars.

In addition, a degree of external quality assurance is provided through the requirement for awarding bodies to be Competent Bodies under the CQFW high level principles. Competent Body status is gained through recognition by Qualifications Wales. Whilst Qualifications Wales does not regulate learning in the Lifelong Learning Pillar, recognition to award in the Regulated Qualifications Pillar requires experience of following processes that represent good practice in the development, delivery and award of qualifications, and this experience is expected to inform delivery of Lifelong Learning. Finally, Welsh Government sets expectations that must be met for learning to be eligible for public funding.

Alignment with the EQF Quality Assurance Principles

Quality assurance in the Welsh qualification system has changed since 2010 because of the formation of Qualifications Wales, but also as the result of a process of review and transformation within the Welsh education and skills system.

In Table 6, we have provided an evaluation of these quality assurance processes against the *Quality assurance principles for qualifications that are part of national qualifications frameworks or systems referenced to the European Qualifications Framework (EQF).*

Table 6 – Evidence against the Quality assurance principles for qualifications that are part of national qualifications frameworks or systems referenced to the European Qualifications Framework (EQF			
Alignment of quality assurance systems for qualifications in Wales with the EQF principles			
	Regulated Qualifications Pillar	Lifelong Learning Pillar	Higher Education Pillar
In accordance with national circumstances and taking into account sectoral differences, quality assurance of qualifications with an EQF level should:			
1. Address the design of qualifications as well as application of the learning outcomes approach;	Qualifications under the Regulated Qualifications Pillar must be designed to comply with Qualifications Wales' Standard Conditions of Recognition. These Conditions require awarding bodies to design and develop qualifications to ensure that; - qualifications have an objective, including a defined outcome for learners (including progression in education or employment) - awarding bodies gain support for a proposed qualification from potential users; and - qualifications can accurately differentiate between learners' levels of attainment. Qualifications Wales monitors awarding bodies' compliance with these Conditions.	Lifelong learning can be included in the CQFW if offered by a CQFW competent body. A competent body is deemed to be any awarding body that is recognised by a UK qualifications regulator, including HEFCW and Qualifications Wales. The majority of CQFW competent bodies are recognised by Qualifications Wales as being able to provide qualifications in the Regulated Qualifications Pillar. Qualifications Wales' recognition requires certain standards of the body itself and its work in managing and implementing qualifications. As a result, the work of these recognised bodies in providing Lifelong Learning qualifications is informed by Qualifications Wales' regulation. Learning can be included as VIP in the lifelong learning Pillar if it is awarded by a vendor, sector or professional body. These may not be CQFW competent	Qualifications in the Higher Education Pillar must be designed with reference to the FHEQ. Regulated Higher Education Providers are required to commission an external quality assurance review at least every six years. This review will comply with Part 2 of the European Standards and Guidelines (ESG). These reviews explore the design of qualification and application of a learning outcomes approach with reference to the FHEQ, the UK Quality Code, and with the ESG part 2.

		bodies; however, this learning must demonstrably meet the CQFW high level principles before it is eligible for public funding for learners undertaking it. As a result, CQFW competent bodies are subject both to the 8 high level principles of the CQFW and to the respective regulation of the Regulated Qualification or Higher Education Pillars when delivering unitised accredit learning under the Lifelong Learning Pillar.	
2. Ensure valid and reliable assessment according to agreed and transparent learning outcomes-based standards and address the process of certification;	Qualifications Wales Conditions of Recognition require regulated qualifications to be 'fit for purpose', including that they are: - valid; - reliable; - comparable; - manageable; and - minimise bias Qualifications Wales also requires that certificates be given following appropriate marking, moderation and following any appeals, and clearly state relevant information including the qualification level. Awarding bodies have to confirm annually in writing that they are	*See above*	The UK Quality Code for Higher Education includes an expectation that 'Courses are well-designed, provide a high-quality academic experience for all students and enable a student's achievement to be reliably assessed.' The mandatory Core and Common Practices include further requirements for valid and reliable assessment. The QAA has also published Advice and Guidance on Course Design and on Assessment to support HE providers in achieving this principle. Regulated HE providers in Wales are subject to cyclical External Review, as noted above which will consider performance against these elements Expectations and Core and Common practices to ensure they are being delivered

	compliant with QW's requirements. Regulatory actions can be taken in cases of non-compliance		
3. Consist of feedback mechanisms and procedures for continuous improvement;	Qualifications Wales undertakes a programme of reviews to ensure that awarding bodies are compliant with regulatory requirements. Feedback from users of qualifications and centres of learning is explicitly sought. Awarding bodies are also required to periodically review their own approaches to the award of qualifications. Where awarding bodies are unhappy about the outcome of this quality assurance, they may make appeals about Qualifications Wales' regulatory decisions.	*See above*	Enhancement is not part of HEFCW's statutory responsibilities, but the Quality Assessment Framework provides information on how enhancement fits within the approach in Wales. Common practices within the UK Quality Code (which are mandatory for HE providers in Wales) require HE providers to improve and enhance their practice using student feedback, and the feedback from external experts. Cyclical external review will assess how well each provider achieves these practices.
4. Involve all relevant stakeholders at all stages of the process;	Quality assurance for regulated qualifications ensures that learners, centres and awarding body employees (as 'whistle-blowers') can raise concerns with Qualifications Wales. The views of stakeholders are sought in Qualifications Wales' targeted and thematic reviews of the Welsh qualification system. New regulatory requirements which potentially impact awarding bodies,	Qualifications and units designed in the Lifelong Learning Pillar with specific users, including employers, in mind are designed with the full involvement of relevant employers.	HEFCW facilitates Welsh HEIs involvement in the UK-wide annual National Student Survey. Through this survey, undergraduate learners can record their experiences of higher education. Surveys are also available to enable postgraduate learners to record their experiences (PRES and PTES) but they are not free, and their use is not mandatory. This survey provides a voice for learners, informs general understanding of the performance of the HE sector and informs policy.

	learners or centres are subject to public consultation before being implemented.		The external quality assurance review that regulated higher education providers are required to commission, must align with the European Standards and Guidelines. The Quality Assessment Framework recognises 'the role of students as partners in quality assurance'. This includes a student member of the review team, and a requirement for the review team to meet with students. In addition, students are members of each institution's governing body and relevant institutional committees. The UK Quality Code includes expectations and practices that students and other stakeholders will be active participants in all aspects of HE provision and that they will contribute to all quality assurance, improvement and enhancement activities. These other stakeholders can include students, alumni, employers, professional bodies, and communities. The Quality Code is a baseline regulatory requirement, which HEIs are reviewed against every six years.
5. Be composed of consistent evaluation methods, associating	Awarding bodies are required to submit annual self-assessed Statements of Compliance to demonstrate compliance	All publicly funded providers in Wales are required to conduct self-assessment. These reports are submitted to Welsh	HEIs' governance arrangements must meet a set of baseline regulatory requirements that are set by the UK

self-assessment and external review;	with Qualifications Wales' Conditions of Recognition. Qualifications Wales also requires additional evidence to be submitted against targeted 'lines of enquiry' as part of this Statement, which is then evaluated by the regulator. This method of evaluation therefore incorporates both self-assessment and external review. Qualifications Wales also undertakes targeted audits of specific issues and subject areas.	Government. Estyn also reviews a teaching and learning providers' self-assessment process.	Standing Committee for Quality Assessment. This Committee includes representation from HEFCW and QAA, as well as a representative of Welsh HEIs. HEFCW requires the governing body of each institution to provide an annual return regarding quality assurance. This includes a report on the dialogue between the institution and the students' union, to ensure the governing body is aware of feedback between the parties. HEFCW's Quality Assessment Framework has a number of quality assurance processes. The ESG includes self-assessment, and this is therefore core to external quality assurance reviews. HEFCW's requirements for external quality assurance review are risk-based and include evidence-based peer review. These requirements take account of the diverse needs and contexts of different HEIs, whilst being transparent and consistent. QAA has been commissioned by universities and some colleges in Wales

			to undertake external review of regulated institutions in Wales. The review methodology requires higher education providers to provide a self-evaluative analysis. The review method is applied consistently in accordance with a detailed published handbook.
6. Be an integral part of the internal management, including sub-contracted activities, of bodies issuing qualifications with an EQF level;	Awarding bodies are required to have a designated Governing Body, Senior Officer and Responsible Officer for the purpose of regulated activities. Awarding bodies are required to ensure that any third parties undertaking any part of the development, delivery or award of regulated qualifications act in a way that ensures compliance with regulatory requirements.	*See above*	The self-evaluation within the external quality assurance review enables higher education providers to evaluate their work against their own strategic priorities, allowing the review to take account of the specific contexts of different HEIs. All higher education providers are required under the Quality Assessment Framework to meet baseline regulatory requirements including the UK Quality Code. The Quality Code contains two core practices setting out how the awarding bodies are ultimately responsible for the academic standards and quality of higher education delivered through partnerships. QAA reviews higher education providers against the quality code on a risk-based maximum cycle of six years.
7. Be based on clear and measurable	Qualifications Wales regulatory requirements are set out in the form of:	*See above*	The external quality assurance review monitors HEIs' compliance with the baseline regulatory requirements for

objectives, standards and guidelines;	- Conditions, to which awarding recognition is subject - Criteria, which must be met in order to attain recognition - Procedures, which must be followed in the process of awarding qualifications, and - Policies, which describe Qualifications Wales approach and enforcement powers. Therefore, there are clear and measurable objectives and standards set out in requirements. Qualifications Wales is required to produce these under the Qualifications Wales Act 2015.		quality assurance, including the FHEQ and the UK Quality Code. HEFCW monitors Fee and Access Plans (FAPs) to evaluate performance against targets set. Institutions are required to meet a quality threshold in order to have a FAP approved. This requires them to have had a successful external quality assurance review within the past six years. New institutions need to demonstrate a track record of maintaining quality assurance in order to apply to become designated. The Quality Assessment Framework has clear aims and objectives for Wales. Qualifications can only be awarded for programmes of learning with identifiable objectives
8. Be supported by appropriate resources;	Qualifications Wales was set up as an independent public body by Welsh Ministers and is funded by the Welsh Government to undertake the functions outlined in the Qualifications Wales Act 2015, which include the quality assurance processes outlined above.	*See above*	HEFCW has a statutory responsibility under the Higher Education (Wales) Act 2015 regarding quality assessment, as noted above. Institutions are required to commission and resource external quality assurance reviews in order to have a fee and access plan approved. The Quality Assessment Framework, UK Quality Code for Higher Education, FHEQ and ESG provide a range of appropriate resources to support HEIs.

9. include a regular review of existing external monitoring bodies or agencies, carrying out quality assurance	Qualifications Wales is subject to scrutiny by the National Assembly for Wales, the Welsh parliament. Representatives of Qualifications Wales provide evidence to and respond to questions from a cross-party Children, Young People and Education Committee. As a publicly funded body, Qualifications Wales is also subject to review by the Auditor General for Wales and the Wales Audit Office. Such reviews include examining how public bodies manage and spend public money, including how they achieve value in the delivery of public services. Qualifications Wales also acts in line with the Better Regulation Task Force's Executive Guidance and the Principals of Public Life and must have regard to any relevant government guidance.		As a public body, HEFCW is subject to scrutiny by the National Assembly for Wales, and by the Wales Audit Office In line with the principles in Annex 4 of the EQF, QAA itself is subject to a cyclical external review by a competent body (ENQA). Its last review was in 2018 and found QAA to be review found QAA to be fully or substantially compliant in all areas. Only one other European agency has matched this level of compliance. QAA is reviewed every five years.
10. Include the electronic accessibility of evaluation results.			There are a number of quality assurance process in Wales including triennial visits, intervention processes, and scrutiny of data that are required by HEFCW. Reports are published on the HEFCW website. HEIs commission QAA to conduct their external quality assurance reviews. In

			line with the ESG, review methodologies and reports published.

Criterion 6

The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.

This criterion has been met.

We have engaged with Welsh Government and HEFCW through the CQFW Advisory Group, of which they are both members, to ensure that the evidence we report against Criterion 5 is consistent with their quality assurance arrangements, provisions and practice. They have confirmed through this Group that the report is an accurate representation.

The Minister for Education and Skills:
"has noted that Qualifications Wales has completed the final re-referencing report, with input from a stakeholder Steering Group and international advisors and given approval for the report to be submitted to the EQF Advisory Group."

We have also sought the stated agreement of QAA, who has been a member of the Steering Group for the work. We have included a letter stating this agreement in Appendix 4.

Criterion 7

The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.

This criterion has been met.

The international experts for the present referencing of the CQFW to the EQF were selected through discussion with SCQFP and partners in the UK bid to the European Union. These experts were selected based on their knowledge, skills and experience in working with qualifications frameworks and their understanding of the work of the EQF Advisory Group.

The international experts have attended our two scheduled Steering Group meetings to provide input. They have also provided helpful written comments on drafts of our report and on the final report, prior to presentation to the EQF Advisory Group.

The international experts have provided statements endorsing the report with further comments. These are included in Appendices 5 and 6.

Criterion 8

The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.

This criterion has been met.

Qualifications Wales, the Welsh Government and HEFCW are the competent bodies in respect of ownership of the CQFW. These bodies are all represented on the Steering Group for the referencing of the CQFW to the EQF. These bodies have all been involved in the development of the report through this forum, as well as separately providing a written statement certifying the referencing to be included in the final report.

Criterion 9

Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

This criterion has been met.

All relevant bodies have consented to the information contained in this report being added to the EQF platform and portal at the appropriate time so that it can be accessed widely in accordance with the agreed position. The referencing report will be made available on Colegau Cymru's website and will be publicised by Qualifications Wales, HEFCW and the Welsh Government.

Criterion 10

Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.

This criterion has been partially met.

All certificates, specifications, marketing materials produced in respect of qualifications in the Regulated Qualifications Pillar must include reference to a CQFW level, as part of Qualifications Wales' regulatory requirements. This is a fundamental part of how qualifications in the Regulated Pillar operate and ensures that all learners are aware of the level at which they have been certified. At present, there is no requirement for awarding bodies in the Regulated Pillar to include EQF Levels on certificates. However, the QiW database, which is available to the public and is used by learning providers and Welsh Government, includes an EQF Level for each qualification.

In 2017, the NCPs of the four UK nations commissioned a survey by the Federation of Awarding bodies (FAB), a representative organisation for awarding bodies, on the topic of the visibility of EQF levels in the UK. FAB noted that 11 per cent of the 116 respondents to the survey reported including EQF levels on their certificates.

Qualifications in the Higher Education Pillar are issued to learners through certificates and recorded centrally by awarding institutions through transcripts, which are also available to learners to access. At present, there is no regulatory requirement for bodies issuing qualifications in the Higher Education Pillar to include either a CQFW or EQF level on these. Transcripts and certificates must state the qualification that is achieved, or the level at which the credits are awarded, using the FHEQ and 'approved' titles. Whilst the level is not stated in a certificate, the type of award is associated directly with a level on the FHEQ and CQFW, so that, for example, a BSc (Honours) degree is awarded at Level 6.

Funding and data systems such as the Pupil Level Annual School Census, Lifelong Learning Wales Record and the UK-wide data collection by the Higher Education Statistical Agency all refer to CQFW levels.

Chapter Six – The Future of the CQFW

The referencing has involved discussion with a range of partners involved in delivering the aims of the CQFW. These discussions have identified a number of ongoing and future changes that are likely to affect the Welsh qualification system and have implications for the framework.

Members of the CQFW Advisory Group have identified their ongoing interest in promoting the CQFW widely amongst learners, FEIs, HEIs, schools and employers. The fan diagram, brochure and web animations will continue to be strategically distributed throughout the system in order to communicate the features of the CQFW and to further embed the understanding of levels and Pillars.

Beyond this, the sector is preparing for ongoing reforms of Regulated Qualifications. Qualifications Wales Vocational Qualifications Strategy describes how, over the coming years, Qualifications Wales will continue a programme of sector reviews of vocational qualifications and skill needs, with the potential that these reviews may lead to the development of new, Wales-only qualifications in these sectors. The CQFW will be an integral influence on these qualifications.

At the time of publishing, various stakeholders including the Welsh Government, Qualifications Wales, subject experts and representatives of the teaching profession are working on the development of a new National Curriculum for learners aged 4-16. This curriculum development is being informed by the findings of a review of the existing curriculum, published in 2015. 'Successful Futures' by Professor Graham Donaldson recommended a curriculum closely aligned to the promotion of skills including independent learning, innovation and group working. Curriculum development is ongoing at the time of writing. In light of curriculum reform, Qualifications Wales will be consulting shortly on proposals around qualifications for 14-16. The new curriculum will be taught in schools from 2022, and new qualifications will be introduced in 2025.

In, 2019, it will be the fifth anniversary of the independent stakeholder review of the CQFW (2014), which presented recommendations as to how the Welsh Government should enhance and promote the CQFW in the future. A considerable amount of activity has taken place since then, including the formation of the CQFW Advisory Group and of Qualifications Wales. CQFW Advisory Group members are currently considering commissioning a further review of the CQFW. A review would evaluate whether the recommendations have been successfully implemented and the distance travelled since 2014. It would also present an opportunity to consider whether the existing management and governance arrangements remain appropriate to support the CQFW moving forward, in light of the establishment of the Commission for Tertiary Education and Research (CTER). The CTER will be an arms-length Welsh Government sponsored body and, once established, will have oversight of the post-compulsory education and training system in Wales, including FEIs.

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Appendix 1 - Mapping of the CQFW Regulated Qualifications Pillar and Lifelong Learning Pillar to the EQF

Horizontal Review

A desk-based review of level descriptors allowed a comparison to be made between the requirements of both the Regulated Qualification and Lifelong Learning Pillar at each level of the CQFW and so establishing the validity of comparing, albeit Pillar-by-Pillar, the level requirements of the CQFW to the level requirements of the EQF.

The requirements of both the Regulated Qualification and Lifelong Learning Pillar level descriptors were compared horizontally with those of the EQF, to identify a best fit. The incremental nature of the design of level descriptors meant starting with CQFW Entry level 1and progressing thereafter from Level 1 to Level 8.

There was a danger within these analyses of intertextuality, that commonality of meaning would be invalidly observed, due to the similarity of verbs or sentence structure. Care was taken during the review not to assume any such similarity (literal or summative) between words or collections of words. For instance, an 'area of work or study' as opposed to a 'field of work or study' (Level descriptors 1 to 8 of the CQFW and 2 to 8 of the EQF respectively), or 'advanced' skills compared to skills that are required to be both advanced and 'specialised'. (CQFW Regulated Qualification Levels 6 and 7 descriptors respectively). The review observed a subtle usage of preposition to graduate level requirements within both the CQFW and EQF level descriptors and these too were noted. That said, there was sufficient awareness of potential differences in words used, the understanding and interpretation of concepts and of nuances.

CQFW Entry Level 2			
Lifelong Learning Entry Level 2	**Knowledge and Understanding** Use knowledge or understanding to carry out simple, familiar activities. Know the steps needed to complete simple activities.	**Application and action** Carry out simple, familiar tasks and activities. Follow instructions or use rehearsed steps to complete tasks and activities.	**Autonomy and accountability** With appropriate guidance, begin to take some responsibility for the outcomes of simple activities. Actively participate in simple and familiar activities.
Regulated Qualifications Entry Level 2	**Knowledge descriptor (the holder…)** Has basic knowledge or understanding of a subject and/or can carry out simple, familiar tasks; and knows the steps needed to complete simple activities.	**Skills descriptor (the holder can…)** Carry out simple, familiar tasks and activities. Follow instructions or use rehearsed steps to complete tasks and activities.	
Comparable EQF levels			
Level 1	**Knowledge:** Basic general knowledge.	**Skills:** Basic skills required to carry out simple tasks.	**Competence:** Work or study under direct supervision in a structured context.
Conclusions			
Outcome: CQFW Entry Level 2 partially maps to EQF Level 1.	The Regulated Qualifications Pillar descriptor states that a 'basic knowledge' is required to carry out simple tasks, and the Lifelong Learning Pillar descriptor implies a 'basic' level of knowledge is required for their use is to be in 'simple' tasks. This association between basic knowledge and simple tasks is used in the EQF Level 1 descriptor. It could be argued that there is some distinction between the 'basic knowledge and understanding of a subject' required of the CQFW Regulated Qualifications Entry Level 2 descriptor and the more complex requirement of a 'basic general knowledge' detailed in the EQF Level 1 descriptor. The EQF Level 1 descriptor implies that less guidance and instruction is required at this level as tasks are framed in a structured context. CQFW Entry 2 level descriptors imply a higher level of guidance expected with the learner expected still to 'follow instruction'. The Lifelong Learning Entry Level 2 descriptor requires the learner to 'actively participate in simple and familiar activities. The term 'activities' implies they are to be viewed as discrete in nature and possibly components of 'tasks' introduced in the EQF Level 1 descriptor.		

CQFW Entry Level 3			
Lifelong Learning Entry Level 3	**Knowledge and Understanding** Use knowledge or understanding to carry out structured tasks and activities in familiar contexts. Know and understand the steps needed to complete structured tasks and activities in familiar contexts.	**Application and action** Carry out structured tasks and activities in familiar contexts. Be aware of the consequences of actions for self and others.	**Autonomy and accountability** With appropriate guidance take responsibility for the outcomes of structured activities. Actively participate in activities in familiar contexts.
Regulated Qualifications Entry Level 3	**Knowledge descriptor (the holder…)** Has basic knowledge or understanding of a subject and/or can carry out simple, familiar tasks; and knows the steps needed to complete simple activities.	**Skills descriptor (the holder can…)** Carry out structured tasks and activities in familiar contexts. Be aware of the consequences of actions for self and others.	
Comparable EQF levels			
Level 1	**Knowledge:** Basic general knowledge.	**Skills:** Basic skills required to carry out simple tasks.	**Competence:** Work or study under direct supervision in a structured context.
Level 2	**Knowledge:** Basic factual knowledge of a field of work or study.	**Skills:** 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.	**Competence:** Work or study under supervision with some autonomy.
Conclusions			
Outcome: A fair correlation to EQF Level 1	The Entry level qualifications are arranged into three distinct levels in the CQFW that demonstrates an expectation that learners progress through these levels onto Level 1. This progression is evident in the distinction between informed knowledge being given to the learner as 'facts' or 'an understanding' progressing into the requirement on the learner to internalise basic knowledge and understanding. The knowledge requirements of EQF Level 1 are for 'basic general knowledge'. The Lifelong Learning Pillar Entry Level 3 descriptor here alludes to the need for the learner to have a more 'general' knowledge base and then be able to be aware of the consequences of actions to self and others and to complete 'simple' tasks and activities albeit in structured and familiar contexts. The term 'familiar' is first introduced at CQFW Entry Level 3 here as a defining characteristic of a context. The term was used in the preceding sets of level descriptors used by the Lifelong Learning framework, namely the 'Northern Ireland Credit Accumulation and Transfer System' (NICATS) level descriptors and then the 'England, Wales and Northern Ireland (EWNI) Generic Credit Level Descriptors, and is therefore established in stakeholders' understanding of qualifications frameworks.		

	The Lifelong Learning Pillar descriptor requires learners to 'actively participate in activities…' This is not explicitly required in the EQF Level 1 descriptor but could allude to the need of the learner to be able to carry out 'simple tasks' using 'basic skills' in a structured (familiar) context.

CQFW Level 1			
Lifelong Learning Level 1	**Knowledge and Understanding** Use knowledge of facts, procedures and ideas to complete well-defined, routine tasks. Be aware of information relevant to the area of study or work.	**Application and action** Complete well-defined, routine tasks. Use relevant skills and procedures. Select and use relevant information. Identify whether actions have been effective.	**Autonomy and accountability** Take responsibility for completing tasks and procedures subject to direction or guidance as needed.
Regulated Qualifications Level 1	**Knowledge descriptor (the holder…)** Has basic factual knowledge of a subject and/or knowledge of facts, procedures and ideas to complete well-defined routine tasks and address simple problems; and is aware of aspects of information relevant to the area of study or work.	**Skills descriptor (the holder can…)** Use basic cognitive and practical skills to complete well-defined routine tasks and procedures. Select and use relevant information. Identify whether actions have been effective.	
Comparable EQF Levels 1 and 2			
Level 1	**Knowledge:** Basic general knowledge.	**Skills:** Basic skills required to carry out simple tasks.	**Competence:** Work or study under direct supervision in a structured context.
Level 2	**Knowledge:** Basic factual knowledge of a field of work or study.	**Skills:** 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.	**Competence:** Work or study under supervision with some autonomy.
Conclusions			
Outcome: A good correlation to EQF Level 2	The EQF Level 1 descriptor requires a 'basic general knowledge'. This is reflected in the requirement of the CQFW Pillar descriptions at this level that require 'basic knowledge of facts, procedures and ideas' as well as requiring the learner to have an 'awareness of information relevant to the area of study or work'. However, the knowledge required in EQF Level 2 better matches the CQFW Level 1 requirements as they are both contextualised to a 'field of study or work'. The CQFW Regulated Qualifications level descriptor requires learners to begin to 'address simple problems' whereas the Lifelong Learning level descriptor relates to the completion of 'well-defined routine tasks. Both CQFW Pillar descriptions however require the learner to be able to 'identify whether actions have been effective'. Whilst this is not a requirement of the EQF level descriptor here, it does imply that solutions are required to be sought to the well-defined routine tasks and simple problems. The CQFW Level 1 and EQF Level 2 descriptors both begin to require the learner to develop a basic competence to select and use relevant information. This suggests the use of skills such as the ability to identify, interpret, judge and appraise. The learner is also expected by the CQFW and EQF descriptors to be able to discern as to when they require guidance. This maps well to EQF Level 2 descriptor for the learner to have 'some autonomy.'		

	Tasks and procedures are ‘well-defined’ and ‘routine’ for the CQFW level descriptors here and these reflect the EQF Level 2 descriptor of working in a ‘structured context’ albeit with ‘some autonomy’. Autonomy is not explicitly mentioned in any CQFW level descriptor here, but it is implied, as the learner is to ‘take responsibility’ and be able to discern when guidance is required.

CQFW Level 2			
Lifelong Learning Level 2	**Knowledge and Understanding** Use understanding of facts, procedures and ideas to complete well-defined tasks and address straightforward problems. Interpret relevant information and ideas. Be aware of the types of information that are relevant to the area of study or work.	**Application and action** Complete well-defined, generally routine tasks and address straightforward problems. Select and use relevant skills and procedures. Identify, gather and use relevant information to inform actions. Identify how effective actions have been.	**Autonomy and accountability** Take responsibility for completing tasks and procedures. Exercise autonomy and judgement subject to overall direction or guidance.
Regulated Qualifications Level 2	**Knowledge descriptor (the holder…)** Has knowledge and understanding of facts, procedures and ideas in an area of study or field of work to complete well-defined tasks and address straightforward problems. Can interpret relevant information and ideas. Is aware of a range of information that is relevant to the area of study or work.	**Skills descriptor (the holder can…)** Select and use relevant cognitive and practical skills to complete well-defined, generally routine tasks and address straightforward problems. Identify, gather and use relevant information to inform actions. Identify how effective actions have been.	
Comparable EQF levels			
Level 2	**Knowledge:** Basic factual knowledge of a field of work or study.	**Skills:** 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.	**Competence:** Work or study under supervision with some autonomy.
Level 3	**Knowledge:** Knowledge of facts, principles, processes and general concepts, in a field of work or study.	**Skills:** A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.	**Competence (a):** Take responsibility for completion of tasks in work or study. **Competence (b):** Adapt own behaviour to circumstances in solving problems.
Conclusions			
Outcome: A good correlation to EQF Level 3	The EQF and CQFW level descriptors at level 2 both move more firmly from 'tasks' to 'problems. Where these were, at level 1, described as straightforward, level 2 adds to their complexity slightly, whilst the tasks remain generally 'routine'. EQF level requires learners to solve problems whilst in the CQFW both Pillar descriptions require the learner to be able to begin to 'problem-solve'. Problems are categorised as 'straight-forward' within both Pillars of the CQFW. The EQF Level 2 descriptor uses the term 'routine' to categorise problems and so was determined to map. We can see a graduation in the definition of tasks in the CQFW being introduced from Level 3 onwards in relation to the categorisation of tasks from 'well-defined' to 'routine' and 'straightforward'.		

	At levels 2 and 3, the EQF and the CQFW begin to use similar words to describe requirements and it is not always clear if they are comparable. For instance, we see that the EQF Level 3 descriptor uses the term 'concepts' whereas the two CQFW Pillars both use the term 'ideas. The EQF uses 'methods' and 'tools' and the CQFW uses 'procedures. The EQF Level 3 descriptors requires learners to be able to 'adapt own behaviour to circumstances' and this is reflected in the CQFW Lifelong Learning Pillar in that it requires learners to 'exercise autonomy and judgement…to take responsibility for completing tasks and procedures' Both the CQFW Regulated Qualifications and Lifelong Learning Pillar descriptors at Level 2 require the learner to be able to…'identify how effective actions have been'.

CQFW Level 3			
Lifelong Learning Level 3	**Knowledge and Understanding** Use factual, procedural and theoretical understanding to complete tasks and address problems that, while well-defined may be complex and non-routine. Interpret and evaluate relevant information and ideas. Be aware of the nature of the area of study or work. Have awareness of different perspectives or approaches within the area of study or work.	**Application and action** Address problems that, while well-defined, may be complex and non-routine. Identify, select and use appropriate skills, methods and procedures. Use appropriate investigation to inform actions. Review how effective methods and actions have been.	**Autonomy and accountability** Take responsibility for initiating and completing tasks and procedures, including where relevant, responsibility for supervising or guiding others. Exercise autonomy and judgement within limited parameters.
Regulated Qualifications Level 3	**Knowledge descriptor (the holder…)** Has factual, procedural and theoretical knowledge and understanding of a subject or field of work to complete tasks and address problems that while well defined, may be complex and non-routine. Can interpret and evaluate relevant information and ideas. Is aware of the nature of the area of study or work. Is aware of different perspectives or approaches within the area of study or work.	**Skills descriptor (the holder can…)** Identify, select and use appropriate cognitive and practical skills, methods and procedures to address problems that while well defined, may be complex and non-routine. Use appropriate investigation to inform actions. Review how effective methods and actions have been.	
Comparable EQF levels			
Level 3	**Knowledge:** Knowledge of facts, principles, processes and general concepts, in a field of work or study.	**Skills:** A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.	**Competence (a):** Take responsibility for completion of tasks in work or study. **Competence (b):** Adapt own behaviour to circumstances in solving problems.
Level 4	**Knowledge:** Factual and theoretical knowledge in broad contexts within a field of work or study.	**Skills:** A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.	**Competence (a):** Exercise self-management within the guidelines of work or study contexts that are usually predictable but are subject to change. **Competence (b):** Supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities.

Conclusions	
Outcome: A good correlation to EQF Level 4.	The CQFW Pillar descriptors at level 3 both use the terms 'procedural', whereas the EQF Level 3 descriptor use the term 'processes'. It is unclear if these are comparable. However, there is a strong link between the CQFW level 3 descriptors and the EQF Level 4 descriptor, as both introduce the use of the term 'theoretical knowledge' within a field of work or study progressing from 'concepts' introduced in the EQF Level 3 descriptor. The EQF level 4 descriptor at this level introduces the term 'specific' which is comparable to the term 'well-defined' used in both CQFW Pillars at Level 3 to describe the complexity of the problems required to be addressed. The EQF requires learners at level 4 to 'generate solutions to specific problems', whereas the CQFW Pillars at level 3 only require learners to 'address problems. The introduction of the qualifier 'appropriate' to describe the cognitive and practical skills, methods and procedures implies that an 'inappropriate' identification and selection on the part of the learner would not then 'generate' solutions, and so there is an expectation that learners would reflect on the nature of the problem and their action. The CQFW Level 3 Pillar descriptors use the term 'non-routine' to characterise the complexity required of tasks and problems, whilst the EQF uses the term 'broad contexts' when it is referring to the knowledge required within fields of work or study that 'are subject to change'. There is progression illustrated in the graduation of the demand of tasks and problems by detailing the contexts surrounding them from 'familiar' at CQFW Entry Levels to 'routine' to now 'non-routine'. ('Non-routine' first being implied first at CQFW Level 2 in the phrase there 'generally routine…'). This suggests that these non-routine contexts are themselves subject to change. The EQF Level 4 descriptor requires the learner to be able to 'evaluate and improve…work or study activities' and whilst this is not described as such in the CQFW Level descriptors; learners are required in both Pillars to 'review how effective methods and actions have been.' The EQF Level 4 descriptor requires learners to 'supervise the routine work of others. This is not reflected in the Regulated Qualifications Pillar but is in the Lifelong Learning Pillar at CQFW Level 3. The CQFW Level 3 descriptors for both Pillars require the learner to be 'aware of different perspectives or approaches within an area of study', This is not explicitly requested at EQF Level 3 or 4. The EQF Level 5 descriptor asks that the learner is aware of the 'boundaries of knowledge' and the Level 6 descriptor requires the learner to have a 'critical understanding' and so whilst exceeding the Level 4 descriptor this skill can be seen as preliminary to developing critical and evaluative skills that would begin to be required for progression to EQF levels 5-8 and CQFW levels 4-8.

CQFW Level 4			
Lifelong Learning Level 4	**Knowledge and Understanding** Use practical, theoretical or technical understanding to address problems that are well defined but complex and non-routine. Analyse, interpret and evaluate relevant information and ideas. Be aware of the nature and approximate scope of the area of study or work. Have an informed awareness of different perspectives or approaches within the area of study or work.	**Application and action** Address problems that are complex and non-routine while normally fairly well defined. Identify, adapt and use appropriate methods and skills. Initiate and use appropriate investigation to inform actions. Review the effectiveness and appropriateness of methods, actions and results.	**Autonomy and accountability** Take responsibility for courses of action, including where relevant responsibility for the work of others. Exercise autonomy and judgement within broad but generally well-defined parameters.
Regulated Qualifications Level 4	**Knowledge descriptor (the holder…)** Has practical, theoretical or technical knowledge and understanding of a subject or field of work to address problems that are well defined but complex and non-routine. Can analyse, interpret and evaluate relevant information and ideas. Is aware of the nature of approximate scope of the area of study or work. Has an informed awareness of different perspectives or approaches within the area of study or work?	**Skills descriptor (the holder can…)** Identify, adapt and use appropriate cognitive and practical skills to inform actions and address problems that are complex and non-routine while normally fairly well-defined. Review the effectiveness and appropriateness of methods, actions and results.	
Higher Education Qualifications Level 4	Will have demonstrated: • knowledge of the underlying concepts and principles associated with their area(s) of study, and an ability to evaluate and interpret these within the context of that area of study • an ability to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study	Will be able to: • evaluate the appropriateness of different approaches to solving problems related to their area(s) of study and/or work • communicate the results of their study/work accurately and reliably, and with structured and coherent arguments • undertake further training and develop new skills within a structured and managed environment	Will have: • the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility
Comparable EQF levels			
Level 4	**Knowledge:** Factual and theoretical knowledge in broad contexts within a field of work or study.	**Skills:** A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.	**Competence (a):** Exercise self-management within the guidelines of work or study contexts that

			are usually predictable but are subject to change. **Competence (b):** Supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities.
Level 5	**Knowledge:** Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.	**Skills:** A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.	**Competence (a):** Exercise management and supervision in contexts of work or study activities where there is unpredictable change. **Competence (b):** Review and develop performance of self and others.
Conclusions			
Outcome: CQFW level 4 exceeds requirements of EQF Level 4 and meets most but not all the requirements of EQF Level 5. This is mapped to EQF Level 5 on the basis of best-fit principle.	The EQF Level 5 descriptor uses the qualifier 'comprehensive' to describe the breadth and depth of knowledge the learner is expected to have at this level. It is unclear if this reflects the CQFW Level 4 descriptors description of required knowledge and understanding as 'practical, theoretical or technical'. The term 'address' continues to be used at this level of the CQFW to describe the approach learners should take to problems. It is unclear how this explicitly maps to the requirements of the EQF Level 4 descriptor that requires the learner to 'generate solutions' or the EQF Level 5 descriptor requiring 'creative solutions to abstract problems. Problems are categorised as 'complex' and 'non-routine' at level 4 of the CQFW, which maps better to the EQF Level 5 descriptor which states problems are 'abstract'. However, the CQFW Pillar descriptors for Level 4 still require the problems to be in the main 'well-defined' The CQFW Level 4 descriptors require problems to be normally fairly well-defined, whereas the EQF Level 4 descriptors require them to be 'specific' the EQF Level 5 descriptor requires them to be 'abstract'. The CQFW differentiates problems between Levels 4 and 5 from 'defined problems' to 'broadly defined problems'. This is not differentiated in the EQF at these levels. There is no explicit reference to 'specialised knowledge or skills' in the CQFW Level 4 Pillar descriptions but this is used from EQF level 5 to level 8. The CQFW Level 4 Lifelong Learning Pillar descriptor requires judgement to be within 'broad but generally well-defined parameters'. This is not specifically requested within the requirements of the EQF Level 5 descriptor but inferred in the 'exercising of management and supervision…. where there is unpredictable change and, in the review, and development of self and others' Both CQFW Level 4 Pillar descriptors require the 'review of the effectiveness and appropriateness of methods, actions and results. This maps well to the EQF Level 5 descriptor.		

	The CQFW Level Pillar descriptors both require the learner to have an 'informed awareness of different perspectives and approaches…' This maps better to the EQF Level 5 descriptor than the EQF Level 4. The CQFW Level 4 Regulated Qualifications Pillar descriptor does not meet the EQF Level 5 descriptor requirement to 'exercise management and supervision…' This is however an expectation to a limited degree in the CQFW Level 4 Lifelong Learning Pillar descriptor. The EQF Level 5 descriptor uses for the first time 'supervision'. Whilst not explicitly referred to in the CQFW Pillar level descriptors it is implied.

CQFW Level 5			
Lifelong Learning Level 5	**Knowledge and Understanding** Use practical, theoretical or technological understanding to find ways forward in broadly-defined, complex contexts. Analyse, interpret and evaluate relevant information, concepts and ideas. Be aware of the nature and scope of the area of study or work. Understand different perspectives, approaches or schools of thought and the reasoning behind them.	**Application and action** Address broadly-defined, complex problems. Determine, adapt and use appropriate methods and skills. Use relevant research or development to inform actions. Evaluate actions, methods and results.	**Autonomy and accountability** Take responsibility for planning and developing courses of action, including where relevant, responsibility for the work of others. Exercise autonomy and judgement within broad parameters.
Regulated Qualifications Level 5	**Knowledge descriptor (the holder…)** Has practical, theoretical or technological knowledge and understanding of a subject or field of work to find ways forward in broadly defined, complex contexts. Can analyse, interpret and evaluate relevant information, concepts and ideas. Is aware of the nature and scope of the area of study or work. Understands different perspectives, approaches or schools of thought and the reasoning behind them.	**Skills descriptor (the holder can…)** Determine, adapt and use appropriate methods, cognitive and practical skills to address broadly defined, complex problems. Use relevant research or development to inform actions. Evaluate actions, methods and results.	
Higher Education Qualifications Level 5	Will have demonstrated: • knowledge and critical understanding of the well-established principles of their area(s) of study, and of the way in which those principles have developed • ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context • knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study	Will be able to: • use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis • 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 • undertake further training, develop existing skills and acquire new competences that will enable them to assume significant responsibility within organisations.	Will have: • the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making.

	• an understanding of the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge.		
Comparable EQF levels			
Level 5	**Knowledge:** Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.	**Skills:** A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.	**Competence (a):** Exercise management and supervision in contexts of work or study activities where there is unpredictable change. **Competence (b):** Review and develop performance of self and others.
Level 6	**Knowledge:** Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles.	**Skills:** Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study.	**Competence (a):** Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts. **Competence (b):** Take responsibility for managing professional development of individuals and groups.
Conclusions			
Outcome: A good correlation to EQF Level 5.	The CQFW Level 5 descriptors both require the learner to 'address' problems whereas the EQF Level 5 descriptor requires learners to derive 'creative solutions'. The EQF Level 6 descriptor goes further, requiring the learner to be able to 'solve complex and unpredictable problems.' The CQFW Level 5 descriptors both require the 'use of relevant research or development to inform actions' it is unclear where this maps to the requirements of the EQF Level 5 or Level 6 descriptors. The CQFW Level 5 descriptor asks that the learner can 'find ways forward.' This is not obviously mapped to the EQF Level 5 or 6 descriptors but can be associated with the skill of developing creative solutions at EQF level 5. The CQFW Level 5 Lifelong Learning Pillar descriptor maps well to the requirements to 'exercise management and supervision' expected in the EQF Level 5 descriptor, requiring learners to ''take responsibility for planning and developing courses of action, including where relevant, responsibility for the work of others.' However, this is not required of the CQFW Level 5 Regulated Qualifications Pillar descriptor where there is no explicit reference to autonomy.		

	The EQF Level 5 descriptor also requires for the first time the 'exercising of…supervision'. Whilst not explicitly referred to in the CQFW Regulated Qualifications Pillar level descriptor it is implied. Both CQFW Pillar descriptors require learners to 'evaluate actions, methods and results.' Problems at CQFW Level 5 in both Pillars are defined as 'broadly-defined in complex contexts'. The EQF Level 5 descriptor defines problems as being 'abstract'. There is some compatibility between these descriptions. The Level 5 Lifelong Learning Pillar descriptor requires 'judgement in broad parameters'. This maps better to the EQF Level 6 descriptor requirement to 'take responsibility for decision-making in unpredictable work or study contexts' than the EQF Level 5 descriptor of the broader 'exercising of management and supervision,'

CQFW Level 6			
Lifelong Learning Level 6	**Knowledge and Understanding** Refine and use practical, conceptual or technological understanding to create ways forward in contexts where there are many interacting factors. Critically analyse, interpret and evaluate complex information, concepts and ideas. Understand the context in which the area of study or work is located. Be aware of current developments in the area of study or work. Understand different perspectives, approaches or schools of thought and the theories that underpin them. Exercise broad autonomy and judgement.	**Application and action** Address problems that have limited definition and involve many interacting factors. Determine, refine, adapt and use appropriate methods and skills. Use and where appropriate design relevant research and development to inform actions. Evaluate actions, methods and results and their implications.	**Autonomy and accountability** Take responsibility for planning and developing courses of action that are capable of underpinning substantial changes or developments. Initiate and lead tasks and processes, taking responsibility, where relevant, for the work and roles of others.
Regulated Qualifications Level 6	**Knowledge descriptor (the holder…)** Has advanced practical, conceptual or technological knowledge and understanding of a subject or field of work to create ways forward in contexts where there are many interacting factors. Understands different perspectives, approaches or schools of thought and the theories that underpin them. Can critically analyse, interpret and evaluate complex information, concepts and ideas.	**Skills descriptor (the holder can…)** Determine, refine, adapt and use appropriate methods and advanced cognitive and practical skills to address problems that have limited definition and involve many interacting factors. Use and, where appropriate, design relevant research and development to inform actions. Evaluate actions, methods and results and their implications.	
Higher Education Qualifications Level 6	Will have demonstrated: • a systematic understanding of key aspects of their field of study, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of a discipline • an ability to deploy accurately established techniques of analysis and enquiry within a discipline • conceptual understanding that enables the student:	Will be able to: • apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects • critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution – or	Will have: • the qualities and transferable skills necessary for employment requiring: • the exercise of initiative and personal responsibility • decision-making in complex and unpredictable contexts • the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

	• to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline • to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline • an appreciation of the uncertainty, ambiguity and limits of knowledge	identify a range of solutions - to a problem • communicate information, ideas, problems and solutions to both specialist and non-specialist audiences. • the ability to manage their own learning and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline).	
Comparable EQF levels			
Level 6	**Knowledge:** Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles.	**Skills:** Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study.	**Competence (a):** Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts. **Competence (b):** Take responsibility for managing professional development of individuals and groups.
Level 7	**Knowledge:** Highly specialised 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.	**Skills (a):** Critical awareness of knowledge issues in a field and at the interface between different fields. **Skills (b):** Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields.	**Competence (a):** Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches. **Competence (b):** Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.
Conclusions			
Outcome: A good correlation to EQF Level 6.	The knowledge required at CQFW Level 6 is described slightly differently in each Pillar in that the Regulated Qualifications Pillar requires the attainment of 'advanced practical, conceptual or technological knowledge and understanding…' Whereas the CQFW Lifelong Learning Pillar requires learners to 'Refine and use practical, conceptual or technological understanding…' The Regulated Qualifications Pillar requiring the 'refining of…advanced cognitive and practical skills' within its Skills descriptor. The EQF level 6 and 7 descriptors do not describe the types of knowledge required but expect it to instead be 'advanced' or 'highly specialised'.		

	The term 'address' is used within both CQFW Pillar descriptors at Level 6. This term is first used in the CQFW Regulated Qualifications Level 1 descriptor and then for the first time at Level 2 for the Lifelong Learning Pillar and then included in both Pillar descriptors at subsequent levels. The EQF Level 6 descriptor requires that learners have sufficient mastery of skills required to be able to 'solve problems' implying a problem-solving process is required that could result in a solution being found. The EQF Level 6 descriptor also 'Advanced skills, demonstrating mastery and innovation, required to solve…. problems…' The Skills descriptors of both Pillars of the CQFW at this level describe the skills required of the learner, so that they must be able to have the skills to be able to 'Determine, refine, adapt and use appropriate methods…' and be able to 'create ways forward.' The EQF Level 6 descriptor requires learners to be able to evidence a 'critical understanding of theories and principles.' Whereas the CQFW Pillars both require learners to have the skill to be able to '…critically analyse, interpret and evaluate complex information, concepts and ideas.' There are further requirements in the CQFW Lifelong Learning Pillar that the learner is '…aware of current developments in the area of study or work.' 'Understands the context in which the area of study or work is located' and finally both CQFW Pillars expects the learner to 'Understand(s) the different perspectives, approaches or schools of thought and theories that underpin them.'

CQFW Level 7			
Lifelong Learning Level 7	**Knowledge and Understanding** Reformulate and use practical, conceptual or technological understanding to create ways forward in contexts where there are many interacting factors. Critically analyse, interpret and evaluate complex information, concepts and theories to produce modified conceptions. Understand the wider contexts in which the area of study or work is located. Understand current developments in the area of study or work. Understand different theoretical and methodological perspectives and how they affect the area of study or work.	**Application and action** Conceptualise and address problematic situations that involve many interacting factors. Determine and use appropriate methodologies and approaches. Design and undertake research, development or strategic activities to inform the area of work or study or produce organisational or professional change. Critically evaluate actions, methods and results and their short and long-term implications.	**Autonomy and accountability** Take responsibility for planning and developing courses of action that initiate or underpin substantial changes or developments. Exercise broad autonomy and judgement across a significant area of work or study. Initiate and lead complex tasks and processes, taking responsibility, where relevant, for the work and roles of others.
Regulated Qualifications Level 7	**Knowledge descriptor (the holder…)** Reformulates and uses practical, conceptual or technological knowledge and understanding of a subject or field of work to create ways forward in contexts where there are many interacting factors. Critically analyses, interprets and evaluates complex information, concepts and theories to produce modified conceptions. Understands the wider contexts in which the area of study or work is located. Understands current developments in the area of study or work. Understands different theoretical and methodological perspectives and how they affect the area of study or work.	**Skills descriptor (the holder can…)** Use specialised skills to conceptualise and address problematic situations that involve many interacting factors. Determine and use appropriate methodologies and approaches. Design and undertake research, development or strategic activities to inform or produce change in the area of work or study. Critically evaluate actions, methods and results and their short- and long-term implications.	
Higher Education Qualifications Level 7	Will have demonstrated: • a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice	Will be able to: • deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences	Will have: • the qualities and transferable skills necessary for employment requiring: • the exercise of initiative and personal responsibility • decision-making in complex and unpredictable situations

	• a comprehensive understanding of techniques applicable to their own research or advanced scholarship • originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline • conceptual understanding that enables the student: • to evaluate critically current research and advanced scholarship in the discipline • to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	• demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level • continue to advance their knowledge and understanding, and to develop new skills to a high level.	• the independent learning ability required for continuing professional development.
Comparable EQF levels			
Level 7	**Knowledge:** Highly specialised 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.	**Skills (a):** Critical awareness of knowledge issues in a field and at the interface between different fields. **Skills (b):** Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields.	**Competence (a):** Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches. **Competence (b):** Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.
Level 8	**Knowledge:** Knowledge at the most advanced frontier of a field of work or study and at the interface between fields.	**Skills:** 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.	**Competence:** 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.

Conclusions	
Outcome: A good correlation to EQF Level 7.	The EQF Level 7 descriptor requires sufficient 'highly specialised knowledge' to be able to support a 'basis for original thinking and/or research.' Both descriptors at Level 7 in the CQFW articulate what knowledge and skills the learner is expected to evidence as described also in the CQFW Level 6 descriptors. These include an additional required ability to 'Reformulate and use practical, conceptual or technological knowledge. The CQFW Level 7 Regulated Qualifications Pillar descriptor uses the term 'specialised skills'. These align with the EQF Level 7 descriptor requirement for 'specialised problem-solving skills…' Both Pillars of the CQFW describe the same set of knowledge manipulation skills and critical evaluation skills expected at EQF Level 7. The EQF Level 7 does not specifically require the learner to solve the problems presented. It should also be noted that the CQFW does not require the 'solution' to a problem per se, but instead requires that learners are able to have the skills to 'address problematic situations….to create ways forward'. Both CQFW Level 7 Pillar descriptors require learners to be able to 'understand current developments in the area of study or work' and the 'wider contexts in which the area of study or work is located.' This is a progression from the CQFW Level 6 Lifelong Learning Pillar requirement that the learner is to 'be aware of current developments…' requiring greater comprehension of current developments. The EQF Level 7 descriptor requires 'highly specialised knowledge, some of which is at the forefront of knowledge in a field or work or study…' and that the learner has a 'critical awareness of knowledge issues in a field and at the interface between different fields', suggesting an alignment between the CQFW and EQF at these levels. The EQF Level 7 descriptor requires the learner to able to '…transform work or study contexts…' This is not explicitly referenced at this level in the CQFW, but both Pillars require learners to 'reformulate' existing knowledge and understanding for a practical purpose. The EQF Level 7 descriptor also asks the learner to '…take responsibility for contributing to professional knowledge and practice', which is comparable to the focus in both CQFW Level 7 descriptors on the learner being able to 'inform or produce change in the area of work or study.'

CQFW Level 8			
Lifelong Learning Level 8	**Knowledge and Understanding** Develop original 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. Understand and reconceptualise the wider contexts in which the field of knowledge or work is located. Extend a field of knowledge or work by contributing original knowledge and thinking. Exercise critical understanding of different theoretical and methodological perspectives and how they affect the field of knowledge or work.	**Application and action** Conceptualise and address problematic situations that involve many complex interacting factors. Formulate and use appropriate methodologies and approaches. Initiate, design and undertake research, development or strategic activities that extend the field of work or knowledge or result in significant organisational or professional change. Critically evaluate actions, methods and results and their short and long-term implications for the field of work or knowledge and its wider context.	**Autonomy and accountability** Take responsibility for planning and developing courses of action that have a significant impact on the field of work or knowledge or result in substantial organisational or professional change. Exercise broad autonomy, judgement and leadership as a leading practitioner or scholar sharing responsibility for the development of a field of work or knowledge, or for substantial organisational or professional change. Take responsibility for the advancement of professional practice.
Regulated Qualifications Level 8	**Knowledge descriptor (the holder…)** Develops original practical, conceptual or technological understanding to create ways forward in contexts that lack definition and where there are many complex, interacting factors. Critically analyses, interprets and evaluates complex information, concepts and theories to produce new knowledge and theories. Understands and reconceptualises the wider contexts in which the field of knowledge or work is located. Extends a field of knowledge or work by contributing original knowledge and thinking. Exercises critical understanding of different theoretical and methodological perspectives and how they affect the field of knowledge or work.	**Skills descriptor (the holder can…)** Use advanced and specialised skills and techniques to conceptualise and address problematic situations that involve many complex, interacting factors. Formulate and use appropriate methodologies and approaches. Initiate, design and undertake research, development or strategic activities that extend or produce significant change in the field of work or study. Critically evaluate actions, methods and results and their short- and long-term implications for the field of work or knowledge and its wider context	

Higher Education Qualifications Level 8	Will have demonstrated: • the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and merit publication • a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice • the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems • a detailed understanding of applicable techniques for research and advanced academic enquiry.	Will be able to: • make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences • continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas or approaches.	Will have: • the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.
Comparable EQF levels			
Level 8	**Knowledge:** Knowledge at the most advanced frontier of a field of work or study and at the interface between fields.	**Skills:** The most advanced and specialised 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.	**Competence:** 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.
Level 7	**Knowledge:** Highly specialised 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.	**Skills (a):** Critical awareness of knowledge issues in a field and at the interface between different fields. **Skills (b):** Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields.	**Competence (a):** Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches. **Competence (b):** Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.

Conclusions	
Outcome: A good correlation to EQF Level 8.	The EQF Level 8 requires that learners have the 'most advanced and specialised skills and techniques…required to solve critical problems.' The CQFW Pillars ask that the learner is able to 'address problematic situations that may involve complex interacting factors.' The CQFW Pillars then to set out a range of knowledge skills and methodical skills required at that level. The CQFW is more definitive in that it requires that learners, through development or research, 'extend or produce significant change in the field of work or study' and, through courses of action, effect 'significant impact on a field of work or knowledge' resulting in 'substantial organisational or professional change.' (CQFW Level 8 descriptor Lifelong Learning Pillar) The EQF at this level requiring a 'sustained commitment to the development of new ideas or processes at the forefront of work or study context including research.' The EQF Level 8 descriptor explicitly requires the learner to have the ability to 'redefine' existing knowledge or professional practice. Whereas the CQFW Level 8 descriptors for both Pillars require learners to '…reconceptualise the wider contexts in which a field or knowledge or work is located.' The requirement of the EQF Level 8 descriptor for learners to have advanced knowledge at the 'interfaces between fields' is mapped to the requirement throughout both CQFW Level 8 Pillar descriptors for learners to be critically aware of 'the wider contexts of a field of work or knowledge' and the 'interacting factors' within a specialised field of knowledge. The EQF Level 8 descriptor requires 'substantial…autonomy' whereas this is not expected within the CQFW Level 8 Regulated Qualifications Pillar descriptor, though 'broad autonomy' is required of learners in the CQFW Level 8 Lifelong Learning Pillar descriptor. The CQFW Level 8 Lifelong Learning Pillar descriptor includes a requirement of the learner to 'share' as a 'leading practitioner or scholar…responsibility for the development of a field of work or knowledge, or for substantial organisational or professional change.' The EQF Level 8 descriptor requiring 'substantial authority…' and '…scholarly and professional integrity.'

Appendix 2 - Outcomes of Vertical progression review

A second comparison activity was undertaken to identify a set of standard characteristic comparators 'common' to each qualifications framework and how the levels of demand and complexity expected of learners in relation to each of these increased through progression through the levels.

Certain characteristics were identified which were threaded within the CQFW Regulated Qualification and Lifelong Learning Pillars and the EQF and delineated within each of their level descriptors. These were:

- Knowledge and understanding
- Skills
- Problem-solving and complexity
- Accountability and responsibility

These characteristics were examined in the level descriptors of these two pillars at each level. This made it possible to identify the increase in complexity and demand described at each level, compared with the previous level.

This exercise facilitated a more integrated basis for the vertical comparison of level descriptors as well as supporting the findings from the initial horizontal review. Because there are 11 Levels in the CQFW and only 8 in the EQF, the progression between some CQFW levels in terms of demand and complexity was likely to be lesser than that between EQF Levels. This exercise was intended to compare these increases in demand and complexity and to and further support the conclusions of the horizontal mapping. This was particularly valuable in understanding the 'continuum' nature of the Entry Levels, and the potential overlap of Levels 4 and 5.

CQFW Standard Pillar characteristic[6]s / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility[7]		EQF Level Descriptor[8]
Entry 1	**CQFW: Regulated Qualification** 'beginning to make use of knowledge and/or understanding.' **CQFW: Lifelong Learning** 'to beginning to make use of…knowledge, or understanding...'	**CQFW: Regulated Qualification** 'to beginning to make use of skills…' **CQFW: Lifelong Learning** 'to beginning to make use of skills…'	**CQFW: Regulated Qualification** No explicit reference to problem-solving. Knowledge and skills are to be related to the 'subject or immediate environment.' **CQFW: Lifelong Learning** No explicit reference to problem solving. Knowledge and skills are to be related to the 'immediate environment.'	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability. **CQFW: Lifelong Learning** No explicit reference to responsibility or accountability.		No mapped descriptor
Commentary:	Not mapped.					Not mapped.

[6] https://beta.gov.wales/credit-and-qualifications-framework-cqfw-level-descriptors
qualificationswales.org/.../1860/qualification-and-component-levels... ·
[7] Autonomy being a prerequisite for increased responsibility and so accountability.
CQFW Regulated Qualification Pillar: Awarding bodies may reference the CQFW Lifelong Learning level descriptors linked to autonomy and accountability.
Such reference must be in addition to and not instead of the level descriptors outlined. (Qualification and Component Levels Requirements and Guidance for All Awarding Bodies and All Qualifications)
[8] https://ec.europa.eu/ploteus/content/descriptors-page

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Entry 2	**CQFW: Regulated Qualification** 'Has basic knowledge or understanding of a subject...' 'knows the steps needed to complete simple activities' **CQFW: Lifelong Learning** 'Use knowledge or understanding…' 'Know the steps needed to complete simple activities.'	**CQFW: Regulated Qualification** 'Can carry out simple familiar tasks.' 'Carry out simple familiar tasks and activities.' 'Follow instructions or use rehearsed steps to complete tasks and activities.' **CQFW: Lifelong Learning** 'Carry out simple familiar activities.' 'Carry out simple familiar tasks and activities.' 'Follow instructions or use rehearsed steps to complete tasks and activities.	**CQFW: Regulated Qualification** No reference to 'problem-solving' Tasks are to be 'familiar' and 'simple' **CQFW: Lifelong Learning** No reference to 'problem-solving' Tasks are to be 'familiar' and 'simple'	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. **CQFW: Lifelong Learning** 'With appropriate guidance begin to take some responsibility for the outcomes of simple activities.'		**Maps but insufficiently to Level 1:** **Knowledge:** Basic general knowledge. **Skills:** Basic skills required to carry out simple tasks. **Competence:** Work or study under direct supervision in a structured context.

		'Actively participate in simple or familiar activities.'				
Commentary:	**Knowledge:** Basic knowledge required is less demand than the EQF. Is not able to build on any previous level achievement from Entry 1. CQFW Lifelong Learning Pillar does not specifically relate knowledge to a subject area until Level 1. Only the Lifelong Learning Pillar requires the learner to 'use' knowledge and understanding. This is different from 'having' knowledge and understanding required in the CQFW Regulated Qualification Pillar. **Skills:** Basic skills mapped albeit to 'tasks and activities.' These skills are not built on any prerequisite skill requirements set out at Entry 1. Activities and tasks are carried out in structured contexts, but more detail is given 'use rehearsed steps to complete tasks and activities.' **Problem-solving and complexity:** Not referenced. **Accountability and responsibility:** EQF required direct supervision but CQFW Lifelong Learning Pillar points to 'appropriate guidance.' **Outcome:** Not mapped					**Level progression commentary:** Whilst not explicitly attributed to a field of study or work, this is 'given' or 'learned' knowledge albeit with the context in which it is presented. The use of rules and tools is not expected at this level as a high degree of supervision is required within a structured context. Skills are sufficient to carry out simple tasks Activity here is centred around the structured use of taught knowledge to enable the use of basic skills within a defined context to complete simple tasks under direct supervision.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Entry 3	**CQFW: Regulated Qualification** 'Has basic knowledge or understanding of a subject…' '…knows the steps needed to complete simple activities' **CQFW: Lifelong Learning** 'Use knowledge or understanding to carry out structured tasks and activities' 'Know and understand the steps needed to	**CQFW: Regulated Qualification** '…can carry out simple and familiar tasks...' 'Carry out structured tasks and activities in familiar contexts.' **CQFW: Lifelong Learning** '…carry out structured tasks and activities' 'Actively participate in activities in familiar contexts.'	**CQFW: Regulated Qualification** No explicit reference to problem solving. Tasks and activities are required to be simple, structured within familiar contexts. **CQFW: Lifelong Learning** No explicit reference to problem solving. Tasks and activities are required to be	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. Learners must 'be aware of consequences of actions for self and others.' **CQFW: Lifelong Learning** 'With appropriate guidance take responsibility for the outcomes of structured activities.' Must 'be aware of consequences of		**Mapped sufficiently to Level 1:** **Knowledge:** Basic general knowledge. **Skills:** Basic skills required to carry out simple tasks. **Competence:** Work or study under direct supervision in a structured context.

	complete structured tasks.'		simple, structured within familiar contexts.	actions for self and others.'		
Commentary:	**Knowledge:** Basic knowledge and understanding required is less demand than EQF mapped requirements. Now the requirement to 'use' knowledge and understanding in structured tasks or familiar activities is in both of the CQFW Pillar descriptors mapping. Implication is taken that the breadth and depth of knowledge and understanding required has become more general well to EQF requirements. (Note: The CQFW Lifelong Learning Pillar does not specifically relate knowledge to a subject area until Level 1. This limits the degree of understanding a learner can garner, given the lack of context.) **Skills:** Carry out structured tasks and activities in familiar contexts maps to 'structured contexts' albeit still with basic general knowledge and understanding. **Problem-solving and complexity:** Tasks are required to be completed in familiar contexts. These will build to be used to problem-solve straightforward problems at Level 2 in both frameworks (CQFW and EQF) Activities and tasks are carried out in structured contexts, but learner is now required to 'carry out structured tasks' rather than '…use rehearsed steps to complete tasks…' at Entry Level 2. This is a closer match to the EQF Level 1 descriptor requirement to 'carry out simple tasks.' **Accountability and responsibility:** EQF requires direct supervision in structured context, implying the learner is not yet sufficiently able to act with autonomy or be expected to take responsibility for outcomes. **Outcome**: A fair correlation to EQF Level 1					**Level progression commentary:** Whilst not explicitly attributed to a field of study or work, this is 'given' or 'learned' knowledge albeit with the context in which it is presented. This will form the foundation from which understanding will develop. The use of rules and tools is not expected at this level as a high degree of supervision is required within a structured context. Skills are sufficient to carry out simple tasks Activity here is centred around the structured use of taught knowledge to enable the use of basic skills within a defined context to complete simple tasks **under direct** supervision.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 1	**CQFW: Regulated Qualification** 'Has basic factual knowledge of a subject and/or knowledge of facts, procedures and ideas…' '…is aware of aspects of information relevant to the area of study or work.' **CQFW: Lifelong Learning** 'Use knowledge of facts, procedures and ideas….' 'Be aware of information relevant to the area of study or work.'	**CQFW: Regulated Qualification** 'Use basic cognitive and practical skills to complete well-defined routine tasks and procedures.' **CQFW: Lifelong Learning** 'Complete well defined, routine tasks.' 'Use relevant skills and procedures.'	**CQFW: Regulated Qualification** '…address simple problems…' 'Select and use relevant information.' 'Identify whether actions have been effective.' **CQFW: Lifelong Learning** No explicit reference to problem solving. 'Select and use relevant information.'	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. Review of effectiveness of methods and actions. **CQFW: Lifelong Learning** 'Take responsibility for completing tasks and procedures subject to direction or guidance as needed.'		**Mapped to Level 2:** **Knowledge:** Basic factual knowledge of a field of work or study. **Skills:** 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. **Competence:** Work or study **under** supervision with some autonomy.

			'Identify whether actions have been effective.' Tasks are to be well-defined and routine.			
Commentary:	**Knowledge:** Basic factual knowledge maps to EQF descriptor, we see in the CQFW Pillar descriptor that the knowledge is becoming more specific and less general and 'relevant **to** an area of work or study.' The inference taken that the learner is able to relate knowledge to an area but has yet to understand why or how it is linked. This is the most common entry point into work for a learner with very basic understanding. **Skills:** Tools here are the practical application of simple cognitive and practical knowledge skills to be able to complete routine tasks and procedures. This maps across to the EQF requirements. **Problem-solving and complexity:** The CQFW Regulated Qualification Pillar refers to 'simple problems.' There is not yet any reference to 'problems' in the CQFW Lifelong Learning Pillar descriptor; however, a range of 'problem-solving' skills are cited. The requirement to 'select and use relevant information' then maps to the EQF requirements **Accountability and responsibility:** The level of autonomy maps to the EQF requirements for 'some autonomy.' **Outcome:** A good correlation to EQF Level 2					**Level progression commentary:** Knowledge becomes more specific and nuanced now within a field of work or study. Skills are still basic as per Level 1 but are now differentiated to include both cognitive and practical skills enabling the learner to move from 'given' knowledge to 'acquired' knowledge. The learner is able to discern the relevancy of information to not only carry out tasks, albeit it still using simple rules and tools but to also solve routine problems. The activity expected of the learner here is slightly progressed in complexity as the learner is to be afforded some autonomy whilst still effectively under supervision.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 2	**CQFW: Regulated Qualification** 'Has knowledge and understanding of facts, procedures and ideas **in** an area of study or field of work.' Inferring progression from the previous level in that the learner is able to begin to comprehend the breadth and depth of a domain of knowledge. This maps well to the EQF level 3 descriptor. 'Can interpret relevant information and ideas.' 'Is aware of a range of information relevant to the area of study or work.' **CQFW: Lifelong Learning** 'Use understanding of facts, procedures and ideas…'	**CQFW: Regulated Qualification** 'Select and use relevant cognitive and practical skills to complete well-defined, generally routine tasks and address straightforward problems.' 'Gather and use relevant information to inform actions.' **CQFW: Lifelong Learning** 'Complete well-defined, generally routine tasks…'	**CQFW: Regulated Qualification** 'address straightforward problems.' 'Tasks are well-defined and generally routine.' **CQFW: Lifelong Learning** 'address straightforward problems.'	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. Identify how effective actions have been. **CQFW: Lifelong Learning** 'Take responsibility for completing tasks and procedures.'		**Mapped to Level 3:** **Knowledge:** Knowledge of facts, principles, processes and general concepts, in a field of work or study. **Skills:** A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information. **Competence (a):** Take responsibility for completion of tasks in work or study. **Competence (b):** Adapt own behaviour to circumstances in solving problems.

	'Interpret relevant information and ideas.' 'Be aware of the types of information that are relevant to the area of study or work.'	'Select and use relevant skills and procedures…' '…gather and use relevant information to inform actions.'	Tasks are well-defined and generally routine'	'Exercise autonomy and judgement subject to overall direction or guidance.' 'Identify how effective actions have been.'		
Commentary:	**Knowledge:** The level of knowledge acquisition maps to the EQF requirements albeit it references 'ideas' rather than 'concepts.' **Skills:** The use of knowledge skills map to the EQF requirements to complete tasks and 'address 'problems. The use of basic skills is implied as the problems at the mapped level are 'straightforward. **Problem-solving and complexity:** Tasks are 'well-defined' and 'generally routine.' The EQF Level 3 descriptor does not set out the characteristics of problems or tasks and so a direct match cannot be made here. The requirement however does map better to the requirements of the preceding EQF level. We start to see the complexity of problems increasing in demand requiring a greater degree of comprehension. **Accountability and responsibility:** The CQFW Lifelong Learning Pillar requires learners to 'take responsibility for completing tasks.' This maps to the EQF requirements. The CQFW Lifelong Learning Pillar requires the exercising of autonomy and judgement and to be able to review the effectiveness of actions. This maps to the EQF requirement to 'adapt own behaviours to circumstances.' **Outcome:** A good correlation to EQF Level 3.					**Level progression commentary:** Knowledge now is made more specific and differentiated to not only concern factual knowledge but to also include knowledge of general concepts and so broadening the extent of knowledge and type of knowledge required. Now includes the learner to have a range of cognitive and practical skills which they can apply through the use of methods, tools, materials and information to solve problems. Competence here is divided into two subsets requiring more autonomy of the learner to be able to be responsible for the completion of tasks and to begin to solve problems that are less routine in nature. The exercising of autonomy and judgement is subject to overall direction or guidance. Note: We begin to see here at Level 3 for the first time the progression from beginning to manage 'self' to for the first time the management of 'others' and then a 'group', Levels 4 to 6.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 3	**CQFW: Regulated Qualification** 'Has factual, procedural and theoretical knowledge and understanding…' 'Can interpret…relevant information and ideas' 'Is aware of the nature of the area of study or work' 'Is aware of different perspectives or approaches…' Is able to discern 'appropriate investigation.' **CQFW: Lifelong Learning** 'Use factual, procedural and	**CQFW: Regulated Qualification** 'Identify, select and use appropriate cognitive and practical skills, methods and procedures…' '...complete tasks and…address problems' Is able to discern 'appropriateness of investigation.' And 'appropriateness of cognitive and practical skills, methods and procedures…' 'Can…evaluate relevant information and ideas' **CQFW: Lifelong Learning** '**Identify,** select and use ***appropriate*** skills, methods and procedures.'	**CQFW: Regulated Qualification** '…address problems that while well-defined maybe complex and non-routine.' 'Use… investigation to inform actions…' 'Review how effective methods have been.' **CQFW: Lifelong Learning** 'Address problems that, while well-defined, may be	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. **CQFW: Lifelong Learning** 'Take responsibility for initiating and completing tasks and procedures including		**Mapped to Level 4:** **Knowledge:** Factual and theoretical knowledge in broad contexts within a field of work or study. **Skills:** A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study. **Competence (a):** Exercise self-management within the guidelines of work or study contexts that are usually predictable but are subject to change. **Competence (b):** Supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities.

	theoretical understanding…' 'Interpret…relevant information and ideas.' 'Be aware of the nature of the area of study or work.' 'Have awareness of different perspectives or approaches…' Is able to discern 'appropriate investigation.'	'...complete tasks and…address problems' Is able to discern 'appropriateness of investigation.' And 'appropriateness of skills, methods and procedures…' '…evaluate…relevant information and ideas'	complex and non-routine.' '…**select** and **use** appropriate skills, methods and procedures.' 'Use… investigation to inform actions…' 'Review how effective methods have been.' 'Exercise…judgement within **limited parameters**'	where relevant, responsibility for supervising or guiding others.' 'Exercise autonomy and judgement…'		
Commentary:	**Knowledge:** Knowledge requirements of the CQFW and their increased defined breadth and depth map to the EQF requirements. As learner's comprehension now is required to be able to differentiate between evidenced or established fact to include 'theoretical knowledge' and a broader awareness of the area of study to include different perspectives and approaches, **Skills:** The requirement to discern, evaluate, identify, select and use a range of knowledge skills maps to the requirements of the EQF. Though these are not explicitly referred to in the EQF descriptor, it is inferred that the use of them would enable the learner to meet the expectations of the EQF Level 4 descriptor. It is unclear if the Regulated Qualification and Lifelong Learning descriptors cover all the cognitive and practical skills required to meet the demand of the EQF Level 4 descriptor. These skills are graduated in complexity from here until Level 8 and are consistently described in more detail as discreet skills. **Problem-solving and complexity:** Problems are still well-defined this map to the EQF requirement for problems to be 'specific' to an area of work or study.					**Level progression commentary:** Theoretical knowledge is now included to build on the knowledge requirements at Level 3. The context of the domain is now broad, so widening the field of work or study. The broad range of skills required now because for the first-time skills the learner is required to generate solutions to problems in a specific field of work or study. (Knowledge is related to a field of work or study first at Level 2.) The competence requirements here are as described at Level 3 and divided into two subsets. Both sets however are progressive in demand expectations of the learner in terms of requiring that they take on more responsibility for the completion of tasks and the solving of specific problems that are sometimes couched in unpredictable contexts. There is a 'step-change' here in the requirement of learners to begin to supervise the completion of routine tasks by others and armed with a better comprehension of

	However, the CQFW goes beyond; allowing problems for the first time to sometimes also be 'complex and non-routine.' This is also implied in the mapped EQF descriptor in that 'contexts may be subject to change.' Learners are then also required to be able to use a range of 'appropriate' skills, methods and procedures to investigate. The ability to select from a range of skills to address the specificity of a problem implies a step change in demand and responsibility. It also allows the learner to explore innovated ways to apply these learned and now assimilated cognitive and practical skills set to address problems and to generate solutions. Thus, the emergence here of a 'Threshold concept' plateau here and the heuristic opportunity for the learner. Accountability and responsibility: Supervision or guiding others maps well to the EQF descriptor, as does the exercising of autonomy and judgement to the EQF requirement here to 'self-manage.' It is unclear if the term used in the Lifelong Learning Level 3 descriptor to 'exercise autonomy within limited parameters' can be compared to the EQF Level 4 descriptor requirement for the 'exercising of self-management within the guidelines of work or study contexts…' Outcome: A good correlation to EQF Level 4.		the thresholds of the domain; to be able to evaluate and improve work and study activities.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 4	CQFW: Regulated Qualification 'Has practical, theoretical or technical knowledge and understanding… to address problems…' Can '**interpret'** and have an 'informed awareness of different perspectives or approaches within an area of study or work.' 'Be aware of the nature and **approximate** scope of the area of study or work.' CQFW: Lifelong Learning 'Uses practical, theoretical or technical understanding to **address** problems…'	CQFW: Regulated Qualification '…adapt and use **appropriate** cognitive and practical skills to…address problems…' Can 'identify' **appropriateness** of 'cognitive and practical skills to inform actions…' CQFW: Lifelong Learning 'Use…**appropriate** methods and skills.'	CQFW: Regulated Qualification '…**address** problems that are complex and non-routine while normally fairly well-defined.' 'Review the effectiveness and **appropriateness** of methods, actions and results.' CQFW: Lifelong Learning '…**address** problems that are complex and non-routine while normally fairly well-defined.'	CQFW: Regulated Qualification No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. '…review of effectiveness and **appropriateness** of methods, actions and results in exercising the management and supervision of self and others.' CQFW: Lifelong Learning 'Take responsibility for courses of action, including where		Mapped partially to Level 5: Knowledge: Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge. Skills: A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems. Competence (a): Exercise management and supervision in contexts of work or study activities where there is unpredictable change. Competence (b): Review and develop performance of self and others.

	Can 'interpret' and have an 'informed awareness of different perspectives or approaches within an area of study or work.' 'Be aware of the nature and approximate scope of the area of study or work.'	'…**adapt** and use **appropriate** methods and skills.' '**Initiate** and use **appropriate** investigation to inform actions.' Can 'identify' appropriateness of methods and skills.	'Review the effectiveness and **appropriateness** of methods, actions and results.' '...use appropriate **investigation** to inform action.' 'Exercise…judgement within **broad** but **generally well-defined** parameters'	relevant responsibility for the work of others.' 'Exercise autonomy and judgement…'		
Commentary:	**Knowledge:** Knowledge requirements fall a little 'short' of the mapped EQF level requirements in that the inference taken is that the knowledge expected of a learner at CQFW Level 4 is not yet 'comprehensive'. However, the requirements of the previous level are met. The learner requirement to have an 'informed awareness' implies a less assimilated or owned awareness of different perspectives. However, the EQF requirement of learners to have an awareness of the appropriate scope maps across well. The CQFW requires of the learner an awareness of the 'appropriate' scope of the area of work or study. The EQF requires a realised awareness of such boundaries. (Note: We see in the CQFW Level 5 descriptor a better match to the EQF Level 5 descriptor.) **Skills:** A requirement for a comprehensive range of skills is not wholly mapped to the requirements of the EQF for a 'comprehensive range.' The extent of knowledge and so skills has to support the required level of problem-solving expected of learners at the level. Learners at this level need only to 'address' complex and non-routine problems that are still 'fairly well-defined' and so do not meet the demand of the EQF Level 5 descriptor in full. The requirements of the previous level are able to be met in full.					**Level progression commentary:** Knowledge attainment now is expected to encapsulate the domain to include core factual and peripheral and theoretical knowledge so that the learner is aware of the extent of established (factual and theoretical) knowledge attributed to a field of work or study. The learner can also begin to discern if knowledge relates to the field of work or study. As with the knowledge requirements of this level, the skills are also now comprehensive enabling the learner to progress to develop solutions to abstract problems. The increase in complexity from 'specific' at Level 4 to 'abstract' at Level 5 is a 'step-change' in demand. The ability of the learner to complete activities with awareness of strategies to manage 'troublesome knowledge.' The learner is required to be able to manage and supervise in a wider range of unpredictable contexts. There is progression in the responsibility from Level 4 in not only managing contexts of work or study activities to now also reviewing and developing the performance of self and others. The

	Problem-solving and complexity: The EQF expects the learner to have sufficient competence and knowledge to be able to approach now 'abstract' problems and be open to finding 'creative solutions.' This is not reflected in the CQFW Level 4 descriptors. The degree of understanding of the use and application of skills at CQFW Level 4 is still for 'fairly well-defined' problems. **Accountability and responsibility:** Only the CQFW Lifelong Learning Pillar requires responsibility for the work of others, which maps to the EQF requirements to 'review and develop performance of self and others.' Exercising of autonomy and judgment does reflect the requirements of the EQF Level 5 somewhat but maps closer to the EQF Level 4 requirements to 'take some responsibility' as the CQFW Lifelong Learning descriptor expects that to be taken within 'broad but generally well-defined parameters.' It is difficult to see how this would sufficiently support a learner wishing to be able to find 'creative solutions.' **Outcome:** Mapped to EQF Level 5 on basis of best-fit principle.		inference being of greater autonomy as the 'exercising' of management and supervision implies limited guidance.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 5	**CQFW: Regulated Qualification** 'Has practical, theoretical or technological knowledge and understanding of a subject or field of work to find ways forward…' 'Can…interpret…relevant information, concepts and ideas.' 'Is aware of the nature and scope of the area of study or work.' 'Understands different perspectives, approaches or schools of thought and the reasoning behind them' **CQFW: Lifelong Learning** 'Use practical, theoretical or technological understanding to find ways forward…'	**CQFW: Regulated Qualification** 'Determine, adapt and use appropriate methods, cognitive and practical skills to address broadly defined, complex problems.' 'Use relevant research or development to inform actions.' 'Evaluate actions, methods and results.' 'Evaluate relevant information, concepts and ideas.' **CQFW: Lifelong Learning** 'Evaluate actions, methods and results.' '…use appropriate methods and skills.'	**CQFW: Regulated Qualification** '…find ways forward...' '...address broadly defined, complex problems.' **CQFW: Lifelong Learning** '…find ways forward...' '...address broadly defined, complex problems.'	**CQFW: Regulated Qualification** No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. '…review of effectiveness and appropriateness of methods and skills used to address problems as well as their evaluation.' **CQFW: Lifelong Learning** 'Take responsibility for planning and developing course of action, including where relevant, responsibility for the work of others.'		**Mapped to Level 5:** **Knowledge:** Comprehensive, specialised, factual and theoretical knowledge **within** a field of work or study and an awareness of the boundaries of that knowledge. **Skills:** A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems. **Competence (a):** Exercise management and supervision in contexts of work or study activities where there is unpredictable change. **Competence (b):** Review and develop performance of self and others.

	'…interpret…relevant information, concepts and ideas.' 'Be aware of the nature and scope of the area of study or work.' 'Understands different perspectives, approaches or schools of thought and the reasoning behind them'	'Use relevant research or development to inform actions.'	'…adapt…methods and skills.' 'Analyse...relevant information, concepts and ideas.' 'Exercise…judgement within **broad** parameters'	'Exercise autonomy and judgment…'		
Commentary:	**Knowledge:** Learners here are expected to now 'understand the different perspectives and schools of thought and the reasoning behind them' This is taken to infer a greater more comprehensive knowledge of the area of study or work and this maps well to the EQF Level 5 descriptor that the learner is aware and understand the extent of knowledge **within** a domain. An awareness of the scope of the knowledge maps to the requirements of the EQF to also be aware of the 'boundaries of that knowledge.' The requirement to use their comprehension of specialised knowledge to create 'ways forward' implies a good match to the EQF requirement for comprehensive knowledge to enable the development of 'creative solutions.' **Skills:** A range of knowledge skills and practical skills are required to be able to address problems maps to the EQF requirements for a comprehensive range of skills. It is unclear if the learner is to use secondary research and development findings to inform actions or begin albeit tentatively to develop their own research using established knowledge within a domain. The former would then not provide the best basis to facilitate the development of creative solutions. **Problem-solving and complexity:** Problems are 'broadly defined' and 'complex' this closely matched to the EQF requirement for problems to be 'abstract.' There is still here an issue as to the surety of meaning of the term 'abstract' given that the graduation in knowledge requirements are towards now becoming specialised. The complexity of context for problems maps to the EQF requirements					**Level progression commentary:** Knowledge attainment now is expected to encapsulate the domain to include core factual and peripheral and theoretical knowledge so that the learner is aware of the extent of established (factual and theoretical) knowledge attributed to a field of work or study. The learner can also begin to discern if knowledge relates to the field of work or study. As with the knowledge requirements of this level, the skills are also now comprehensive enabling the learner to progress to develop solutions to abstract problems. The increase in complexity from 'specific' at Level 4 to 'abstract' at Level 5 is a 'step-change' in demand. The learner is required to be able to manage and supervise in a wider range of unpredictable contexts. There is progression in the responsibility from Level 4 in not only managing contexts of work or study activities to now also reviewing and developing the performance of self and others. The inference being of greater autonomy as the 'exercising' of management and supervision implies limited guidance.

	Accountability and responsibility: The level of autonomy maps to the EQF requirement to exercise management and supervision enabling judgement within broad parameters. These have no longer needing to be 'well-defined.' The EQF descriptor here requiring the context to be 'unpredictable.' It was unclear if the learner was assessed on the effectiveness of such management. The CQFW Lifelong Learning Pillar descriptor maps to the EQF for learners to review and develop performance of self and others, as it expects learners to 'take responsibility for work of others' implying a review of their performance or development needs in the least. It was unclear if the learner was to be assessed on the effectiveness of that 'review' or indeed if development occurred as a result. **Outcome:** A good correlation to EQF Level 5.		

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 6	CQFW: Regulated Qualification 'Has advanced practical, conceptual or technological knowledge and understanding…' '…interpret…complex information, concepts and ideas.'	CQFW: Regulated Qualification 'Determine, refine… adapt and use…. methods and advanced cognitive and practical skills…' Is able to discern the 'appropriateness' of 'methods and advanced cognitive and practical skills.' 'Evaluate actions and methods and their results…' 'Use and where appropriate design relevant research and development to inform actions.'	CQFW: Regulated Qualification '…address problems that have limited definition and involve many interacting factors.' '…create ways forward in context where there are many interacting factors.' Be aware of the 'implications' of the results of evaluation of methods and actions. To 'critically analyse…complex information, concepts and ideas.'	CQFW: Regulated Qualification No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. '…review of effectiveness and appropriateness of methods and advanced skills to evaluate the results and their implications.' CQFW: Lifelong Learning		Mapped to Level 6: Knowledge: Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles. Skills: Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study. Competence (a): Manage complex technical or professional activities or projects, taking responsibility for decision making in unpredictable work or study contexts. Competence (b): Take responsibility for managing professional development of individuals and groups.

	CQFW: Lifelong Learning '…use practical, conceptual or technological understanding…' '…interpret…complex information, concepts and ideas.'	CQFW: Lifelong Learning 'Refine…. practical, conceptual or technological understanding…' 'Determine…appropriate methods and skills' 'Evaluate complex information, concepts and ideas.' 'Use and where appropriate **design** relevant research and development to inform actions.'	CQFW: Lifelong Learning '…create ways forward in context where there are many interacting factors.' 'Address problems that have limited definition and involve many interacting factors.' Be able to 'refine' and 'adapt' methods and skills. To 'critically analyse…complex information, concepts and ideas.' Be aware of the 'implications' of the results of evaluation of methods and actions. 'Exercise…**broad** autonomy and judgement.'	'Exercise broad autonomy and judgement.' 'Take responsibility for planning and developing courses of action that are capable of underpinning substantial changes or developments.' 'Initiate and lead tasks and processes, taking responsibility where relevant for the work and roles of others.'		
Commentary:	Knowledge: The requirement of the EQF Level 6 descriptor here is of a 'critical' understanding of 'theories and principles' This is taken as a self-acquired comprehension borne through the critical application of analysis and evaluative to complex ideas and so maps well across.					Level progression commentary: Knowledge is now advanced from Level 5. The learner being able to analyse and evaluate theories and principles of the field of work or study to acquire greater understanding.

	There is a clear map in advanced knowledge skills then to the EQF, whilst referring to 'ideas' and 'concepts' rather than 'principles' and 'theories.' However, the shared meaning of the term 'advanced' may differ between its use in the Regulated Qualification Level 6 descriptor and the EQF Level 6 descriptor. **Skills:** The range and level of skill required allowing the learner to refine, design and adapt knowledge and practical skills to meet requirements of problems as presented. This infers the learner is required now to begin to develop their own approaches to research and development armed with an advanced comprehension of a field of work or study. There is direct reference at this level to the use of 'innovation' in the Regulated Qualification or Lifelong Learning level descriptors. Innovation seemed ambiguous in that it was unclear if it was to be determined in context to the learner's 'discovery' of a new way of completing tasks, that whilst enlightening may not be original to that field of work or study. Or if it implied an outcome that was new and so original within a given field of study or work. The information is required to be complex in nature. This maps to the EQF descriptor to be able to 'solve complex problems.' **Problem-solving and complexity:** The described range of problem-solving skills reflect the EQF requirement to have for the first time 'mastery' of problem-solving skills allowing the management of complex technical or professional activities or projects. (Note: The term 'mastery' is ambiguous give the requirements of the EQF Level 8 descriptor but is taken to refer to the achievement of competence of skills and understanding of the domain and its place alongside other related domains.) **Accountability and responsibility:** The 'initiate and lead' requirement of the CQFW Lifelong Learning Pillar maps across to the EQF requirement to 'manage' and 'take responsibility for decision-making.' The level of autonomy expected of a learner to be able to 'manage complex…activities or projects' and to 'take responsibility for decision-making' of the EQF descriptor is reflected in the CQFW Lifelong Learning Pillar requirement to exercise responsibility for work and roles of others. **Outcome:** A good correlation to EQF Level 6.		As with the knowledge required at this level the expectation here is that the learner is able to have mastered and exceeded the skills required to advance their knowledge and understanding. Problems increase in demand to be both complex and unpredictable whilst still contextualised to a 'specialised' domain. The progression here moves from the exercising of management and the review of activities in Level 5 to the management of complex technical or professional activities and projects within unpredictable contexts; and so away from the individual per se. Learners are expected to now take responsibility for managing wholly the more specific professional development of not just individuals but groups.

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 7	CQFW: Regulated Qualification '…uses practical, conceptual or technological knowledge and understanding of a subject or field of work…' 'Understands the wider contexts in which the area of study or work is located.' 'Understands current developments in the area of study or work.' 'Understands different theoretical and methodological perspectives…'	CQFW: Regulated Qualification Is able to 'reformulate… practical, conceptual or technological knowledge and understanding of a field of study or work to create ways forward…' Is able to 'analyse' and 'evaluate complex information to produce modified conceptions.' Is able to discern the appropriateness of 'methodologies' and 'approaches.' Is able to 'determine and use appropriate methodologies and approaches.' 'Design and undertake research, development or strategic activities to inform or produce	CQFW: Regulated Qualification 'Critically analyses…complex information, concepts and theories to produce modified conceptions.' Be aware of the 'short and long-term implications' of the outcomes of evaluation. Is aware of 'how' different 'theoretical and methodological perspectives' affect the area of study or work. Contexts are complex and have 'many interacting factors.' The outcomes of courses of action and/or activities modify	CQFW: Regulated Qualification No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. inference of responsibility to use appropriate methodologies and approaches to inform or produce change in the contexts as well as responsibility to critically evaluate both results and their short/long-term implications for the area of study or work.		Mapped to Level 7: Knowledge: Highly specialised 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. Skills (a): Critical awareness of knowledge issues in a field and at the interface between different fields. Skills (b): Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields. Competence (a): Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches. Competence (b): Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.

	CQFW: Lifelong Learning Has a 'practical, conceptual or technological understanding' 'Understands the wider contexts in which the area of study or work is located.' 'Understands current developments in the area of study or work.' 'Understands different theoretical and methodological perspectives…'	change in the area of work or study.' CQFW: Lifelong Learning 'Design and undertake research, development or strategic activities to inform or produce change in the area of work or study.' Is able to discern the appropriateness of 'methodologies' and 'approaches.' Is able to 'determine and use appropriate methodologies and approaches.' Is able to 'analyse' and 'evaluate complex information to produce modified conceptions.'	'conceptions' or 'produce change in the area of work or study. CQFW: Lifelong Learning 'Critically analyses…complex information, concepts and theories to produce modified conceptions.' Be aware of the 'short and long-term implications' of the outcomes of evaluation. Is aware of 'how' different 'theoretical and methodological perspectives' affect the area of study or work. Contexts are complex and have 'many interacting factors.' The outcomes of courses of action	CQFW: Lifelong Learning 'Exercise broad autonomy and judgement…' 'Take responsibility for planning and developing courses of action that initiate or underpin substantial changes or developments.'. 'Initiate and lead complex tasks and processes, taking responsibility, where relevant, for the work and roles of others.'		

			and/or activities create 'substantial change or development', modify 'conceptions' or 'produce change in the area of work or study. 'Exercise broad autonomy and judgement across a **significant area** of work or study.'			
Commentary:	**Knowledge:** The inferred level of comprehension of a specialised knowledge of a subject or field of work, maps to the EQF requirement for highly specialised knowledge some of which is at the forefront of the field. The requirement to be able to 'modify conceptions' or 'produce changes in an area of work or study' maps to the EQF Competence (a) requirement to 'transform' work or study contexts. This also maps to the EQF requirement in 'requiring new strategic approaches.' **Skills:** The requirement to 'create ways forward' maps to the EQF requirement to have sufficient comprehension to be able to use and manipulate knowledge and theories as a basis for the establishment of 'original' thinking or an original approach to researching a presented issue. Building on the expectation of 'mastery' expected at EQF Level 6 the ability to analyse and evaluate complex information and produce modified concepts maps with the competent use of the extended 'range of cognitive and practical skills described in the CQFW Pillars map to the EQF requirement for a 'critical awareness.' **Problem-solving and complexity:** Problems are specialised and complex and couched in contexts that are also complex and may have many interacting factors. These map to the EQF requirement for 'specialised problem-solving skills' to be able to now develop for the first time 'new' knowledge and procedures. The skills are defined now in terms of expected outcomes which either produce change or modify concepts.					**Level progression commentary:** The change in requirements of knowledge now to require the learner to have specialised knowledge building on the Level 6 to now be able to have a critical understanding of the field of work or domain, with a view to extending its breadth or depth. Skills are now differentiated into the interpretation and evaluation of issues underpinning knowledge within the domain and its interrelated fields of work or study and the expectation that the learner is able to use specialised problem-solving via research to develop new knowledge using 'original' thinking. The learner is required to use knowledge and skills acquired to competently both manage and be able to 'transform' work or study in unpredictable and complex contexts. The learner is responsible for extending professional knowledge and practice to use approaches that are less operational in nature and more strategic.

	This is the first time we see the requirement to 'self-actualise' being presented as indicative of a learner's ability at this level. Accountability and responsibility: The level of autonomy required maps to the EQF requirements of the matched level as the CQFW Lifelong Learning Pillar and by inference the CQFW Regulated Qualification Pillar's overall expectations if the knowledge and skills requirements are to be validly met a substantial amount of autonomy is required for thinking or approaches to research to be 'original.' Planning and developing courses of action to initiate or support substantial changes or development map to the EQF Competence (a) requirement. EQF requires at the matched level the review of the strategic performance of teams; whereas the CQFW level descriptors for both Pillars are still concerned here with the work and roles of others and not groups per se. Whilst the 'leading' required to address complex tasks and processes does require inferentially the ability to meet the EQF Skills requirements and Competence (a) in the least. Outcome: A good correlation to EQF Level 7.		

CQFW Standard Pillar characteristics / CQFW Level	Knowledge	Skills	Problem-solving and complexity	Accountability and responsibility		EQF Level Descriptor
Level 8	CQFW: Regulated Qualification 'Develops original practical, conceptual or technological understanding…' Is able to 'interpret…complex information, concepts and theories…' 'Understands…the wider contexts in which a field of knowledge or work is located.' 'Contributes 'original knowledge and thinking to a 'field of knowledge or work.' Has a '…understanding of different theoretical and methodological perspectives and how they affect the field of knowledge or work.'	CQFW: Regulated Qualification 'Use advanced and specialised skills and techniques to conceptualise and address problematic situations…' 'Formulate and use appropriate methodologies and approaches.' Is able to discern the appropriateness of 'methodologies and approaches.' 'Initiate, design and undertake research, development or strategic activities…' 'Critically evaluate actions, methods and results…'	CQFW: Regulated Qualification '…create ways forwards in contexts that lack definition and where there are many complex… interacting factors.' 'Critically analyse…complex information, concepts and theories to produce new knowledge and theories.' Be aware of the 'short and long-term implications' of the outcomes of evaluation for the field of work or knowledge and its wider context. '…address problematic situations that involve many complex… interacting factors.'	CQFW: Regulated Qualification No explicit reference to responsibility or accountability, but the degree of responsibility can be inferred from skills required and required indirectly via any supervisory and/or managerial tasks that are expected to be evidenced. I.e. Planning and development of course of action that have a **significant** impact on a field of work or result in **substantial** organisational or professional change.		Mapped to Level 8: Knowledge: Knowledge at the most advanced frontier of a field of work or study and at the interface between fields. Skills: 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. Competence: 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.

	CQFW: Lifelong Learning 'Develops original practical, conceptual or technological understanding…' Is able to 'interpret…complex information, concepts and theories…' 'Understands…the wider contexts in which a field of knowledge or work is located.' 'Contributes 'original knowledge and	CQFW: Lifelong Learning 'Conceptualise and address problematic situations…' 'Formulate and use appropriate methodologies and approaches.' Is able to discern the appropriateness of 'methodologies and approaches.' 'Initiate, design and undertake research, development or strategic activities…'	Is able to through actions 'extend or produce significant change in the field of work or study.' Able to 're-conceptualise' the wider contexts in which a field of knowledge of work is located.' CQFW: Lifelong Learning 'Create ways forwards in contexts that lack definition and where there are many complex and interacting factors.' '…address problematic situations that involve many complex and interacting factors.' Is able to through actions 'extend the field of work or knowledge or result in significant	CQFW: Lifelong Learning 'Take responsibility for the advancement of professional practice.' 'Take responsibility for planning and developing courses of action that have significant impact on the field of work or knowledge or result in substantial organisational or professional change.' 'Exercise broad autonomy, judgement and		

	thinking to a 'field of knowledge or work.' Has a '…understanding of different theoretical and methodological perspectives and how they affect the field of knowledge or work.'	'Critically evaluate actions, methods and results…'	organisational or professional change.' 'Critically analyse…complex information, concepts and theories to produce new knowledge and theories.' Be aware of the 'short and long-term implications' of the outcomes of evaluation for the field of work or knowledge and its wider context. Able to 're-conceptualise' the wider contexts in which a field of knowledge of work is located.'	leadership as a leading practitioner or scholar sharing responsibility for the development of a field of work or knowledge, or for substantial organisational or professional change.'		
Commentary:	**Knowledge:** The need for original understanding meets the needs of the EQF descriptor indicating the need to transcend the established understanding of a field of knowledge to be able to navigate complex contexts in which it is located to articulate innovative ways forward. **Skills:** The use of skills at this level should be sufficient to adapt and formulate independently or through a team, approaches and methodologies to undertake research, development or address strategic activities to meet the EQF Skills requirements. It was unclear if assessment was to determine also the effectiveness of such development.					**Progression commentary:** Knowledge of the domain its boundaries and interfaces with other related domains is at its zenith of what is accepted and established within a field of work or study. Unlike the Level 7 descriptor there is no stated expectation of further learning required of the learner. There is strong progression links from Level 7 as the skill elements builds on the previous levels requirements and again reaches its zenith so that the learner is able to solve 'critical' problems and

	The CQFW Pillars both use the term 'conceptualise' rather than the joint terms used in the EQF to 'synthesis' and 'evaluate.' **Problem-solving and complexity:** Problem-solving skills in contexts that are complex and have interacting factors and the ability of the learner to 're-conceptualise' indicate that the learner should be able to evidence the ability to extend or produce 'significant' change in a field of work or study. This maps to the EQF Skills requirements. Skills being a prerequisite for problem solving. The EQF Level 8 requirement to 'extend or redefine existing knowledge or professional practice' maps well against the Regulated Qualification and Lifelong Learning Level 8 descriptors requirement to 'produce new knowledge' and 'extend or produce significant change in…and development of… a field of work or study.' **Accountability and responsibility:** The requirement to 'share responsibility' for development seems additional to the EQF requirements to be 'committed to the development of new ideas and processes…' The CQFW Lifelong Learning Pillar requirements to develop courses of action that have significant impact on a field of work or study matches the EQF competence requirement to work towards the 'development of new ideas or processes at the forefront of work study contexts. The requirement to 'lead' as a practitioner maps to the EQF competence requirements to 'demonstrate substantial authority. **Outcome:** A good correlation to EQF Level 8.		extend and redefine the accepted and acknowledged knowledge or practice within a field of work or study. There is a 'step-change' here as the learner performs at an arrived at 'threshold concept' and so is required to demonstrate performance at its apogee within a work or study context to be able to work towards the development of new ideas and processes. Required characteristics are now used to define expectations as well as required behavioural attributes such as professional integrity and a 'sustained commitment.'

Appendix 3 – Findings from the Learning Outcome Review

Findings of the Learning Outcome Review

The activity was undertaken to evidence the extent to which learning outcomes were used in qualifications assigned to the Regulated Qualification Pillar of the CQFW. As Qualifications Wales has responsibility for the Regulated Qualification Pillar, it has access to data on all regulated qualifications offered in Wales via its Qualifications in Wales (QiW) database[9].

Learning outcomes are defined as:

> What a learner is expected to know, be able to do and understand at the end of a learning process or sequence.
>
> CEDEFOP, 2017, p.5

Learning outcomes are often used to determine the demand of qualifications. Awarding bodies map the levels of demand associated with a qualification on a 'best-fit' basis to the level descriptors of a qualifications framework. As such, they reflect the requirements of each level of demand. This also in turn allows for a range of qualifications with different purposes to be levelled according to their closeness to descriptors of the level of expected outcome. A qualification's learning outcomes are evident in qualification specifications and other documentation.

A set of qualifications were randomly selected at each level of the Regulated Qualification Pillar. A desk-based review of associated documentation was undertaken for each qualification to identify evidence of the use of learning outcomes[10].

As there is currently little guidance on how to write learning outcomes, it was decided that the review would seek to:

- Identify evidence of the use of descriptions of learning outcomes;
- Identify the use of occupational standards as aids for defining learning outcomes;
- Identify and assess the validity of command verbs[11] used in any identified learning outcomes; and
- Identify and assess the use of progression within identified learning outcomes.

Findings

Descriptions of learning outcomes, that were classically formatted as standards of achievement, were identified in the majority of qualifications within the sample population taken. The way learning outcomes were presented, however, did vary in format between qualifications.

[9] https://www.qiw.wales/
[10] These included: Specifications, Qualification Aims, Guidance (Assessment and delivery), and Sample Assessment materials.
[11] Command verbs in one observed set of learning outcomes for one component/module or unit within a qualification, may in themselves not be indicative wholly of the demands of a particular level of demand.

Vocational qualifications used learning outcomes more transparently than other qualification types. This may be in part due to the unitisation of such qualifications to focus on requirements of achievement of required competence-based standards, set by standards bodies and interested parties.

General qualifications often had their learning outcomes prescribed via regulatory qualification criteria.

The qualification learning outcomes reviewed did reflect the demand and complexity of the assigned level of demand.

Some outcomes were identified non-traditionally as 'qualification aims' or published progression paths within specifications or guidance. These, in themselves, were being used to capture, at the development stage, the depth and breadth of learning required.

Some referenced national occupational standards or guidance from standard setting bodies. These required achievement outcomes would also be useful indicators when designing a qualification of its fitness and so would inform assessment specifications, the choice of assessment instrument and associated controls on delivery and testing.

It was noted that learning outcomes do not exist in a vacuum and so consideration of progression was taken into account in respect of any prescribed delivery requirements and/or contexts.

One qualification was assessed, in the main, via observer judgement. Whilst the quality of performance of a learner was differentiated in the qualification's mark scheme, no discrete, traditional learning outcomes were identified. This example highlighted the difficulty of writing learning outcomes that differentiate according to artistic performance.

Overall, command verbs used within identified learning outcomes were appropriate to the level assigned to the qualification.

The review considered the relative complexity of the level of demand requirements when assessing their alignment. Terms such as 'evaluate' and 'identify' per se were considered then, not in isolation, but in relation to the fully described learning outcome in the context it would be assessed.

Learning outcomes were organised hierarchically in terms of chronology i.e. Learning Outcome 1 and then Learning Outcome 2 etc., and also incrementally in terms of increasing complexity of requirements, with each subsuming the previous learning outcome to provide the opportunity for the learner to realise the aim of the component/module or unit.

Associated assessment criteria within each learning outcome identified were also observed to have been designed to be incremental in nature and terms or complexity.

Notes on the review of the use of learning outcomes within qualifications sampled and the efficacy of associated command verbs are summarised here.

Use of Learning Outcomes in CQFW Regulated Qualification Pillar qualifications.

Entry Level									
Qualification level and title[12]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	For mat	Source	Notes
TCL Entry Level Certificate in ESOL International- Speaking and Listening (Entry 2)	✓	*[13]	✓		✓	✓	Learning outcomes are set out as; 'The Learner will…' and the Assessment criteria are set out as 'The Learner can…'	https://www.trinitycollege.com/resource/?id=7952	Learning outcomes are hierarchical in beginning to speak to engaging in discussions. Assessment criteria use appropriate command verbs for level. E.g. 'Use', 'Obtain'
City and Guilds Entry Level Essential Skills Wales in Application of Number (Entry 3)	✓	✓[14]	✓		✓	✓	Each level of skill incorporates and builds on the previous level. For example, the requirement to 'multiply and divide a simple decimal by a whole number, with and without a calculator' builds on 'multiply two-digit whole numbers by single-digit whole numbers' (Entry Level 3); when carrying out calculations at Level 3,	https://cdn.cityandguilds.com/ProductDocuments/Skills_for_Work_and_Life/English_Mathematics_and_ICT_Skills/3868/Centre_documents/ESW_Delivery_Guidance_for_	Standard set by DCELLS[15] (2010) Handbook and delivery guidance produced by ColegauCymru Learning outcomes are hierarchical in understanding numbers to understanding the context and using the appropriate method to

[12] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx
[13] Learning Objectives linked to Adult ESOL Core Curriculum (AECC) standards. CEFR standards also reflected.
[14] http://qualificationswales.org/media/1371/qwrd1088-final - esw suite design principles - june 2015 pdf2.pdf (Application of number and Communication use 2010 Welsh Government criteria.)
[15] Department for Children, Education, Lifelong Learning and Skills (DCELLS)

							candidates need to know how to 'work with, and convert between fractions, decimals and percentages', which is a requirement at Level 2. Learning outcomes are set out as; 'You must provide evidence that you can…' More detail is then provided with statements beginning with, 'In order to show that you are competent, you need to know how to…' Amplification is provided via a 'Guidance' column and a further table of more detailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'	Practitioners_-_CollegesWales_August_2017.pdf https://gov.wales/docs/dcells/publications/100524eswintroen.pdf	arrive at a calculated answer and to check answers thereafter. Appropriate level command verbs used. E.g. 'Use', 'Describe', 'Show', 'Explain.'
City and Guilds Entry Level Essential Skills Wales in Communication (Entry 3)	✓	✓	✓		✓	✓	Learning outcomes are set out as; 'You must provide evidence that you can…' More detail is then provided with statements beginning with, 'In order to show that you are competent, you need to know how to…' Amplification is provided via a 'Guidance' column and a further table of more detailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'	https://cdn.cityandguilds.com/ProductDocuments/Skills_for_Work_and_Life/English_Mathematics_and_ICT_Skills/3868/Centre_documents/ESW_Delivery_Guidance_for_Practitioners_-_CollegesWales_August_2017.pdf https://gov.wales/docs/dcells/publications/100524eswintroen.pdf	Standard set by DCELLS (2010) Handbook and delivery guidance produced by ColegauCymru Learning outcomes are hierarchical from extracting information, sorting it for relevance and communicating an overview based on that relevant information. Appropriate command verbs are used for the level such as 'identify', 'extract', 'use', 'respond.'

Level 1									
Qualification level and title[16]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
WJEC Level 1 Essential Application of Number Skills (EAoNS)	✓	✓	✓		✓	✓	Learning outcomes are set out as; 'You must provide evidence that you can…' More detail is then provided with statements beginning with, 'In order to show that you are competent, you need to know how to…' Amplification is provided via a 'Guidance' column and a further table of more detailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'	http://www.wjec.co.uk/qualifications/qualification-resources.html?subject=essentialApplicationOfNumberSkills1&level=eswFrom2015 https://cdn.cityandguilds.com/ProductDocuments/Skills_for_Work_and_Life/English_Mathematics_and_ICT_Skills/3868/Centre_documents/ESW_Delivery_Guidance_for_Practitioners_-_CollegesWales_August_2017.pdf	Handbook and delivery guidance produced by ColegauCymru Learning outcomes are hierarchical and systematic to carry out calculations and review sums. Command verbs are appropriate to the level such as 'Use', 'describe', 'interpret', 'carry out.'
OCR Level 1 Award in Administration (Business Professional)	✓		✓	✓[17]	✓	✓	Learning outcomes are set out in Units as; 'The Learner will…' Assessment criteria are described as 'The Learner can…'	http://www.ocr.org.uk/qualifications/vocational-qualifications-qcf-administration-	The Learning outcomes are hierarchical in 'Welcoming people' unit candidates first must 'Know why it is important to welcome people' to then 'be able to welcome people.'

[16] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx
[17] Relate to Business Administration NOS standards

								business-professional-level-1-award-03952/	Command verbs are appropriate to the level. E.g. 'Welcome', 'Follow', 'Answer routine questions', 'State'
ABRSM Level 1 Award in Graded Examination in Music Performance (Grade 1)	✓	*[18]	✓		✓	✓	Outcomes are described but not as discreet easily discernible tasks or activities.	http://www.abrsm.org/en/our-exams/	Music theory Grade 1 syllabus requirements are set out discretely but not in terms of 'What a learner can or will…' Grade 1 requirements set out the areas that must be displayed when being assessed playing an instrument i.e. Pedalling, Page turning, Interpreting the score. The mark scheme sets out differentiation will be determined. Aural tests are described in terms of what a candidate must do to 'listen' effectively.
City and Guilds Level 1 Essential Skills Wales in Application of Number Skills	✓	✓	✓		✓	✓	Learning outcomes are set out as; 'You must provide evidence that you can…' More detail is then provided with statements beginning with, 'In order to show that you are competent, you need to know how to…' Amplification is provided via a 'Guidance' column and a further table of more detailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'	https://cdn.cityandguilds.com/ProductDocuments/Skills_for_Work_and_Life/English_Mathematics_and_ICT_Skills/3868/Centre_documents/ESW_Delivery_Guidance_for_Practitioners_-_CollegesWales_August_2017.pdf https://gov.wales/docs/dcells/publications/100524eswintroen.pdf	Standard set by DCELLS (2010) Handbook and delivery guidance produced by ColegauCymru Learning outcomes are hierarchical and systematic to carry out calculations and review sums. Command verbs are appropriate to the level such as 'Use', 'describe', 'interpret', 'carry out.'

[18] ABRSM have their own defined standards set out as 'Graded Performance' (Grades)

BSC Level 1 Award in Health and Safety in a Construction Environment (QCF)	✓		✓	✓[19]	✓	✓	Overview states that 'Upon completion of the qualification, learners should be able to:' and then describes the areas the qualification covers. The Learning outcomes within its content state what a candidate will be expected to know, understand or be able to do and the assessment criteria describe the requirements that a candidate is expected to meet to demonstrate that a learning outcome has been achieved.	https://www.britsafe.org/products/level-1-award-in-health-and-safety-in-a-construction-environment-1	Learning outcomes start with the verb in each case i.e. 'Know…' The Assessment criteria then also start with a command verb i.e. 'State' Give this a Level 1 Award the command verbs used are at the lower end of the Level 1 descriptor in the main. E.g. 'Know', 'State', 'Outline' 'Identify'

[19] Contributes towards evidence required for CSCS Green card.

Level 1 / 2									
Qualification level and title[20]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
WJEC GCSE in French (Wales)	✓	✓	✓		✓	✓	Learning outcomes are set out in a non-traditional format i.e. 'Learners will be required to…demonstrate, follow, identify, deduce, etc.' The objectives are often multiple in nature i.e. 'initiate and develop, communicate and interact, understand and respond, etc.' The GCSE Mark scheme sets out what will be awarded and is hierarchical in its progression dividing outcomes into 2 sectors namely, Communication and Content and Linguistic knowledge and accuracy.	https://www.wjec.co.uk/qualifications/french/r-french-gcse-from-2016/	The Aim of the qualification sets out that the qualification 'will enable learners to…. develop their ability to, communicate, express and develop thoughts etc.' Outcomes for the Foundation and for the Higher tiers are differentiated.
OCR Level 1/2 GCSE (9-1) in Psychology	✓	✓	✓		✓	✓	The Grade descriptors for grades 2, 5 and 8 are set out by Ofqual and these are formatted as learning outcomes. For example, 'candidates will be able to… demonstrate, use, critically analyse, critically evaluate etc.' Assessment Objectives (AO1 to AO3) are hierarchical in nature;	http://www.ocr.org.uk/qualifications/gcse-psychology-j203-from-2017/	The Aims of the qualification states that it 'will encourage learners to…use, develop and acquire….' The content section of the specification states that 'learners are required to…' and that 'learners must demonstrate…'

[20] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx

							Demonstrate Knowledge and understanding Apply Knowledge and understanding Analyse and Evaluate to make judgements and draw conclusions		
WJEC Level 1/2 Award in Science for Work	✓	✓	✓		✓	✓	Unit is set out as Learning outcomes as: 'The Learner will…' Assessment criteria are set out as 'The learner can….' Amplification of breadth and depth is also described. Performance bands differentiate outcomes based on characteristics such as 'relevancy', 'degree of accuracy' 'appropriateness of reasoning' and 'degree of independence'	http://www.wjec.co.uk/qualifications/science/vocational/science-for-work-level-1-2/17711.pdf?language_id=1	Specification states that 'Learning outcomes state what the learner should know, understand or be able to do as a result of completing the learning in the unit. The assessment criteria specify the standard a learner is expected to meet to demonstrate that the learning outcomes of that unit have been achieved.' Learning outcomes are hierarchical for example: understand effect of greenhouse gases on Earth learners are first required to define the terms and gases involved and then to know the impacts on climate and then finally to assess evidence linking prevalence of such gases to rises such impacts. Command verbs are appropriate for the level E.g. 'describe', 'explain', 'assess' 'analyse', 'make recommendations.'

Level 2									
Qualification level and title[21]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
RSPH Level 2 Award in Food Safety and Hygiene	✓	✓	✓	✓ [22]	✓	✓	Learning outcomes are summarised non-traditionally as; 'Candidates must…' The required breadth and depth following from that stem.	https://www.rsph.org.uk/qualification/level-2-award-in-food-safety-and-hygiene.html	Outcomes in the Specification are written as 'Summary of outcomes' with the learner being requested to 'Understand….by being able to meet the following assessment criteria…' Command verbs are hierarchically arranged and appropriate as they require 'Understanding' to be evidenced by the learner having to 'identify', 'explain', 'outline'
HABC Level 2 Award in Food Safety in Catering	✓	✓	✓	✓ [23]	✓	✓	Unit is written as Learning outcomes that begin, 'The learner will…' This is converted to Assessment criteria which begin 'The learner can….' Indicative content for each learning outcome is set out giving guidance on range and breadth of content to be covered.	https://www.highfieldabc.com/qualifications/compliance/food-safety-qualifications/L2FSCRegulatedQualificationUK	Learning outcomes are hierarchical in that learners for example are to 'Understand how individuals can take personal responsibility for food safety' They first are required to identify the importance of food hygiene procedures then to be able to identify hazards and finally recognise responsibilities. Command verbs used are level appropriate. E.g. 'identify', recognise',
City and Guilds Level 2 Essential Digital Literacy Skills	✓	✓	✓		✓	✓	Learning outcomes are set out as; 'You must provide evidence that you can…'	https://cdn.cityandguilds.com/ProductDocuments/Skills_	Standard set by DCELLS (2010)

[21] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx
[22] Qualification is mapped to Food Hygiene National Occupational Standards
[23] Content is mapped to Food Standards Agency guidelines

							More detail is then provided with statements beginning with, 'In order to show that you are competent, you need to know how to…' Amplification is provided via a 'Guidance' column and a further table of more de and a further table of more detailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'tailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'	for_Work_and_Life/English_Mathematics_and_ICT_Skills/3868/Centre_documents/ESW_Delivery_Guidance_for_Practitioners_-_CollegesWales_August_2017.pdf	Handbook and delivery guidance produced by ColegauCymru Learning outcomes are hierarchical and systematic to understanding how digital technologies can be useful by gathering information, sorting for relevance, identifying information of how each is useful and also the problems and issues with such technology. Command verbs are appropriate to the level such as 'State', 'Manage', 'Organise', 'Give reasons.'

Level 3									
Qualification level and title[24]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
WJEC Advanced and Advanced Subsidiary GCE Mathematics	✓	✓	✓		✓	✓	Specification states that 'Candidates will be expected to be familiar with the knowledge, skills and understanding implicit in……' The Assessment Objectives are set out as Learning Outcomes in that they are set out as 'Candidates should be able to…. recall, comprehend, use etc.' The Key Skill descriptors are set out as learning outcomes.	https://www.wjec.co.uk/qualifications/qualification-resources.html?subject=Mathematics&level=GCEASA	The aim of the qualification sets out as objectives but is written as 'will encourage candidates to….' The Assessment objectives are hierarchical in nature within each Assessment Outcome from AO1 to AO4. (AO5 is primarily requires the accurate and efficient use of technology and techniques) Grade descriptors again are hierarchical and employ the use of level appropriate command verbs.
Pearson Edexcel Level 3 Advanced GCE in History of Art	✓	✓	✓		✓	✓	The Assessment Objectives are non-traditional in that they state that 'students must demonstrate, analyse, interpret, and make critical judgements.' The mark schemes are hierarchical in nature for each level of Knowledge, understanding, analysis and critical judgement evidenced.	https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/history-of-art-2017.html	The aim of the qualification states that it will 'enable students to…engage, understand, know and be able to analyse and make critical judgements.' A taxonomy of command verbs is provide defining what is meant by each. They are appropriate to the level of the qualification.

[24] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx

City and Guilds Level 3 Essential Communication Skills	✓	✓	✓		✓	✓	Learning outcomes are set out as; 'You must provide evidence that you can…' More detail is then provided with statements beginning with, 'In order to show that you are competent, you need to know how to…' Amplification is provided via a 'Guidance' column and a further table of more detailed description of evidence requirements. The Confirmatory test requirements set out 'The Learner needs to know how…'	https://cdn.cityandguilds.com/ProductDocuments/Skills_for_Work_and_Life/English_Mathematics_and_ICT_Skills/3868/Centre_documents/ESW_Delivery_Guidance_for_Practitioners_-_CollegesWales_August_2017.pdf https://gov.wales/docs/dcells/publications/100524eswintroen.pdf	Standard set by DCELLS (2010) Handbook and delivery guidance produced by ColegauCymru Learning outcomes are hierarchical and systematic to writing a short document to a specific audience by selecting relevant information, planning and drafting a piece of writing, correctly using grammar, and checking the piece for errors. Command verbs are appropriate to the level such as 'Read and understand', 'Plan', 'Identify', 'Use', 'Review.'
QA Level 3 Award in First Aid at Work	✓	✓	✓	✓ [25]		✓	Units are designed and set out as Learning outcomes. E.g., 'The learner will…' The Assessment criteria are set out as 'The learner can…'	http://www.qualsafeawards.org/sites/default/files/QA%20Level%203%20Award%20in%20First%20Aid%20at%20Work%20%28QCF%29%20Qualification%20Specification_1.pdf	Evidencing the learner's ability to be able to provide first aid to a casualty begins with the learner having to 'recognise' the presenting condition and then 'administer' the appropriate first aid. This comes as the summative Learning outcome of the qualification so is built on the knowledge learned previously. Command verbs are appropriate to the practical nature of the qualification content and purpose. E.g. 'identify',' describe', 'recognise', 'demonstrate' 'administer'

[25] Based on standards set by the British Resuscitation Council (UK) and Health and Safety Executive (HSE) training standard for delivery of First Aid at Work (FAW)

Level 4									
Qualification level and title[26]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
City and Guilds Level 4 NVQ Diploma in Advice and Guidance	✓	✓	✓	✓[27]	✓	✓	Achievement is also gauged against 'currency' of knowledge used, and comprehensiveness against NOS standards, level of learning and context. Each unit is set out as Learning outcomes. E.g., 'The learner will….' These have assessment criteria, and these are phrased as 'The learner can…' Guidance is provided for each unit setting out the required context in which the knowledge skills and understanding are to be assessed and sufficiency of evidence expected and controls for their authenticity. Links to each NOS reflected in the requirements of each unit are listed.	https://www.cityandguilds.com/qualifications-and-apprenticeships/learning/advice-and-guidance-and-career-information-and-guidance/3569-advice-and-guidance-support	Learning outcomes are hierarchical, for instance for the learner to be able to identify and provide accurate information required by clients. They must first 'Explore-Identify-Check- Agree' Command verbs are appropriate to the practical nature of the qualification content and purpose. E.g. 'Explore', 'Check', 'Create', 'Recognise', 'Manage.'
ILM Level 4 NVQ Diploma in Management	✓	✓	✓	✓[28]	✓	✓	Units are set out as Learning outcomes. E.g.	https://www.i-l-m.com/Learning-	Learning outcomes are hierarchical E.g. 'Identify-Compare-Evaluate'

[26] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx
[27] Mapped to National Occupational Standards in Advice and Guidance (2006).
[28] Mapped to Management and Leadership National Occupational Standards.

							'The Learner will…' Assessment criteria are set out as; 'The learner can…' Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula.	and-Development/management/management-and-leadership-generic/8622-level-4-nvq-diploma-in-management	Command verbs are appropriate to level. E.g. 'Compare', 'Evaluate', 'Execute' 'Amend' 'Review.'

Level 5									
Qualification level and title[29]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
CMI Level 5 Certificate in Management and Leadership	✓	✓	✓		✓	✓	Units are set out as Learning outcomes. E.g., 'Be able to…' With associated assessment criteria. These start with command verbs ('The learner can…' or 'learner will…') Sufficiency of evidence is defined in 'Good Practice' column.	https://www.managers.org.uk/~/media/Files/Qualifications/Level-5-in-Management-and-Leadership/L5-Management-and-Leadership-Syllabus.pdf	Learning Outcomes are hierarchical. E.g. Learners are required to 'Be able to assess and plan for personal professional development…' by 'identifying' then 'assessing' then 'constructing' Command verbs are appropriate for the level. E.g. 'Construct', 'Assess', 'Develop', 'Discuss', 'Review'
City and Guilds Level 5 Diploma in Leadership for Children's Care, Learning and Development (Advanced Practice) (Wales and Northern Ireland)	✓	✓	✓	✓[30]	✓	✓	Unit set out all Learning outcomes in the unit guidance these are then described as 'Outcomes' with associated 'Assessment criteria'. Outcomes are designed as the learner will 'be able to do'. The Assessment criteria are set as 'the learner can…'	https://cdn.cityandguilds.com/ProductDocuments/Children/Children_and_Young_People/4227/4227_Level_5/Centre_documents/4227-07_L5_Qualification_handbook_Wales_NI_Mandatory_v2-1.pdf	The learning outcomes are hierarchical. E.g. Be able to improve health, safety and risk management policies, procedures and practices in health and social care or children and young people's settings, the learner is expected to 'Obtain-Evaluate-Identify-Recommend'

[29] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx
[30] Mapped to the CCLD and Health & Social Care National Occupational Standards.

Level 6									
Qualification level and title[31]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
CILEx Level 6 Certificate in Law	✓	✓	✓	✓	✓	✓	Units are set out as Learning outcomes and state; 'The learner will….' Assessment criteria are set out as 'The learner can…' Exemplification is provided within each unit of knowledge, skills and understanding expected.	https://www.cilex.org.uk/~/media/pdf_documents/main_cilex/education/study_pdfs/unit_spec_2019/level_3/l3u3_2019_final.pdf?la=en	Knowledge, skills and understanding are amplified to give the learner an idea of required breadth and depth. Learning outcomes are hierarchical in that for learners to evidence their ability to 'Understand the nature and features of strict liability' They are required to 'Define-Identify-Explain-Apply-Evaluate.' Command verbs are appropriate to the level 'Define', 'Explain', 'Apply', 'Evaluate'
TCL Level 6 Diploma in Music Theory	✓	✓	✓	✓	✓	✓	Outcomes are started by; 'Candidates should demonstrate…' followed by command verb	www.trinitycollege.com/resource/?id=7382	Assessment is through practical and written examination. Each unit also has Assessment Objectives E.g. 'Candidates should demonstrate: 'a broad-based body of knowledge in music theory and familiarity with relevant concepts and issues, including knowledge of how to analyse musical structures by studying a written score.'

[31] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx

CIPS Level 6 Professional Diploma in Procurement and Supply	✓	✓	✓	✓[32]	✓	✓	Units set out as Learning outcomes. 'Candidates will be able to….' Assessment criteria set out as command verbs. Indicative content is set out in each unit.	https://www.cips.org/Documents/Qualifications/Unit_Content_Guides/1/CIPS_ProfDipProcSupp_WEB%20FINAL.pdf	Learning outcomes are defined in the syllabus as 'The learning outcome within a unit sets out what a learner is expected to know, understand, or be able to do as a result of a process of learning.' Assessment criteria are defined as 'Assessment criteria specifies the standard a learner is expected to meet to demonstrate that the learning outcomes of a unit have been achieved.' Command verbs are appropriate to the level 'Critically evaluate', 'Critically analyse', 'Create.' Learning outcomes are hierarchical. E.g. In order for the learner to evidence 'Understanding of… the main elements of strategy formulation and implementation that impact on supply chains' they are required to 'Critically compare, critically assess-evaluate- 'implement'.

[32] References standards set by the International Standards Organisation (ISO) for supply and procurement standards i.e. OSI, EDIFACT, and X.40

Level 7									
Qualification level and title[33]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
City and Guilds Level 7 Certificate in Executive Coaching and Mentoring	✓	✓	✓	✓[34]	✓	✓	Learning outcomes are set out in units. 'The learner will…' Assessment criteria are set out as 'The learner can…' Indicative content is provided for each learning outcome breadth and depth required. Links to Coaching & Mentoring 2012 NOS: LSI CM01, LSI CM02, LSI CM03, LSI CM04, LSI CM08, LSI CM10	https://www.i-l-m.com/~/media/ilm%20website/sharepoint%20documents/_published%20documents/level-7-certificate-and-diploma-in-executive-coaching-and-mentoring-ilm-part-b-specification.docx.ashx https://www.i-l-m.com/~/media/ILM%20Website/Sharepoint%20Documents/_Published%20Documents/Understanding-the-context-of%20coaching-and-mentoring-in-	Learning outcomes are hierarchical, for instance for the learner to be able to evidence 'Understanding the context of coaching and mentoring in a strategic business environment' Learners have to 'Define - Critically review – Evaluate - Determine.' Command verbs are appropriate to the level. E.g. 'Critically review', 'Evaluate', 'Justify','

[33] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx
[34] Links to Coaching & Mentoring National Occupational Standards: LSI CM01, LSI CM02, LSI CM03, LSI CM04, LSI CM08, LSI CM10

								a-strategic-business-environment-ilm-unit-specification.docx.ashx	
Pearson Edexcel Level 7 NVQ Diploma in Construction Senior Management	✓	✓	✓	✓[35]	✓	✓	Units are set out as Learning outcomes. E.g. 'The learner will be able to…' Assessment Criteria state; 'The learner can….' Unit summary sets out NOS linked to qualification. Context in which assessment must take place and sufficiency of evidence required.	https://qualifications.pearson.com/content/dam/pdf/NVQ-and-competence-based-qualifications/Construction-Senior-Management/2010/Specification/N025083-L7-NVQ-Dip-Construction-Senior-Management-QCF-291110.pdf	Learning outcomes are hierarchical e, g Learners required to evidence 'Understand how to select and form a project team' need to 'Describe-evaluate-propose-explain' Command verbs are appropriate for the level 'Propose', 'Review'. 'Consult', 'Judge'

[35] Based on requirements of National Occupational Standards as defined by ConstructionSkills, the Sector Skills Council.

Level 8									
Qualification level and title[36]	Qualification aim	Regulatory criteria	Learning Outcomes	Occupational Standards	Assessment criteria	Verbs reference level	Format	Source	Notes
CMI Level 8 Diploma in Strategic Direction and Leadership	✓	✓	✓		✓	✓	Units are set out as Learning outcomes: 'Be able to…' Assessment criteria are set out as command verbs. Good practice column sets out requirements of learner in terms of sufficiency of response and	https://www.managers.org.uk/~/media/Files/Qualifications/Level-8-Strategic-Management-and-Leadership/L8-Strategic-Management-and-Leadership-Syllabus.pdf	Learning outcomes are hierarchical. E.g. Learners to evidence their ability to 'Be able to explain how policy objectives are translated into inter-organisational strategies', they must first 'Review' then 'Evaluate.' Command verbs are appropriate to the level. E.g. 'Evaluate', 'Compare', 'Assess', 'Analyse','
QUALIFI Level 8 Diploma in Strategic Management	✓	✓	✓		✓	✓	Learning outcomes are set out as; 'The Learner will be able to…' Assessment criteria are set out as command verbs Indicative content is described setting out breadth and depth required.	https://qualifi.net/wp-content/uploads/2016/12/QUALIFI-Level-8-Diploma-in-Strategic-Management-and-Leadership-Qualification-Specification-September-2016.pdf	Learning outcomes are hierarchical. E.g., Learners required to evidence their ability to 'Be able to recognise leadership qualities that support organisational mission and values' must first 'Critically evaluate-Critically analyse-Address recommended changes required.' Command verbs are appropriate to the level. E.g. 'Plan and deliver', 'Critically evaluate', 'Critically analyse', 'Address.'

[36] http://qualificationswales.org/media/3206/vq-2017-q4-statistical-tables-english.xlsx

Appendix 4 – Letter of support from QAA

9 May 2019

QAA can confirm that it has been involved in the updating of the Referencing of the Credit and Qualification Framework for Wales (CQFW) to the EQF process in 2019. Dr Alison Felce has represented the QAA on the Steering Group established to oversee this process and has had opportunity to input to and comment on the various drafts and the final version of the updated referencing report.

I can confirm on behalf of QAA that the report reflects the current quality assurance arrangements in Wales in respect of the CQFW, which incorporates the Framework for Higher Education Qualifications (FHEQ), of the key quality assurance role of QAA in those arrangements and that QAA is happy to endorse this updated referencing report.

Yours faithfully

Rowena Pelik
Director of Nations and International

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Appendix 5 – Statement from Dr John O'Connor, Quality and Qualifications Ireland (International expert)

Comments on report on a review and update of the referencing of levels of the CQFW to the levels of the EQF.

International Commentator: Dr John O'Connor, Head of Qualifications and Skills Policy, Quality and Qualifications Ireland.

April 2019

General Observations

The updated referencing report provides a sound basis to confirm and strengthen the relationship between the Credit and Qualifications Framework for Wales (CQFW) and the European Qualifications Framework (EQF). The report presents evidence against each of the 10 criteria for referencing that were established by the Council of the European Union in May 2017.

In my opinion, the report provides a comprehensive and transparent description of the Welsh qualifications system. Given the complexity of any national qualifications systems, this report provides sufficient data, information, analysis and commentary, to promote transparency and confidence in the relationship between the CQFW and the EQF. The report includes critical and reflexive analysis. The reality of incremental change, contestation and challenges are not dodged, rather they are revealed and acknowledged as part of the process and consequence of updating the referencing report. Such balance between the descriptive and critical analysis has become a strength of EQF referencing, encouraging participating countries to demonstrate both how threshold criteria for establishing and strengthening EQF referencing are addressed within the national context, but also providing a platform for reflection and planning. The capacity to be frank about strengths and weaknesses surrounding NQFs is a signal of the growing maturity of the EQF project and of its constituent NQFs.

The report is accessible, addressing a domestic and international audience. As the product of a Steering Group comprising key actors, the report presents the nationally agreed position on the state of the CQFW and its relationship with the EQF. As an international commentator, I was afforded access to all relevant documentation and invited to participate in meetings of the Steering Group, which were conducted in an open and inclusive spirit. Input and advice sought from stakeholders, including international experts, was duly considered. The technical work, underpinning the mapping of the levels of the CQFW and the EQF, is detailed and convincing. The analysis of the use of learning outcomes in general and VET qualifications, included in the appendices of the report, is a commendable and innovative example of the breadth of technical work completed.

Notwithstanding the 'elephant in the room', the timing of this report is not just influenced by the prospect of a changed relationship between the UK and the EU. Since the UK presented their single EQF referencing report in 2010, Wales has experienced greater devolution of and divergence in its national education and training policy. There have been significant institutional and legislative changes; notable among these is the establishment of Qualifications Wales. The qualifications authorities in Wales have also commissioned periodic reviews and evaluations of the CQFW, the results of which have informed the evolution of the CQFQ and associated policy. This report is therefore timely, notwithstanding Brexit.

Innovative features of the CQFW, of interest to an international audience, include the concept of 'Pillars'. The Lifelong Learning Pillar in particular is interesting, a national response to the desire for the CQFW to be comprehensive and inclusive of all learning. The establishment and practice of high-level principles underpinning the CQFW are also a notable feature, given their capacity to promote coherence across the three distinct Pillars. Based on this updated referencing report, there can be little doubt that the CQFW is well established, widely used and accepted and embedded within broader education and training policy in Wales.

The report details the legislative, regulatory, quality assurance and institutional arrangements that support the operation of the CQFW. Broadly representative governance systems are in place, which ensure the integrity of the CQFW.

In my opinion, the approach and method employed to update the 2010 referencing exercise and the resulting evidence presented in this report, serve to confirm and strengthen the association between the CQFW and the EQF. The updated referencing report was produced consistent with the guidance provided in Note AG 43-4-REV on the Updating of EQF referencing reports as part of the EQF AG work programme 2018-19.

Comment on the extent to which the draft report addresses the criteria and procedures for referencing national qualifications frameworks or systems to the European Qualifications Framework, as set out in Annex III of the 2017 Recommendation.

Criterion 1:

The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Co-ordination Point, are clearly determined and published by the competent public authorities.

This criterion is addressed. The institutional, legislative and governance arrangements supporting the CQFW are apparent and operational.

Criterion 2

There is a clear and demonstrable link between the qualifications levels in the national qualifications frameworks or systems and the level descriptors of the EQF.

This criterion is addressed. The technical mapping exercise is transparent, detailed and exhibits certain innovative features. The resulting outcomes have been accepted and confirmed by the representative Steering Group. The mapping exercise was all the more challenging since each Pillar of the CQFW has its own set of level descriptors and, while this adds to the complexity of addressing this criterion, it also affords the opportunity to use EQF level descriptors to complete a 'soft triangulation' of the relationship among the level descriptors for the Higher Education, Regulated and Lifelong Learning Pillars.

Criterion 3

The national qualifications frameworks or systems and their qualifications are based on the principle and objective of learning outcomes and related to arrangements for validation of non-formal and informal learning and, where appropriate, to credit systems.

This criterion is addressed. The UK education and training system has a long tradition of learning outcomes-based qualifications. The way that learning outcomes are interpreted and used in practice across the three Pillars of the CQFW, is presented in the report. Appendix 3 – outcomes of review of learning outcomes, adds to the discussion and suggests that learning outcomes play an important role in the development, validation and levelling of qualifications in Wales.

Both the Lifelong learning Pillar and entry-level qualifications signal the CQFW openness to recognise all learning achievements. The various successes and challenges experienced in Wales when seeking to validate all learning achievements are set out in the report. The challenges described, particularly in relation to accommodating informal learning within the CQFW, are honest and interesting to international colleagues.

The CQFW is demonstrably related to the national system for credit.

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

This criterion is addressed. The procedures for including qualifications within the CQFW are described in the report. The mix of principles, regulations and quality assurance arrangements that support the assignment of a level to a qualification in each of the three Pillars, is apparent. Particularly for the Higher Education and the Regulated Pillar, the procedures for inclusion of qualifications within the CQFW have regard to the procedures that operate across countries within the UK where regulatory and quality assurance arrangements are cross territorial.

Criterion 5

The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems and are consistent with the principles on quality assurance as specified in Annex IV to this Recommendation.

This criterion is addressed. As with other recent referencing reports, my sense is that the principles in Annex IV will need further refinement so that participating countries can best present aspects of their quality assurance systems that promote confidence in their NQFs. If comparable analysis of quality assurance arrangements supporting qualifications, is of interest to the EQF community, again, some further consideration and guidance on how consistency with the principles in Annex V is to be demonstrated, will be required by the EQF-AG. Currently, in my opinion, the principles are open to a fairly liberal interpretation which the EQF-AG will need to decide is a good thing or not.

Notwithstanding this point, the current report has interpreted the principles in a reasonable way and presents relevant examples of quality assurance arrangements for each of the three Pillars that suggests consistency with the European norms. The tabular presentation of the evidence enhances the accessibility of the report.

Criterion 6

The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.

This criterion is addressed.

Criterion 7

The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.

This criterion is addressed.

This written statement is one of a number of written comments and observations I have had the opportunity to provide in response to earlier versions of the report. I have participated in meetings of the Steering Group where the collective ownership of the CQFW was apparent and where consensus and agreement typified the approach to developing the report. In my experience, the quality of engagement with international experts in the preparation of this report was appropriate.

In my view, the Welsh authorities' update to the EQF-AG in February 2019 on the approach to updating their referencing report was well prepared and the follow-up to questions, comments and advice received was thorough and reflected in the final report.

There is no doubt that interested readers will have questions about the Welsh qualifications system, or any qualifications system given their innate complexity and the limitations of an EQF referencing exercise to meet the information needs of all audiences. Never the less, in my opinion, what is presented here is a comprehensive review and updating of the original referencing report that satisfactorily addresses each of the referencing criteria and strengthens the relationship between the CQFW and the EQF.

Criterion 8

The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.

This criterion is addressed. It is worth noting that the Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland, is separately referenced to the EQF for the first time as part of the England/Norther Ireland updated referencing report. The FHEQ was self-certified as compatible with the QF-EHEA in 2008.

Criterion 9

Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

This criterion is addressed. Provision for addressing this criterion is evident.

Criterion 10

Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.

This criterion is addressed. International audiences may be interested in the state of play regarding the availability, or otherwise, of European Certificate and Diploma supplements in Wales. To the extent to which they are available, they may afford an opportunity to promote the CQFW/EQF levels associated with qualifications gained in Wales.

Appendix 6 – Statement from Horacy Dębowski, Centralna Komisja Egzaminacyjna, Poland (International expert)

13 May 2019
Horacy Dębowski

Comments on Referencing the Credit and Qualifications Framework for Wales to the European Qualifications Framework. Report – April 2019.

International Commentator: Horacy Dębowski, Vice director of the Central Examination Board in Poland (CKE)

General Observations

1. The presented report updates the referencing of the Credit and Qualifications Framework for Wales (CQFW) with the EQF and is designed to complement updated referencing reports produced by other UK countries, namely the Scottish report. The Scottish report was submitted to the EQF AG in 2018 and the report of England and Northern Ireland is scheduled to be submitted to the EQF AG in October 2019.

2. The CQFW consists of three 'Pillars': Higher Education Pillar, Regulated Qualifications Pillar and Lifelong Learning Pillar. Each Pillar has its own set of level descriptors, institutional set-up, inclusion of qualification procedures and quality assurance mechanisms. The updated report presents linkages of the Regulated Qualifications Pillar and Lifelong Learning Pillar to the EQF. The report does not address the Higher Education Pillar and the self-certification process carried out within the European Higher Education Area.

3. Updating the referencing report of Wales is motivated mostly by developments in the Welsh education and qualifications system especially in relation to changes in the level descriptors of the CQFW, the institutional set up and quality assurance procedures. Therefore, updating the referencing report from 2010 with regards to Wales is relevant and justified (see EQF AG note 43-4 on updating referencing reports from December 2017).

This referencing report for Wales has been produced with Brexit as the backdrop. The report indicates the value for Wales to continue to be linked with European qualifications systems after the UK leaves the European Union and stresses the importance of the European Qualifications Framework as a tool for providing transparency and trust between the different systems across Europe. The referencing process is also being seen by Wales as a way of promoting its qualifications system in Europe and beyond.

4. The report documents well the fulfilment of the 10 criteria as indicated in the Council Recommendation of May 2017 on the European Qualifications Framework.

The report addresses the 10 criteria clearly and adequately and provides confidence about alignment of the Welsh qualifications system, based on the CQFW, with the EQF principles.

Analysis of the level descriptors of the CQFW (Regulated Qualifications Pillar and Lifelong Learning Pillar) to the EQF has been done thoroughly providing strong evidence of the linkages between CQFW level descriptors and the EQF level descriptors.

The report shows that CQFW has become, since 2010, more deeply embedded in policy and practice in Wales and has evolved from a regulatory/transformative framework into a more communicative framework.

5. Updating the referencing report in Wales was thoroughly prepared and was preceded by a number of other related activities. One activity was the qualitative impact review of the CQFW that was commissioned by the Welsh Government in 2014. It should also be highlighted that comments and feedback received at the EQF AG forum after publication of the UK referencing report in 2010 were duly analysed by the Welsh referencing team and have been included in the report.

6. The process of work on the report was very transparent from the perspective of an international observer. Both international experts were invited to be members of the Wales Steering Group on the updating the referencing report. We were equipped with a large set of documents and notes explaining the aims of the referencing process in Wales, its organisational solutions as well as detailed information about the adopted approaches. We also participated in the discussions of the Steering Group through the process of preparing the report for the submission to the EQF AG.

7. International experts provided written comments in two rounds of work on the report and participated in the Steering Group meeting held in November 2018 and in January 2019. All the questions posed by the international experts were answered and the given comments were duly analysed.

The following issues, among many others, were raised during discussions with the international experts:

- the rationale for updating the report including the context of Brexit and changes in the education and qualifications system in Wales over the last eight years;
- concepts of “Pillar”; “learning” and “qualifications” in the Welsh qualifications system. The report uses, in some places, the terms “learning” and “qualifications” interchangeably.
- the rationale for distinguishing a Lifelong Long Learning Pillar, its quality assurance solutions and whether this Pillar includes qualifications in the EQF sense or not;
- the structure of the report and the order of chapters to ensure the most possible transparency for readers from abroad;
- clarifying the relationships between three sets of level descriptors in the CQFW for the three Pillars of the qualifications system. Also, an indication of how large each Pillar is in terms of qualifications awarded, number of learners, etc.;
- the rationale for the reduction of autonomy & responsibility category from the Regulated Qualifications Pillar level descriptors and the effect on the linkages with the EQF;
- the outcomes of the mapping of the CQFW Regulated Qualifications Pillar and Life Learning Pillar to the EQF. There was discussion regarding the indication of the strengths of the

linkages between CQFW and the EQF levels used in the report ("a fair correlation", "a good correlation", correlation based on the "best-fit" principle);
- with reference to Criterion 3, there were discussions regarding the terms and concept of validation of non-formal and informal learning and credit accumulation and transfer in the Wales qualifications system;
- how to structure the description in the report to show fulfilment of Criterion 5;
- to include in the report a more detailed description of the existing procedures for the inclusion of qualifications in the CQFW;
- to broaden the description of quality assurance procedures and practices used in the Lifelong Learning Pillar;
- to provide information regarding further development of the CQFW and the Welsh qualifications system.

8. The report is divided into six chapters and seven appendices.

Chapter 5 (Evidence against the Criteria for Referencing) is preceded by three chapters that describe: the context for the CQFW including a description of Wales' education system (Chapter 2); the CQFW (Chapter 3) and changes to the CQFW since the 2010 referencing report (Chapter 4). I found the information in these three chapters to be very relevant and informative in the context of the updating exercise.

Chapter 5 presents responses to the referencing criteria. Chapter 6 presents information regarding further development of the CQFW. Appendices 1 and 2 provide detailed information regarding the mapping and linkages of the CQFW and EQF level descriptors. Appendix 3 presents the use of learning outcomes in the CQFW Regulated Qualification Pillar based on the chosen sample qualifications.
In my view, Appendix 3 provides information that allows a better sense of what types of qualifications might be included in the NQF and how they are designed and, as a result, to have a better understanding of the qualifications system in Wales.

Compliance with the Referencing Criteria

Below are presented comments on the extent to which the report addresses the criteria and procedures for referencing national qualifications frameworks or systems to the European Qualifications Framework, as set out in Annex III of the 2017 EQF Recommendation

Criterion 1: The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process are clearly determined and published by the competent authorities.

The criterion is fulfilled.

The report clearly presents the responsibilities and competences of institutions and bodies governing the CQFW and each of the sub-sectors (Pillars) of the national qualifications system. The report also

explains how different groups of national stakeholders are involved in the policy regarding development and promotion of the CQFW within the CQFW Advisory Group. It is interesting to note that employers and representatives of employees are not explicit members of the CQFW Advisory Group that may be a result of UK industrial relation traditions and arrangements.

For the purpose of updating the referencing report, the Steering Group was formed and comprised of the institutions and bodies in charge of the CQFW and relevant stakeholders.

Criterion 2: There is a clear and demonstrable link between the qualifications levels in the national qualifications frameworks or systems and the level descriptors of the EQF 3.

The criterion is fulfilled.

The Wales report documents well the linkages of the CQFW (Regulated Qualifications Pillar and Lifelong learning Pillar) to the EQF. It is worth noting that different areas (Pillars) of the qualifications systems in Wales use different sets of level descriptors (which is also the case in some other European countries). As a result, the level descriptors of the two Pillars (sub-frameworks): Regulated Qualifications Pillar and Lifelong Learning Pillar were referenced to the EQF level descriptors. The scope of the level descriptor domains between the two Pillars is different. Regulated Qualifications Pillar distinguishes only two domains: knowledge and skill, whereas Lifelong Learning Pillar distinguishes three domains: Knowledge and understanding; Application and action; Autonomy and accountability.

To demonstrate the link between the two Pillars of the CQFW and the EQF, a thorough analysis was conducted and is presented in Appendix 1 and 2 of the report. This gives strong confidence in matching the CQFW level descriptors to the EQF. Authors of the report decided to indicate the strength of the link between the EQF
("a fair correlation", "a good correlation", correlation based on the "best-fit" principle) which, in my view, adds to transparency of the referencing process especially when national frameworks consist of more than 8 levels that need to be referenced to the 8-level structure of the EQF.

Criterion 3: The national qualifications frameworks or systems and their qualifications are based on the principle and objective of learning outcomes and related to arrangements for validation of non-formal and informal learning and, where appropriate, to credit systems

The criterion is fulfilled.

The qualifications system based on the NQF in Wales, similarly as in the whole UK, has a long tradition in using learning outcomes. Learning outcomes are used as the main point of reference in designing qualifications, assessment, validation and quality assurance. The report describes differences between the use of learning outcomes in different qualifications sub-systems (Pillars). For the purpose of preparing the updated referencing report, a review was conducted into how learning

outcomes are included in particular qualifications within the CQFW. Outcomes of this analysis are presented in Appendix 3 of the report.

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

The criterion is fulfilled.

The report presents the procedures for inclusion in the CQFW that are being used in each of the three Pillars. The procedure of allocating NQF levels to qualifications in the Regulated Qualifications Pillar and Higher Education Pillar must be in line with stated regulatory criteria and standards and be externally quality assured. Inclusion of qualifications in the Lifelong Learning Pillar is less demanding, allowing for more flexibility and responsiveness to some groups of stakeholders but must still be in line with the eight high level principles of the CQFW.

It is interesting to note that for any qualification to be used on publicly funded programmes of learning, it must be included within the Regulated Qualifications Pillar.

Criterion 5: The national quality assurance system(s) for education and training refer(s) to the national qualifications frameworks or systems are consistent with the principles on quality assurance as specified in Annex IV to this Recommendation

The criterion is fulfilled.

The report addresses this criterion by providing a general overview of the quality mechanisms adopted in the three Pillars of the qualifications system in Wales. The report later addresses each principle on quality assurance as specified in Annex IV of the EQF Recommendation, also within each Pillar.

The description provided in Criterion 5 shows alignment of quality assurance systems in Wales regarding the Regulated Qualifications Pillar and the Higher Education Pillar with the EQF principles. Learning and/or qualifications that are included in the Lifelong Learning Pillar follow less strict and demanding procedures than qualifications from the other two Pillar. However, they still must be in line with CQFW requirements and are under the control of the Welsh competent bodies.

Criterion 6: The referencing process shall include the stated agreement of the relevant quality assurance bodies that the referencing report is consistent with the relevant national quality assurance arrangements, provisions and practice.

The report states that the Welsh Government, Higher Education Funding Council for Wales (HEFCW) and the Quality Assurance Agency for Higher Education (QAA) as the relevant quality assurance bodies, were engaged in the updating the referencing report and that these bodies confirm that the report is an accurate representation of the quality assurance arrangements, provisions and practice.

Each of these bodies was represented as part of the Wales Steering Group for updating the referencing report. The updated referencing report does not include written statements from these bodies.

Criterion 7. The referencing process shall involve international experts and the referencing reports shall contain the written statement of at least two international experts from two different countries on the referencing process.

The criterion is fulfilled.

The process involved two international experts. Both of us were invited to be members of the Wales Steering Group that was formed to feed in to the updating of the referencing report. We participated in the discussions of the Steering Group during the process of preparing the report for the submission to the EQF AG. As indicated above, a wide range of information was made available to us and our proposals and recommendations have been duly taken into account. International experts provided written comments to earlier versions of the report in two rounds of work and participated in the Steering Group meetings in November 2018 and January 2019.

Criterion 8: The competent authority or authorities shall certify the referencing of the national qualifications frameworks or systems with the EQF. One comprehensive report, setting out the referencing, and the evidence supporting it, shall be published by the competent authorities, including the EQF National Coordination Points, and shall address separately each of the criteria. The same report can be used for self-certification to the Qualifications Framework of the European Higher Education Area, in accordance with the self-certification criteria of the latter.

Qualifications Wales, the Welsh Government and HEFCW, the competent bodies in respect of ownership of the CQFW, certified the referencing of the CQFW with the EQF.

The report separately addresses each of the EQF referencing criteria. The report is not used for updating the self-certification to the Qualifications Framework of the European Higher Education Area.

Criterion 9: Within 6 months from having referenced or updated the referencing report, Member States and other participating countries shall publish the referencing report and provide relevant information for comparison purposes on the relevant European portal.

Publication of the report will be undertaken by ColegauCymruand by the competent bodies for the CQFW. All these bodies agree to publish the updated report on the EQF portal and their websites.

Criterion 10: Further to the referencing process, all newly issued documents related to qualifications that are part of the national qualifications frameworks or systems (e.g. certificates, diplomas, certificate supplements, diploma supplements) and/or qualification registers issued by the competent authorities should contain a clear reference, by way of national qualifications frameworks or systems, to the appropriate EQF level.

All qualifications awarded in the Regulated Qualifications Pillar and Higher Education Pillars and which are included in the CQFW must indicate a CQFW level. The report does not say explicitly that this is also the case for learning/qualifications in the Lifelong Learning Pillar.

Awarding bodies might indicate EQF level on their certificates but there is no formal requirement to do so. The Qualifications in Wales (QiW) database, which is available to the public indicates an EQF level for each qualification on the database.

The report does not indicate whether there are plans to impose the inclusion of an EQF level on qualifications referenced to the CQFW in Wales in the future.

Appendix 7 – Members of the Steering Group for the referencing

Iestyn Davies	ColegauCymru
Adrian Sheehan	ColegauCymru
Siân Holleran	ColegauCymru
Kelly Edwards	National Training Federation for Wales (NTfW)
Emma Jane Evans	Welsh Government (NOS/CQFW)
Alison Rees	Welsh Government. (RDP and Legislation)
Cliona O'Neill	HEFCW
Alison Felce	QAA
Sheila Dunn	Scottish Credit and Qualifications Framework Partnership
Elaine Carlile	Welsh Joint Education Committee
Gareth Williams	Construction Industry Training Board
Jack Watkins	Qualifications Wales
Joni Alexander	National Union of Students Wales
Kate Crabtree	Qualifications Wales
Rachel Heath-Davies	Qualifications Wales
John O'Connor	Quality and Qualifications Ireland
Horacy Dębowski	Centralna Komisja Egzaminacyjna
Jennifer Lee	Ofqual
Rhian Dent	Ofqual
Donna Hooper	Adult Community Learning Partnership
Judith Archer	Agored Cymru
Mike Williams	Coleg Sir Gâr
Caroline Egerton	Council for the Curriculum, Examinations and Assessment (CCEA)
Julie Swan	Ofqual