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Accreditation of Digital Learning Providers and Qualifications

Proposal for a Maltese Accreditation Framework

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CONTENTS

1 SCOPE

This report was commissioned by the Ministry for Education & Employment in Malta. It proposes a framework for the licensing of providers of courses that are delivered primarily over digital media ('the courses), and the accreditation of such courses within the Malta Qualifications Framework (MQF) administered by the National Commission for Further and Higher Education (NCFHE).

The document is structured to facilitate internal discussion by policy-makers and the NCFHE, and provide the ground work for the communications regime to inform both applicants and reviewers as to the best practice in using the system. It is meant to be a technical document for a technical audience, as opposed to a document that can be immediately shared with potential applicants. Conversely, it should provide the basis to facilitate decisions by Government and the NCFHE on a short-term strategy to manage applicants where part or all of a course is conducted online.

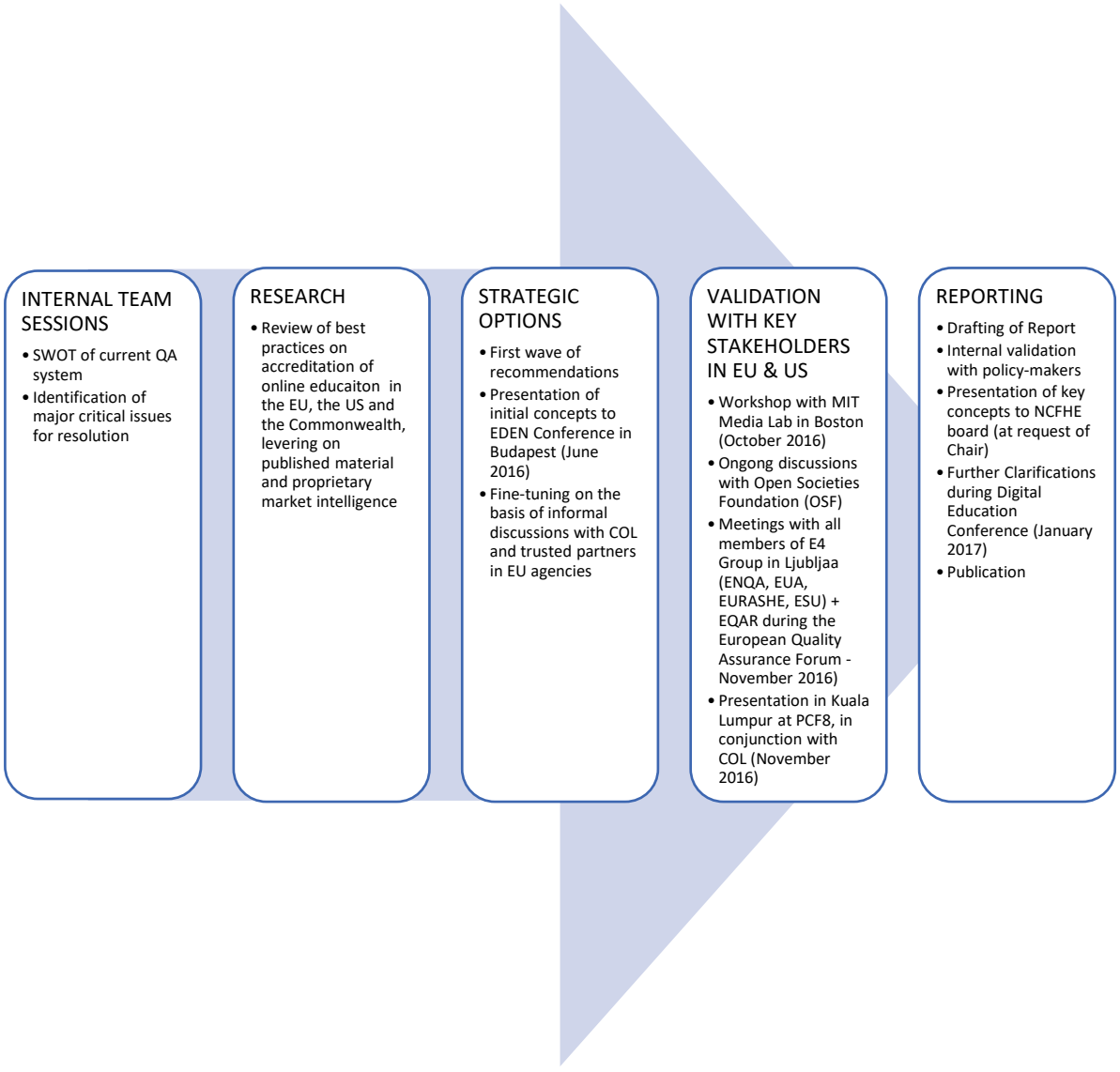
The Annexes and supporting Presentations to key stakeholders are a fundamental component of this report.

2 APPROACH

The primary objectives of the consultancy as set by MEDE were to develop a transparent, workable framework for the accreditation of programmes at MQF Levels 5 to 8 that are either partially or entirely delivered through the use of digital media ('digital education programmes'). As a pre-requisite, the proposed framework must:

a) Be manageable within NCFHE's current resource capabilities; and
b) Not jeopardise NCFHE's current MQF accreditation and QA regime
c) Be fully compliant with European accreditation norms including ECTS, EQF, and ESGs

In conducting this assignment, we followed the following process:



3 CONCEPTS

Designing a system for the accreditation of digital learning requires an understanding of the potential and challenges provided by digital technologies within a modern education context. The list of 'typical education technologies' in *Table 1* overleaf, adapted from the Horizon 2016 report, will be familiar to many people, and yet still has little resonance in the standard lecture hall of a higher education institution.

Within the context of this report, digital technologies offer unprecedented, almost limitless opportunities to spread knowledge and ideas and enhance collaboration, communication, critical thinking, creativity, citizenship and character education. By providing instant access to vast amounts of information, as well as unfiltered access to a wide range of education sources, technologies can have a significant impact on opinions and perceptions. Within an education context, technologies offer providers and users a platform to produce teaching and learning content without the help of intermediaries.

New entrants in the online education market place range from platform owners such as Coursera, edX, FutureLearn, Udemy, Alison and others to online-arms of established education institutions to lone educators providing courses for free or against payment, over a multitude of platforms. Public and private costs of education are being reduced in the process, with a net positive effect on the quality and distribution of educational resources. The Open Education movement, assisted by Creative Commons, is now global, lobbying to make all publicly-funded educational resources open: open educational resources (OER) are increasingly part of the EU vernacular.

The following are indicative of the emerging online learning landscape:

- Physical location and 'bricks and mortar' are no longer key contributors to the quality of teaching and learning provided by an education institution
- Networked teachers and student communities are becoming the norm
- Internet access is a pre-requisite to reduce barriers to learning opportunities – issues relating to the digital divide remain important
- Specific tasks may support high areas of specialisation
- New pedagogies are required to harness the technology potential – there is a corresponding need for investment in teacher professional development to maximise such potential
- Normal learning becomes more asynchronous than synchronous, and knowledge is imparted via multimedia.

The emergence of digital learning means that every possible permutation of an educational model will be tried, tested, broken, repackaged and 'disrupted'.

Within this context, the clear delineation of concepts, and how, if at all 'digital', changes them is key to understanding the reasoning behind the recommendations made in this report.

Table 1: Typical Digital Education Technologies

CONSUMER TECHNOLOGIES

- 3D Video
- Drones
- Electronic Publishing
- Quantified Self
- Robotics
- Telepresence
- Wearable Technology

DIGITAL STRATEGIES

- Bring Your Own Device (BYOD)
- Flipped Classroom
- Location Intelligence
- Makerspaces
- Preservation/Conservation Technologies

INTERNET TECHNOLOGIES

- Bibliometric and Citation Technologies
- Cloud Computing
- Networked Objects
- Semantic Applications
- Syndication Tools

LEARNING TECHNOLOGIES

- Digital Badges
- Learning Analytics and Adaptive Learning
- Mobile Learning
- Online Learning
- Open Content
- Open Licensing
- Virtual and Remote Laboratories

SOCIAL MEDIA TECHNOLOGIES

- Crowdsourcing
- Online Identity
- Social Networks

VISUALISATION TECHNOLOGIES

- 3D Printing/Rapid Prototyping
- Augmented and Virtual Reality
- Information Visualization
- Visual Data Analysis
- Volumetric and Holographic Displays

ENABLING TECHNOLOGIES

- Affective Computing
- Flexible Displays
- Machine Learning
- Mesh Networks
- Mobile Broadband
- Natural User Interfaces
- Near Field Communication
- Next-Generation Batteries
- Open Hardware
- Speech-to-Speech

TRANSLATION

- Virtual Assistants
- Wireless Power

Technology also transforms assessments. It can help us imagine and redefine assessment in a variety of ways. These tools can provide unobtrusive measurements for learners who are designing and building products, conducting experiments using mobile devices, and manipulating parameters in simulations. Problems can be situated in real-world environments, where students perform tasks, or include multi-stage scenarios that simulate authentic, progressive engagement with the subject matter. Teachers can access information on student progress and learning throughout the school day, which allows them to adapt instruction to personalize learning or intervene to address particular learning shortfalls.

The unique attributes of technology-based assessments that enable these activities include the following:

- Enhanced question types
- Measurement of complex competencies
- Provision of Real-Time Feedback
- Accessibility
- Adaptation to Learner Ability and Knowledge
- Embedded Assessments
- Access for Ongoing Learning

3.1 PURPOSE OF LICENSING AND QUALITY ASSURANCE

As in nearly all countries within the European Higher Education Area, Malta has a regulator for quality assurance in Higher Education, which, broadly speaking[1], operates in compliance with the standards laid down by the European Standards and Guidelines (ESGs) for Quality Assurance in Higher Education (2015).

The ESGs state that a successfully implemented quality assurance system will provide information to assure the higher education institution and the public of the quality of the higher education institution's activities (**Accountability**) as well as provide advice and recommendations on how it might improve what it is doing (**Enhancement**)." Under the ESGs, "higher education institutions have primary responsibility for the quality of their provision and its assurance". The ESGs exist to create a common **Basis of Trust** between institutions and systems.

Thus, in this report rather than developing new, detailed standards for quality digital education, we have *analysed the fitness for purpose of current standards for non-digital education when applied to the digital sphere*.

Thus, all recommendations in this report as far as they concern QA seek to *address real or perceived concerns about accountability and quality enhancement*. The recommendations are grounded in NCFHE's present QA regime and obligations – not a re-imagined future that has yet to align with the digital world.

[1] We say 'broadly speaking' since the NCFHE has not yet received independent external assessment of its certification.

3.2 SUBJECT OF ACCREDITATION

Aside from the *licensing of institutions*, the second key component of the Maltese quality assurance regime is the *accreditation of qualifications*. Specifically, accreditation can be defined as authorising an institution to issue a qualification which is pegged to the Maltese Qualifications Framework, and hence also to the European Qualifications Framework.

3.3 LEARNER IDENTITY AND SECURITY OF ASSESSMENT

Interviews with key stakeholders in the EU indicate that the primary concern around digital education is that it erodes the basis of trust for quality assurance: questions about identity can arise when there are concerns about who is actually performing coursework since this is no longer under direct, 'in person' supervision. This in turn breaks down into three over-riding concerns:

1. Are students performing allocated coursework, by 'attending and participating in' digital lectures or their equivalent?
2. Are students who they say they are, or are they performing course work on behalf of somebody else?
3. Are students prevented from gaining undue advantage during assessment, i.e. cheating?

When we engage with these three concerns, it becomes clear that these can be easily mitigated by the very affordances of technology. Digital systems can offer far superior tracking and monitoring systems than those traditionally employed by the supervision activities and internal controls of bricks and mortar institutions. Advanced technology systems can, for example, support the use of:

- Fingerprint sensors swiped at regular intervals to ensure identity
- Screen-recorders and key-loggers to ensure that every action on a computer is tracked
- 360 degree supervised webcams to ensure that students are truly alone when doing assessment

Since there is a perception that control systems for digital learning are inferior to those that exist in the offline world, it is recommended that applicants to the Maltese system make their methods for ensuring student assessment and identity explicit and to provide proof of systems which ensure a basis of trust equivalent to a traditional invigilated examination system.

3.4 UNBUNDLING

Traditionally, Higher Education includes design, teaching and assessment of a 'bundle' of courses leading to a qualification. Increasingly, each of these services is being 'unbundled' with different providers being responsible for different parts of the course, and different courses from different providers being 're-bundled' into innovative qualifications. While this is not a phenomenon restricted exclusively to digital education, the latter increases the scope for and extent of unbundling exponentially, in particular with the popular uptake of Massive Open Online Courses (MOOCs).

Even where an institution does not offer full diplomas or degrees, where it offers courses which may be expressed in terms of ECTS or ECVET, these credits can be accumulated and used to form part of another qualification. Therefore, these offerings also need to be subject to accreditation to maintain the basis of trust in the entire framework of qualifications.

Since the subject of accreditation is the qualification, *the key to deciding whether a service requires accreditation is the link to the qualification*. Thus, teaching activities, or the creation of textbooks

alone are not activities which require accreditation. However, as soon as it is claimed that a set of materials or a teaching course leads to a particular qualification, then this claim needs to be proven by means of accreditation.

Where a provider subcontracts certain services – such as the design of courses; and / or offers teaching through a third party and then issues the qualification under the provider brand and / or its own certificate - the provider would need to include all those services offered by subcontractors within the scope of the accreditation: for all intents and purposes, the subcontractor would be considered to be part of the provider's operating structures.

3.5 JURISDICTIONAL ISSUES

The Maltese system for accreditation has only jurisdiction over education activities which happen within the territory of Malta. This has particular resonance within the online education sector, where it is highly likely that the institution developing online education content has no formal ties with Malta. This would also likely to be the case with services offered by an online education institution's subcontractors.

Therefore, we would consider that institutions fall under the mandatory scope of the accreditation system where:

- They issue qualifications which are pegged to the Malta Qualifications Framework;
- They make claims within or on the basis of Maltese jurisdiction (for instance, in promotional materials distributed in Malta) to be considered an education institution; or
- Offer services outlined in Schedules 2 and 3[2] of SL 327.433 of the laws of Malta.

The implications for the purposes of this report is that new rules and conditions need to be established to ensure that there is no confusion for users of online learning as to whether a qualification is in fact aligned with the Malta Qualifications Framework.

It also means providing clarification to users whether key terms (and claims) such as 'higher education institution', 'training centre', 'university', 'degree' and 'accredited course' have the same meaning when used by a foreign provider and when they are used by a Maltese provider.

To address these jurisdictional issues, this report levers on the **Lisbon Recognition Convention** and the **ECTS** as core components of what should constitute a robust accreditation system.

- The Lisbon Recognition Convention (1999**)** provides a legal framework for cross-border academic recognition.

  ARTICLE 36:

  Qualifications of approximately equal level may show differences in terms of content, profile, workload, quality and learning outcomes. In the assessment of foreign qualifications, these differences should be considered in a flexible way, and only substantial differences in view of the

[2] These schedules reserve the use of the words 'University', 'Higher Education', 'Programme' and others only to institutions with appropriate licensing.

purpose for which recognition is sought (e.g. academic or de facto professional recognition) should lead to partial recognition or non-recognition of the foreign qualifications.

ARTICLE 37:

Recognition of foreign qualifications should be granted unless a substantial difference can be demonstrated between the qualification for which recognition is requested and the relevant qualification of the State in which recognition is sought.

- Description of a course in terms of ECTS has become the standard way to describe the content, profile, workload, quality and learning outcomes for the purposes of the convention. If an online course has to enjoy parity of esteem with existing courses under the MQF / EQF regime, then ECTS has to be deployed as the 'base currency' for any framework for the accreditation of digital learning.

3.6 DIFFERENCES BETWEEN FORMAL AND NON-FORMAL EDUCATION

Formal education is defined by CEDEFOP as learning that occurs in an organised and structured environment (such as in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time or resources).

Formal learning is intentional from the learner's point of view. It typically leads to certification.

Non-Formal learning is defined as 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.

While most digital education is explicitly designated as learning in terms of objectives, times and/or resources, the level of organisation and structure of the environment varies depending on the level of independence of the learner and the degree of supervision and control the instructor has over the learner in each case.

Thus, we see a need to extend the definition of non-formal learning to include activities which are:

1. Explicitly defined as 'learning', but which;
2. Do not necessarily occur within an organised and structured environment, and which;
3. Lead to certification.

This is necessary, for instance, to cover the case of MOOCs, in particular, MOOCs based on the principles of Connectivism, or 'Connectivist MOOCs'.

3.7 MEASURING QUALITY OF PROGRAMMES

The NCFHE does not give any specific guidelines on how to measure quality of programmes. Rather it is left up to experts in the field to determine whether a proposed programme has appropriate learning outcomes for a qualification at the proposed level, and whether the learning activities and assessment of those outcomes are fit for purpose. This expert-based method of assuring programme quality is appropriate for any kind of education, whether digital or otherwise, with the only relevant difference being that a knowledge of digital pedagogy is required to determine the fitness for

purpose of digital education. Since the likely pool of subject experts also qualified in digital pedagogy may be limited, we propose a system whereby subject-matter experts can consult experts in digital pedagogy to make a joint decision.

3.8 APPLICABILITY TO DIFFERENT KINDS OF EDUCATION

The scope of this report was to design an accreditation system for Higher Education.

During the course of our work, it became evident that the framework being proposed can be flexed to work beyond this context. Considering that Malta uses a unitary system of quality assurance, licencing and accreditation for Higher Education and VET, we have tested and confirmed the applicability of the recommendations in this report for all qualifications offered at levels 5 and above of the Malta Qualifications Framework.

4 KEY FEATURES OF THE SYSTEM

The framework outlines a system for:

a) The licencing of institutions active in the provision of digital education
b) The accreditation of qualifications which have been offered primarily through digital means, either through a
    A. Formal Pathway, or through an
    B. Informal pathway

It is thus open to any providers of formal education who wish to be licenced to:

- Operate within the Republic of Malta, and/or
- Award ECTS credits within the European Higher Education Area

No distinction is made between fully-online and blended learning.

The formal pathway involves accreditation of a course which meets the following criteria:

- A minimum of **20% of the workload** must be made up of **activities under the supervision and control of an instructor**. These activities involve any activities where the learner and teacher are in communication.
- The majority (by workload) of **activities under the supervision and control of an instructor** occur over digital media where the learner and instructor are in different physical spaces.

An e-learning qualification is any qualification obtained through activities which mainly occur through digital media, and which has been mapped to the Malta Qualifications Framework.

A digital learning institution is an institution who, by virtue of its *mission*, primarily offers digital learning courses and/or qualifications.

4.1 TYPES OF ACCREDITATION

There are two types of accreditation:

- **Institutional accreditation** which grants the provider the ability to operate as an educational organization within Malta, to advertise itself as an educational organization (within the conditions set by its licence) and to submit courses and/or qualifications for licensing in Malta
- **Accreditation of a Qualification which** grants the provider the permission to award a qualification described in terms of ECTS, and mapped onto the Malta Qualifications Framework.

Two paths exist for such accreditation:

- **Formal Education pathway**, whereby the provider is granted the permission to offer an educational course which can be advertised as explicitly leading to the granting of the qualification.
- **Non-Formal Education pathway**, whereby the provider may not make any claims about the educational activities involved, but may claim that they offer examinations / assessments that lead to the granting of the qualification

4.2 UNBUNDLING THE COMPONENTS OF EDUCATIONAL SERVICES

A provider or Institution typically offers a range of educational services, including:

1. Course Design and Creation of Educational Content
2. Teaching and Instruction
3. Assessment and Examinations
4. Awarding of Qualifications

Under an unbundled format, an Institution does not necessarily provide all these services in-house, but may offer one or more of them through agreements with third-party providers.

We recommend that the definition of a further/higher education institutions requires that *all* the services listed above be provided *through* the applicant institution but not necessarily *by* the applicant institution.

For the purposes of quality assessment, we recommend that any services offered by third parties will be evaluated as if they were offered by the applicant institution, and hence, the applicant institution will be held responsible for quality management of all the processes, irrespective of provider.

Institutions that only offer one of the first three of the four services listed above - such as publishing houses, examination bodies, etc. - are *not* deemed to be eligible to be accredited independently under this system.

4.3 PROTECTED TERMS

For licencing to be effective in protecting users from fake and/or low-quality products, it is important that such licencing conveys an exclusivity to providers to:

1. Operate on the market
2. Advertise and promote their services to the market

To this end, we recommend that, by law, no institution be permitted to use the following terms to describe themselves or their services, in any published materials, including online, unless they hold the relevant licences:

- University, higher education institution, further education institution, further education centre, tuition centre
- Any qualification specifically mentioned on the Malta Qualifications Framework
- 'Diploma' and 'Degree'
- Any reference to being accredited or licenced by any body

In the case of use of these terms by institutions who have are accredited abroad, and who are merely advertising their services in Malta, without the need for a Maltese licence, we propose that to use the protected terms, the institutions would be obliged to either:

- Receive permission to use the terms by the ENIC/NARIC centre, after the latter has determined equivalence between their foreign accreditation and local legislation; or
- Include a disclaimer that "The qualification/institution is not licenced under Maltese legislation" in any media where they use the terms.

5 ELIGIBILITY REQUIREMENTS

5.1 CRITERIA FOR ELIGIBLE PROVIDERS AND INSTITUTIONS

For an education institution to be eligible for a licence, the institution needs to have the following criteria in place:

- An **Accredited Course** on the Malta Qualifications Framework and European Qualification Framework - digital learning institutions are expected to have *digital learning courses* accredited to satisfy this criterion.
- **Qualified Academic Staff** - digital learning institutions would be expected to provide CV for staff involved in:
  - Course design and content development;
  - Technical and media support;
  - Teaching course and interacting and supporting learners;
  - Providing support to teaching
- An **Internal Quality Assurance policy** - this will need to cover all activities provided through the institution, including those offered through external suppliers;
- **MEPA Certified premises** - the necessary premises will be evaluated according to the needs of the specific teaching model offered by the institution. (e.g. lecture rooms will not be required if all lectures are delivered by video)

Additionally, Digital Learning Institutions are expected to have the following in place:

- a **Legal representative** who is resident in Malta
- an **IT plan** describing the server infrastructure, service-provider, premises, off-site backup procedures & continuity of service arrangements.
- an **Archive of student records** physically located in Malta, including admission records, student details, proof of assessment and recognition information

5.3 Criteria for Eligible Qualifications

Any kind of Further or Higher Education Institution, irrespective of whether it is specialised in digital learning, may apply for accreditation of a qualification.

Any Digital Qualification which is accredited needs to demonstrate:

- Full alignment with the Malta Qualifications Framework
- Fitness of Purpose of the Assessment process – that is, the assessment process must adequately test for the learning outcomes
- Adequate arrangements for Verifying Student Identity
- Adequate arrangements for Securing the Assessment
- (For Accreditation of Formal Learning) Fitness of Purpose of learning activities under the direction and control of the instructor for reaching the intended learning outcomes

5.4 Information Required from Applicants

Both Course and Qualification Accreditation requires a full description of the learning outcomes, learning activities, content and assessment methods used in the course.

Courses should be aligned with ECTS and the MQF.

Providers would be guided towards the following resources:

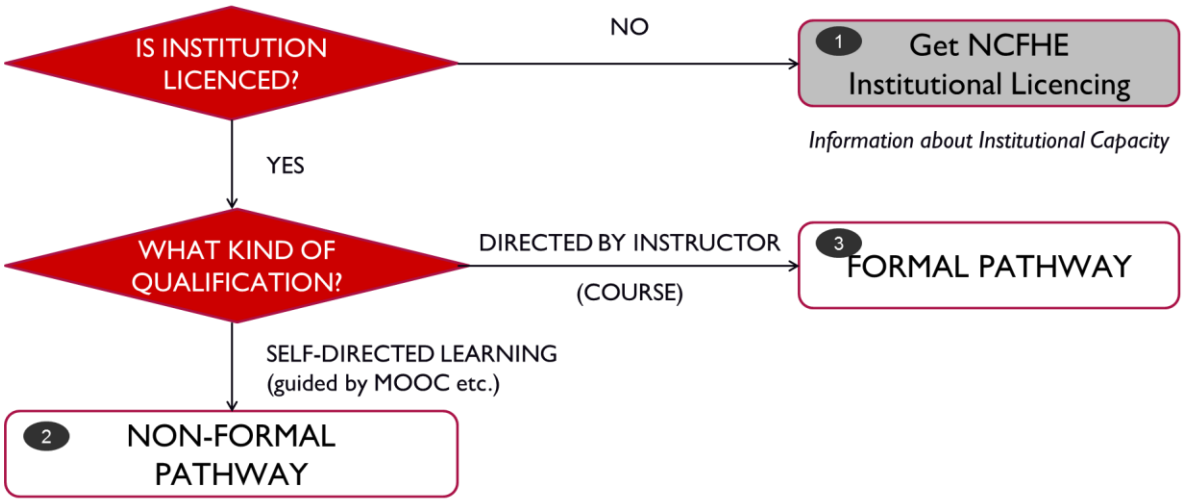
- ECTS Guide. Available at: http://ec.europa.eu/education/library/publications/2015/ects-users-guide_en.pdf
- Malta Qualifications Framework Referencing Report. Available at: https://ncfhe.gov.mt/en/Documents/Referencing%20Report/Referencing%20Report%202016.pdf

6 APPLICATION PROCESS FOR ACCREDITATION

The following figure provides an overview of the application process for accreditation as proposed in this report.

The over-riding principles underpinning the key recommendations of this report are presented in tabulated format, and a set of consequential steps, in 6.1.

In principle, the application process proposed in this report will need to undergo internal validation by NCFHE to identify outliers and exceptions and determine a timeframe within which the current application process could be revised to accommodate the proposals of this report (and subsequent internal fine-tuning by the NCFHE).



6.1 KEY QUESTIONS FOR EACH STEP OF THE ACCREDITATION PROCESS

Step	**Minimum Provider / Institution Requirements**	**Alternative Options (when Provider/ Institution do NOT meet Requirements)**
1.	The majority of the learning activities take place via digital media, with the instructor and learner in different physical spaces.	Pursue 'traditional' course accreditation with NCFHE.
2. Institutional Licencing	The institution must have a presence established in Malta, including: 1. A legal representative who is resident in Malta 2. An Archive of Student Records physically located in Malta, including admission records, student details, proof of assessment and recognition information	Establish necessary presence in Malta.
3. Institutional Licencing	The institution must have: 1. An Accredited Course on the MQF 2. Qualified academic staff 3. An Internal Quality Assurance policy 4. MEPA Certified premises 5. An IT Plan	Address missing procedures in 3. as necessary.
4 Accreditation of Non-Formal & Formal Qualifications	Describe the qualification in terms of: 1. Knowledge 2. Skills 3. Competences 4. Learning Outcomes 5. Level of the MQF Assessment must appropriately verify acquisition of the above.	Prepare course description in line with Malta Qualifications Framework, using the referencing report.

5. Accreditation of Formal Qualifications	Learning activities (and supporting infrastructure) must be appropriate to teach the Knowledge, Skills, Competences and Learning Outcomes described in the qualification.	

7 KEY ADVANTAGES OF FRAMEWORK

The proposed Framework for the accreditation of digital learning has a number of advantages. Some of these are tabulated below:

1. It is based on the ECTS as the core currency (as opposed to, say, badges as developed by Mozilla). This makes it immediately recognisable by the EU and other jurisdictions.

2. 'Digital' is incorporated as an opportunity to scale up an existing, accredited framework as opposed to the need to start up a system, or develop new regime (for, say, 'digital universities' et al).

3. If deployed quickly, it provides Malta with a significant competitive advantage over other EU jurisdictions that are hampered by internal issues, relating to scale, resistance of higher education institutions to change, non-responsive national QA agencies etc.

4. At face value, it should be lightweight to manage, and not involve major changes to the current NCFHE modus operandi.

5. There is little requirement for legal changes. Prima facie, there is no need to make changes to the Education Act but there may be a requirement for a legal notice.

7.1 SUPPORTING INNOVATION

The System is designed to support innovation. Applicants are encouraged to apply for accreditation even where their course offering involves cutting edge / experimental technologies. Examples of this might include use of Artificial Intelligence for Assessment, use of blockchain for certification, use of virtual reality for collaboration etc.

Where applications include such elements, the accreditation committee will typically ask the applicant for supporting documentation on the technology being deployed. The committee will then, on an ad-hoc basis determine an experimental protocol, i.e. the conditions which must be put in place to ensure quality of product and protection of students, and include these conditions directly in the licence for the institution and/or course. The licence conditions would typically be regularly reviewed as more information became available from the use of the technologies

The NCFHE should set up a **Digital Education Consultative Committee** (DECC) whose role it will be to make such determinations.

- The DECC will be constituted by a number of local and international experts in digital learning.
- The Accreditation Unit at NCFHE will make formal requests for consultations to the DECC in writing.
- These will be considered in public and / or recorded sessions (although these might well occur in public online sessions).
- The decisions of the DECC will be minuted and made available from the NCFHE's websites. This will meet on average four times a year or on an urgent needs basis, and virtually. It can operate either as a sub-committee of the QAC or as an arms-length committee.

- Thus, institutions will be able to benefit from a forward-looking accreditation regime which certifies the use of new technologies, as suitable for education, while at the same time offering a high degree of student protection.

8 CRITICAL SUCCESS FACTORS

Any new framework is susceptible to a number of critical success factors. The following are identifiable at the time of writing this report:

EMBARGOED

9 RECOMMENDED NEXT STEPS

The following high-level recommendations are made on the assumption that the stakeholders – in this case the Ministry for Education and Employment and the National Commission – endorse the key recommendations of this report and prepare to fast-track:

9.1 RECOMMENDED STEPS FOR LEGISLATIVE ROLL-OUT

Several of the recommendations in this report have broader implications for the overall Maltese licencing and accreditation system. We therefore recommend a staged roll-out made up of the following phases:

EMARGOED

10 ANNEX A: DEFINITIONS

Accreditation means a process of quality assurance through which a programme of education or training is officially recognised and approved by the relevant legislative or professional authorities following assessment against predetermined standards. Within the specific context of this report, accreditation means authorising an education institution to issue a qualification which is pegged to the Maltese Qualifications Framework, and hence also to the European Qualifications Framework.

Assessment means the sum of methods and processes used to evaluate the attainments (knowledge, skills and competences) of an individual, and typically leading to certification.

Certificate means an official document, issued by an awarding body, which records achievements of an individual following assessment against a predetermined standard.

Competence means the ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development).

Connectivism means a view of learning whereby knowledge is distributed and learning is the process of navigating, growing, and pruning connections. Connectivism is driven by the understanding that decisions are based on rapidly altering foundations. New information is continually being acquired and the ability to draw distinctions between important and unimportant information is vital. Also critical is the ability to recognise when new information alters the landscape based on decisions made yesterday. Some theories of learning, notably the many shades of constructivism, have some similarities with this view. However, as the world becomes more digital and networked individualism becomes more prominent, the distinctions between connectivism and constructivism are becoming more clear. Eventually, even the constructivist will describe learning and knowledge through the lens of connectedness.

Course means an umbrella term that refers to all the activities conducted by training and education institutions that leading to qualifications that are respected by employers and academics worldwide.

Credits mean one of the tools designed to facilitate the implementation of credit transfer systems at national and European level. They are used by authorities, education and training providers, awarding bodies and learners to support arrangements for accumulation and recognition of learning outcomes towards a qualification and for Trans-National mobility. Credits [credit points] are allocated to Qualifications and Awards to the units of which a qualification is made up. One credit (ECTS/ECVET) in Malta is considered as being equivalent to a workload of 25 hours of learning. The term workload refers to an estimation of the time an individual typically needs to complete all learning activities such as lectures, seminars, projects, practical work, work placements and individual study required to achieve the defined learning outcomes in formal learning environments.

Curriculum means a set of actions followed when setting up a course: it includes defining training goals, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers.

Digital competence means the ability to use information and communication technology (ICT). digital competence is underpinned by basic skills in ICT: use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.

Digital learning means any type of learning that is facilitated by technology or by instructional practice that makes effective use of technology. Digital learning occurs across all learning areas and

domains. It encompasses the application of a wide spectrum of practices including: blended and virtual learning.

Digital media means any media that is encoded in a machine-readable format. Digital media can be created, viewed, distributed, modified and preserved on digital electronics devices. Computer programs and software; digital imagery, digital video; video games; web pages and websites, including social media; data and databases; digital audio, such as mp3s; and e-books are examples of digital media. Digital media are frequently contrasted with print media, such as printed books, newspapers and magazines, and other traditional or analogue media, such as pictures, film or audio tape.

European Credit Transfer and Accumulation System (ECTS) means a system developed by the European Commission in order to provide generally valid and accepted procedures for the recognition of study qualifications gained by students on courses outside their home country. It is also intended to provide more binding conditions, more flexibility and a greater degree of clarity in the organising and running of courses for foreign students. ECTS gives students the opportunity to clarify definitively with their home university how many courses or classes they should attend while they are abroad and under what conditions the qualifications they obtain will be recognized by the home university on their return.

Learning means the process by which an individual assimilates information, ideas and values and thus acquires knowledge, know-how, skills and/or competences. Learning occurs through personal reflection, reconstruction and social interaction; it may take place in formal, non-formal or informal settings.

Massive open online course (MOOC) means an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials such as filmed lectures, readings, and problem sets, many MOOCs provide interactive user forums to support community interactions among students, professors, and teaching assistants (TAs). MOOCs are a recent and widely researched development in distance education which were first introduced in 2008 and emerged as a popular mode of learning in 2012. Early MOOCs often emphasized open-access features, such as open licensing of content, structure and learning goals, to promote the reuse and remixing of resources. Some later MOOCs use closed licenses for their course materials while maintaining free access for students.

Self-directed learning means the process whereby individuals take the initiative with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying resources for learning, choosing and implementing learning strategies and evaluating learning.

11 ANNEX B: ACRONYMS

CEDEFOP	European Centre for the Development of Vocational Training
DECC	Digital Education Consultative Committee
ECTS	European Credit Transfer and Accumulation System
ECVET	European Credit System for Vocational Education and Training
EHEA	European Higher Education Area
EQF	European Qualifications Framework
ESG	European Standards and Guidelines for Quality Assurance in Higher Education
EQF	European Qualifications Framework
ESG	Standards and Guidelines for Quality Assurance in the European Higher Education Area
HEI	Higher Education Institution
MEDE	Ministry for Education and Employment
MOOC	Massively Online Open Course
MQF	Malta Qualifications Framework
NCFHE	National Commission for Further and Higher Education
QAC	Quality Assurance Committee of the National Commission for Further and Higher Education
VLE	Virtual Learning Environment

12 ANNEX C: ACTIVITIES UNDER THE DIRECTION AND CONTROL OF AN INSTRUCTOR

Activities under the direction & control of an instructor are any activities involving communication between the instructor and the learner whether synchronously or asynchronously.

Examples of synchronous activities under the direction and control of an instructor include:

- Lectures
- Demonstrations
- Workshops
- Lab-work
- Site-visits
- Supervised apprenticeships

Examples of asynchronous activities under the direction and control of an instructor include:

- Home-Work
- Project Work
- Listening to Recorded Lectures
- Participation in an online Forum
- Following an interactive lesson in a learning management system

All studying activity is self-directed. This is therefore activity which does not take place under the direction and control of an instructor.

Since the element of communication is key to the concept of an activity under the direction and control of an instructor, evidence of continuous communication is key to the concept.

Imagine a set of scenarios for the same course: “Introductory Italian”:

- **Classroom Teaching:** Here the student learns directly from the teacher in the classroom, and any learning activities he / she undertakes at home are assigned by the teacher, with student progress being regularly monitored by the teacher. Thus, the entirety of the learning is being *directed* by the teacher. All questions of the student are directed to the teacher throughout the course. The only scenario whereby the student engages in self-directed learning is if he or she wishes to supplement the curriculum with *extra* learning.
- **Self-Study Textbook**: Here, even though the student may follow a formal study structure outlined in a textbook which was originally written by a teacher, nobody monitors his progress and nobody is available to answer queries. Thus, there is no element of two-way communication between the learner and teacher, and the teaching approach cannot be adjusted based on feedback from the learner. Furthermore, since the learning is under the total control of the learner, the learner may choose to deviate from the structure outlined in the textbook at any time.

These concepts can be extended to a virtual environment. Thus, the presence of a structured course where one step follows on from the next is not necessarily enough for the course to be considered taught.

Thus, using the same scenario as described above:

- If the VLE presents a set of activities which the student must follow, and these activities are monitored by an instructor and/or involve work which is submitted to an instructor, it is broadly analogous to classroom teaching, and can be considered to be happening under the direction and control of the instructor
- If the VLE presents a set of activities which the student must follow, but at no point verifies the student's activities with an instructor, then effectively the student is self-studying, as they are the only actor involved in the teaching/learning. Thus, in this case the VLE is more analogous to an interactive self-study textbook than a classroom experience.

13 ANNEX D: APPLICATION FORMS

13.1 REGISTRATION FOR AN EDUCATIONAL INSTITUTION PROVIDING DIGITAL PROVISION

(Note: Differences between current NCFHE Forms are highlighted in blue colour)

Field	Description	Attachments
Section A		
Owners	• Name, Surname of Owners, together with ID Card Numbers and/or Passport numbers • Where multiple owners, please provide list of owners with minimum 5% shareholding in institution. • Where there are multiple levels of ownership, evidence must be given of the ultimate beneficial owner(s)	
Legal Representative in Malta	• Name, Surname • ID Card / Passport Number • Contact Details (E-mail, Phone, Address) Of person **resident** in Malta authorised to enter into legally binding agreements on behalf of the institution.	Copies of ID Card/ Passport Number
Full Name of Further and/or Higher Education Institution	• Name	
Main Office Address & Contact Details	• Address of the registered offices of the institution • E-mail • Office phone number	
Section B: Legal Presence in Malta		

MFSA Registration Number and/or Voluntary Organization Number		• *MFSA* or MCVS certificate • Statute of the Institution
Section C: Category of Licence		
Levels to be served by the Further and/or Higher Institution	Choose between Options: ❑ University ❑ Higher education institution (MQF levels 5-8) ❑ Further education institution (MQF levels 1-4) ❑ Further education centre (MQF levels 1-4) (The Second Schedule section in Legal Notice 296 gives a detailed description of the criteria required for new and unlicensed providers to be registered in one of the categories mentioned in this section.)	
Section D: Mission Statement		
Mission Statement	Include a description of the philosophy of the educational programme, including the rationale, mission statement and the aims and objectives of the Further and Higher Education Institution. These should contain an explicit orientation towards provision of digital education.	As appropriate
Section E: Target Audience		
Ages	❑ 1-16 ❑ 16-18 ❑ 19-30 ❑ 31-65 ❑ 65+	

Geographical Spread	❑ Malta ❑ EU ❑ Outside EU	
Section F: Locality & Mode of Provision		
Mode of Provision	• Provision is through digital channels, with additional learning activities delivered physically in Malta • Provision is through digital channels, with additional learning activities delivered physically abroad • Provision is exclusively through digital channels	
Locality of Head Office / Administration	Indicate the centre from where academic activities are coordinated, i.e. central contact point for students and the public.	
Teaching Sites	• Please list all sites used for physical delivery of teaching • Indicate which activities occur at which site	• Deeds of ownership • Where contracted through third parties, copies of contracts with third parties
Other Operational Sites	• Please list any other sites where employees or sub-contractors of the institution work, including: o Administrative offices o Student-support services o assessment/examination centres o Data centres • Please indicate the activities that take place at each of these sites	• Deeds of ownership • Where contracted through third parties, copies of contracts with third parties
Delivery partners	• Name of any partners delivering education under licence from the provider, and nature of the relationship	Proof of contractual or other formal relationship of

	(Franchise, satellite campus, representation, etc.)	operating and/or delivery partner/s
Section G: Head of Institution		
Head of Institution	• Name, Surname • ID Card / Passport Number • Contact Details (E-mail, Phone, Address) Statutes of the institution must clearly indicate this person as head of all academic activities within the institution	Copies of ID Card/ Passport Number
Selection Criteria		• Copy of selection criteria OR • Employment contract
Qualifications & Experience	Provide summary of qualifications and experience of head of institution	• Copy of CV supported by authenticated certificates
Section H: List of Programmes		
Programmes Offered by Institution	For Each Course: • Name • Institution Awarding Qualification • QRIC Recognition (Yes/No) • MQF Level	Recognition and/or comparability statements as applicable
Section I: Registration Fees		
Fees	List registration Fees and/or other additional fees paid by the students	

Section J: Teaching Staff		
Staff Profile	Generic Staff Profile, indicating selection criteria used by institution	
Staff	List full names of teaching staff, their post and qualifications - including where these persons are employed by third parties. These should include persons responsible for: a) Course Design and Content development; b) Technical and Media support; c) Teaching Course and Interaction with Learners; d) Provision of support to Learners	Please attach: • CVs • Certified copies of qualifications and QRIC verification where required.
Section K		
Employment Licenses	List employees which are non-EU citizens/residents.	Copies of employment licence from Jobs+
Section L		
Quality Assurance System	Include a detailed description of the internal quality assurance system to be implemented in the Further and/or Higher Education Institution which is fully compliant with the Subsidiary Legislation 327.433 on Licensing, Accreditation and Quality Assurance and in line with the National Quality Assurance Framework for Further and Higher Education. Refer to the guiding document available from the National Quality Assurance Framework section on www.ncfhe.gov.mt (Part 1 of the Framework – Theoretical Foundations of the Framework and the Internal Quality Assurance Standards – Section 5 of the document).	Comprehensive statement detailing the steps that will be implemented by the Further and/or Higher Education Institution.

Section N – Premises		
Premises	Indicate how institution complies with: Further regulations and other possible venues for provision. Please refer to Communication 03/2015 which may be accessed from https://ncfhe.gov.mt/en/services/Pages/All%20Services/communications_accreditation.aspx	Where institution provides physical learning activities in Malta: • Plan of premises to be used as a Further and/or Higher Education Institution with dimensions and clear indications of rooms which are to be used as classes and other facilities i.e. offices, restrooms, amongst others OR • MEPA/Planning Authority/PAPB Compliance Certificate for premises to be used as an educational establishment.
Section O: Infrastructure		
Digital Infrastructure	Provide details of the server infrastructure. This should include the service-provider, premises, backup procedures & continuity of service arrangements.	• Network architecture including backup arrangements • Service Level Agreement with Server Provider • Disaster Recovery Plan

Student Records	Please provide a description of how you maintain and retain (and archive) student records in Malta. At a minimum, these must include admission records, student details, proof of assessment and recognition information. Archives must give adequate assurance that their contents will be available for 40 years.	

13.2 ACCREDITATION OF EDUCATIONAL QUALIFICATIONS WITH THE MALTA QUALIFICATIONS FRAMEWORK

Field	Description	Attachments
Section A: General Information		
Contact Information	• Name, Surname • E-mail • Phone Number Details of the person responsible for submitting the application	
Name of Education & Training Provider		
Tuition Licence	• Licensed, but requiring revised licence due to this application • Not licenced, and requesting accreditation through separate application	

Section B: Course Description		
Brief Profile of the Education & Training Provider	Where applicable, include: ethos/philosophy, business model, organigram, experience and expertise in training provision.	If available on website indicate specific URL
Type of Course	• Qualification • Award	
Level of Formality	❑ Formal Learning: this allows the institution to claim that your qualification is aligned with the MQF, and that the course is accredited by the NCFHE ❑ Non-Formal Learning: this only allows the institution to claim that the qualification is aligned with the MQF, but does not afford it any claims with respect to the course	
Title of the Qualification / Award	Please add the appropriate abbreviation e.g. B.Sc., M. Psych, PhD, etc.	
Proposed MQF Level	For more information about MQF visit www.ncfhe.gov.mt	
Hours of Total Learning	• Hours spent in synchronous learning activities under the direction and control of an instructor (over digital media and with the instructor present and visible to the learners) • Hours spent in asynchronous learning activities under the direction and control of an instructor (over digital media and with the instructor present and visible to the learners) • Hours spent in self-directed learning • Hours spent in assessment	

	Note that total should lead to a whole number of ECTS (i.e. a multiple of 25). Furthermore, a minimum of **20%** of activities must involve learning under the direction and control of an instructor.	
Total number of ECTS / ECVET for course completion	Note this must be a whole number.	
Course Type and Duration	• Full-Time • Part-Time (defined) • Part-Time (flexible) Min. Number of weeks for completion: Max. Number of Weeks for completion:	
Target Group		
Overall Course Objectives	The overall knowledge, skills and competences acquired by the learner at the end of the course	
Entry Requirements		
Course Rationale	*Optional* - Explain your reasoning behind offering this course, what is he marked need for this course, how this course fulfils these needs.	
Learning Outcomes for Communication Skills for entire course	The learner will be able to: • *[Applicant to include detail]*	
Learning Outcomes for Learning to Learn Skills for the whole course	The learner will be able to: • *[Applicant to include detail]*	

General Pedagogical Guidelines and Procedures for this Course	Consider an appropriate mix of teaching/learning methods that are fit for purpose and that allow learners with different learning styles and abilities to achieve mastery. Please explain from a pedagogical standpoint your selection of specific modes of delivery (video-lectures, asynchronous vs synchronous, peer-learning, connected learning etc.) **In particular, show how the digital methods chosen are equivalent or superior to equivalent non-digital methods of teaching/learning.** *Only fill in for Formal Qualifications*	If available on website indicate specific URL.
General Minimum Qualifications for the Course Team	Outline the minimum qualifications for any persons involved in: a) Course design and Content Development; b) Technical and Media support; c) Teaching Course and Interacting and Supporting Learners; d) Providing Support to persons in c)	Evidence with: • Job Profiles / Calls for persons employed, sub-contracted or employed through third parties in these categories
General assessment policy and procedures	Consider an appropriate mix of assessment procedures that are fit for purpose and that allow learners with different learning styles and abilities to show mastery. Please describe your procedures to ensure cheating does not take place during assessments.	(if available on website indicate specific URL)
Methods for verifying student identity	Outline the methods you use to ensure student identity for various forms of assessment.	
List of Modules / Units taught in the course	For each module: • Name of module • compulsory/elective • # of ECTS/ECVET	

Relationship to Occupations	List the occupations for which this course prepares the student. Make reference to skills frameworks and/or professional standards wherever possible.	
Section: Procedures Checklist		
Appropriate student information and support systems in line with the National Quality Assurance Framework for Further and Higher Education		Provide Copy of Procedure
Plagiarism and other misconduct		Provide Copy of Procedure
Complaints procedures		Provide Copy of Procedure
Taking temporary leave of absence	Only applicable for formal courses	Provide Copy of Procedure
Granting extension of studies	Only applicable for formal courses	Provide Copy of Procedure
Ethics approval system	Only indicate where applicable	Provide Copy of Procedure
Selection of Dissertation Tutors	This indicates 'dissertation, research project or research component/s of equivalent standard' - only applicable for qualifications at MQF levels 5-8.	Provide Copy of Procedure
Dissertation and other examining boards	Only applicable for qualifications at MQF levels 5-8.	Provide Copy of Procedure

Security of Assessment		Provide Copy of Procedure
Verifying Student Identity		Provide Copy of Procedure
IT Continuity of Service and Disaster Recovery		Provide Copy of Procedure
Section D: to fill in for each module / unit listed in Section B		
Title of the Module / Unit		
Learning Outcomes	Competences: – at the end of the module/unit the learner will have acquired the responsibility and autonomy to: • *[Applicant to include detail]* Knowledge – at the end of the module / unit the learner will have been exposed to the following: • *[Applicant to include detail]* Skills - at the end of the module / unit the learner will have mastered the following skills: • Knowledge & Understanding Skills o *[Applicant to include detail]* o • Judgement Skills & Critical Abilities o *[Applicant to include detail]* o • Additional Module-Specific Communication Skills o *[Applicant to include detail]* o	

	• Additional Module-Specific Learner Skills
	  ○ *[Applicant to include detail]*
	  ○
	• Digital Skills & Competences
	  ○ *[Applicant to include detail]*
	  ○	

Hours of Total Learning	• Hours spent in synchronous learning activities under the direction and control of an instructor (over digital media and with the instructor present and visible to the learners) • Hours spent in asynchronous learning activities under the direction and control of an instructor (over digital media and with the instructor present and visible to the learners) • Hours spent in self-directed learning • Hours spent in assessment	
Explain how this module/unit will be taught in line with Section A	Please provide module/unit-specific details as applicable. Please identify and describe the digital learning tools being used for your course and any other relevant information. Only fill in for formal qualifications	
Explain how this module/unit will be assessed in line with Section A	Please provide module/unit-specific details as applicable. Please identify and describe the digital learning tools being used for your course and any other relevant information.	
Reading List	Please distinguish between core and supplementary texts, documents, videos or any other media as applicable. Courses at MQF L5 and above should not just present the main legislation or one textbook/source, but present also other viewpoints and perspectives as applicable. For texts/sources with different editions, it	

	is recommended that the latest version is included. For courses at MQF L5 and above it is recommended that texts should not be older than 10 years, although this threshold may be too low for higher MQF Levels especially in particular content areas. The exception is 'classic/canonical' texts, such as the original texts by Piaget in psychology or Plato's Republic in Philosophy, to give two examples	
Additional minimum formal qualifications and experience required to teach this module/unit	Additional Unit Qualifications for persons responsible for: a) Course design and Content development; b) Technical and media support; c) Teaching course and interacting and supporting learners; d) Providing support to persons in c) Where these roles are performed by third parties, please provide information relating to such arrangements (such as SLAs, contracts etc.)	Attach CV and or Job Profile as appropriate

14 ANNEX E: SCENARIOS

14.1 SCENARIO 1: MOOC / CONTINUING EDUCATION PROVIDER WITH 'AUTOMATED' OFFERINGS

Under this scenario, the (already-accredited) Provider would seek to secure accreditation for a fully-automated online course – that is, the student would be able to follow the Course entirely online, with no intervention from an instructor, in his/her own time.

In such a scenario, should the Institution wish to pursue Maltese accreditation, it would need to:

- Align the Course with the Malta Qualifications Framework, i.e. describe the Course in terms of learning outcomes and level, as well as a description of the course in terms of ECTS.
- Since none of the learning activities take place under the direction or control of an instructor, the provider should apply for accreditation as a Non-Formal qualification.
- Under a Non-Formal qualification, emphasis would be put in ensuring that the assessment method adequately tested for the learning outcomes, and that assessment-security and student identity were adequately addressed.

14.2 SCENARIO 2: PROVIDERS WISHING TO SET UP AN OPERATION TO OFFER DIGITAL COURSES FROM MALTA

Under this scenario, an organisation (usually a Body Corporate or Foundation) would wish to open a further/higher educational institution in Malta, for the express purpose of offering digital courses.

To this end, the Provider would need to:

- Apply for accreditation as a digital education provider with the NCFHE, accommodating both the requirements for further/higher education in Malta, as well as the additional requirements for digital education providers, i.e.:
  - a **Legal representative** who is resident in Malta
  - an **IT plan** describing the server infrastructure, service-provider, premises, off-site backup procedures & continuity of service arrangements.
  - an **Archive of student records** physically located in Malta, including admission records, student details, proof of assessment and recognition information
- Simultaneously apply for accreditation of at least 1 (digital) qualification, most likely for a formal education qualification.

14.3 SCENARIO 3: NON-EHEA PROVIDER WISHING TO OFFER ECTS IN EUROPE

Under this scenario, the non-EHEA provider would already be offering a number of online courses, but would wish to be able to offer students within the EHEA credits for this offering.

In such a case:

- The Institution would still need to apply for institutional accreditation with the NCFHE.
- The Institution in Malta would need to be responsible for (a) Assessment and (b) Certification (so as to comply with the Minimum Unbundling Rules) - while the course design and provision could be handled abroad.
- Certification activities could be carried out through a joint certificate offered by the foreign institution in conjunction with its Maltese affiliate, or exclusively by the Maltese institution.
- The specific course would need to be accredited with the NCFHE, through the non-formal qualifications pathway.

14.4 SCENARIO 4: TRADITIONAL (LOCAL) PROVIDER WITH MINIMAL DIGITAL OFFERING

Where a traditional local provider wishes to launch a digital offering alongside or as a component of its mainstream (traditional) offer, it would only need to apply for accreditation of the specific (formal education) qualification.

Since the institution would not have a specific accreditation for digital education providers, the accreditation of the qualification would put special emphasis on analysis of the following procedures:

- Security of assessment
- Verification of student identity
- ICT continuity of service and disaster recovery

14.5 SCENARIO 5: DIGITAL LEARNING PROVIDER WITH HIGHLY INNOVATIVE METHODS

Where an applicant is applying highly innovative methods, e.g. using artificial intelligence to analyse students' writing patterns to determine their identity, the procedure will work as follows:

- The Institution would apply for institutional and qualification accreditation as per normal procedures.
- Once the Accreditation Unit receives the application, it will ask the institution for supplementary documentation on the innovative method, in particular asking it to provide evidence of equivalence with more traditional methods.
- The Accreditation Unit will make a formal written request to the consultative digital committee of the QAC, asking it to determine equivalence
- The Digital Education Consultative Committee will analyse the evidence provided, and determine whether:
  - The evidence supplied is enough to prove equivalence
  - Any additional measures can be enacted as licence conditions to provide for equivalence, if suggested measures are not sufficient
- The decision of the Digital Education Consultative Committee will be published, and the accreditation unit of the NCFHE will rule accordingly.

14.7 SCENARIO 6: DIGITAL LEARNING PROVIDER BASED ABROAD OFFERING COURSES ONLINE TO MALTESE STUDENTS

Where the applicant is a university or higher education institution, accredited by a foreign quality assurance agency, which does not award qualifications on the Maltese Qualification Framework, but advertises its programmes in Malta, it does not need to apply for a licence or for accreditation of the programme in Malta.

However, to be able to use the terms 'degree' or 'university' (or other protected terms) in any published material or in any communication with Maltese students it must either:

- Include a disclaimer in the material that it is not licenced by the NCFHE; or
- Obtain permission from the NCFHE to use the terms, via a declaration from the ENIC/NARIC stating that the institution's offerings are equivalent to the Maltese understanding of the terms.

15 ANNEX F: COMPATIBILITY WITH (REVISED) EQF

The annexes to the Proposal for a Council Recommendation on the European Qualifications Framework for lifelong learning and repealing the Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning, propose the following Indicative elements of a common format for the electronic publication of information on qualifications.

The forms in annexe D have been future-proofed, in that they already collect all the data requested by the common format:

			Required / Optional
Description of the qualification	Either	Knowledge	Required
		Skills	Required
		Responsibility/Autonomy	Required
	Or	Open text field describing what the	Required
Awarding body**			Required

* ISCED FoET2013

** The minimum required information on the Awarding body should facilitate to find information on the Awarding body. This would be the name of the Awarding body, or if applicable the name of the group of Awarding bodies, completed with a URL or contact information

16 ANNEX G: RECOMMENDED REVISIONS TO THE NATIONAL QUALITY ASSURANCE FRAMEWORK FOR FURTHER AND HIGHER EDUCATION

The link below gives access to an annotated version of the national quality assurance framework for further and higher education, indicating the changes required to update it for digital learning courses, as per the recommendations of this report:

http://gofile.me/37BeX/LnhR4KTXl

18 FURTHER READING

Camilleri, A. (2015). Implications of Open Education for the Maltese Educational System. With a special emphasis on MOOCs. Available at: http://anthony.knowledgeinnovation.eu/wp-content/uploads/2015/03/Report-on-Status-of-Open-Education-MOOCs.pdf

Cedefop (2014). Terminology of European education and training policy Terminology of European education and training policy, Second Edition.

Commonwealth of Learning (2016). Guidelines for Quality Assurance and Accreditation of MOOCs. Available at: http://www.coe.int/t/dg4/highereducation/recognition/lrc_EN.asp

dos Santos, A.I., Punie, Y., Munoz, J.C. (2016) JRC Science for Policy Report. Opening up Education. A Support Framework for Higher Education Institutions. Available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101436/jrc101436.pdf

Panagiotis Kampylis, Yves Punie, Jim Devine (2015). JRC Policy for Science Report. Promoting Effective Digital-Age Learning. A European Framework for Digitally-Competent Educational Organisations. Available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC98209/jrc98209_r_digcomporg_final.pdf

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015). Brussels, Belgium. Available at: http://www.eua.be/Libraries/quality-assurance/esg_2015.pdf?sfvrsn=0

Terminology of European education and Training Policy. Available at: http://europass.cedefop.europa.eu/education-and-training-glossary

The Lisbon Recognition Convention. Available at: http://www.coe.int/t/dg4/highereducation/recognition/lrc_EN.asp

19 ABOUT THE AUTHORS

Anthony F. Camilleri is a consultant on quality assurance in education and a senior partner with the Knowledge Innovation Centre. He has worked with quality assurance regulators around Europe to improve the processes at quality assurance agencies, train reviewers for QA reviews and participate in reviews. He has also worked extensively in accreditation of digital education and is currently developing a system for accreditation of digital learning within European legislative frameworks. He has also developed a proposal for a meta-data standard for MOOC accreditation within the VMPASS project, and is currently working on a matrix for triple-bottom line reporting of MOOCs within the Erasmus+ MOONLITE initiative. Mr Camilleri currently acts as secretary of the International Standard Organization's PC288/WG1 which is developing ISO21001 – a management system for Educational Organizations.

Alex Grech is a strategist, change consultant and academic. He has advised multinationals, governments, NGOs and start-ups in sectors ranging from ICT and neurosciences to culture and education. Alex is currently a senior advisor to the Minister for Education and Employment in Malta, working on digital education policy, 21st century skills agendas and lifelong learning. He is a Visiting Senior Lecturer at the University of Malta, an expert on two ET2020 working groups, Deputy Chair of the National Skills Council and the Executive Director of the newly-established Commonwealth Centre for Connected Learning. Alex's research is in education technology, digital citizenship, social media and power. He holds a PhD in Internet Computing from the University of Hull and is an FCCA by profession.