



## MICROBOL Working Group on Qualifications Framework and ECTS

Output document and recommendations

June 2021

### 1. Introduction

The MICROBOL project engages ministries and stakeholders involved in the Bologna Follow-up Group to explore whether and how the existing EHEA tools can be used and/or need to be adapted to be applicable to micro-credentials. For this reason, the project looks to national qualifications frameworks, QF-EHEA and ECTS as they are one of the key bases for transparency in Higher Education.

The first meeting of the working group on QF and ECTS was focused on identifying challenges in the applicability of Bologna tools to micro-credentials, and the second meeting focused on tackling these challenges and identifying possible solutions.

This document is meant to:

- provide a comprehensive overview of the main points and challenges emerged in the Working Group meetings held in January and May 2021;
- provide input on possible solutions and recommendations to overcome these challenges, highlighting the way forward for micro-credentials in general.

### 2. Observations and challenges in applying Bologna tools to micro-credentials: outcomes of the Working Group meeting held in January 2021

The main challenges for the qualifications frameworks and ECTS highlighted in the WG meeting in January are the following:

#### 2.1. Qualifications Frameworks

- A micro-credential (MC) can be described as being within a level (1st, 2nd, 3rd cycle QF EHEA) the same way as would any single course unit/ module or individual learning component in a full degree programme.
- If micro-credentials are part of a degree programme provided by a higher education institution, this would be very easy.
- However, micro-credentials are understood also in **a wider context and not only as part of a degree programme** provided by a higher education institution.
- The way this complexity of learning fits into the idea of level may depend on how the learner develops his/her personal learning path.
- In other words, **the accumulation of knowledge, skills and competences may take place vertically or horizontally** within the qualifications frameworks, and in various directions.





- The Dublin Descriptors provide a way to describe the MCs, but **the co-existence of MCs and degrees at the same level may create confusion** among learners in terms of progress between the levels.
- Therefore, **the distinction between full degrees and stackable micro-credentials is important and should be clearly communicated.**
- **MCs should not automatically be 'stacked' into a full degree** just on the basis of the numerical sum of the credits they carry as a full degree would normally also require certain research and/or practical activities leading to a final thesis or dissertation, and also would normally include only a certain possible selection of course components.
- **The way MCs are conceptualised varies**
  - as part of degree or as stand-alone courses
  - as subject-specific knowledge, skills or competences, sets of transversal skills or small programmes
  - as 1 MC = 1 topic or 1 MC covering many topics to achieve certain knowledge, skills or competences
  - in addition, the field of study may also matter.
- Regulating **the size of MC** is not crucial, but:
  - the bigger the MC, the easier it becomes to define the learning outcomes and the level.
  - if the MC is too big, it could be confused with a programme.
- **The indication of level may be useful**, to create transparency and stackability whenever possible, but **the description of learning outcomes might also be sufficient.**
- **MCs may provide knowledge, skills and competences that are applicable to various fields of study** and are included as part of various degree programmes.
- **MCs can be part of a programme, but also lead to individual, stand-alone credentials.**
- Currently, MCs do not necessarily indicate the QF level which might **create problems with their recognition**, especially in countries other than that of the provider.
- Opening up NQFs to MCs may lead also to the other education provision that could be at the QF level 6, 7, or 8 **with different quality assurance practices.**

## 2.2. ECTS

- ECTS should be used for micro-credentials provided by higher education institutions.
- This could be useful also for other education sectors, employers and 'other providers' as there would be an advantage in using a widely accepted language, particularly the translation of ECTS into workload.
- However, there might be issues regarding **how to ensure that ECTS is used properly in these cases.**
- The easiest way would seem to be by **agreements** between 'other providers' and HEIs, that could verify that the LOs and the volume of learning are correctly described in terms of ECTS.
- **Views on whether to define a possible the range of credits for MCs vary: how to ensure clarity without sacrificing flexibility?**



- The ECTS Users' Guide supports the development of stand-alone MCs but **it should be better known and applied, with regard to this and other aspects.**

### 3. Way forward: outcomes of the Working Group meeting held in May 2021

#### 3.1. An opportunity to rethink higher education's role in lifelong learning

Micro-credentials are **an emerging topic** within the higher education sector at the national and European level, as well as globally. This topic is closely linked to a wider discussion on more accessible and flexible lifelong learning opportunities to keep pace with social, economic, and technological changes and ability to respond to societal challenges. The COVID-19 pandemic has made the question even more urgent.

Micro-credentials are often referred to as a way to increase and diversify **lifelong learning provision** to support individual learning pathways and widen access to higher education. Provision of lifelong learning opportunities, or units smaller than full degrees, such as courses, modules, diplomas, parts of degrees, in-service training, etc., is however an area where higher education institutions have long been active. Private companies and third sector actors also provide learning, which fits the concept of micro-credentials. In this regard, micro-credentials may not bring anything new under the sun at all. However, by including already existing diverse learning provision in the discussion, the micro-credentials may help to **re-conceptualise** this diversity by putting these different concepts together into a coherent and more understandable whole.

At the heart of the micro-credentials are **learners** – individuals in search of a first experience of higher education or in pursuit of updating and enhancing their knowledge, skills and competences after a period in or out of the workforce. In this regard, micro-credentials should be understood as learning opportunities provided **before, during and after higher education studies leading to a degree.**

Another important aspect is **collaboration**. In many cases, the diversification of learning provision takes place in **collaboration with higher education institutions and other education providers** both within the sector and between different sectors nationally and internationally. At EU level, one example is the higher education institutions participating in the European Universities initiative, where participating institutions together seek to expand their learning offer to different target groups by combining their strengths, which can lead to the co-development of MCs between institutions, students and employers/companies. Efforts can also be made to open up learning opportunities together on **various platforms**, often including **collaboration with employers**. In this regard, micro-credentials can be seen as a way to **tailor the learning offer** to the needs of working and family life, but also as a means to make evident the acquired knowledge, skills and competences. Another interesting aspect is **the relationship with research** and how micro-credentials could support knowledge transfer by translating the latest research results quickly into learning opportunities to the benefit of society.





Consideration is needed on the cost of developing and delivering micro-credentials across different disciplines and how they are linked to higher education funding structures. Currently these are often focused on degrees and differ greatly from country to country. Appropriate incentivisation of micro-credentials will be important for their broader take-up.

- **Recommendation 1:** facilitate the exploration of the concept of micro-credentials to support engagement of higher education institutions in lifelong learning by reaching out and providing access to education to diverse learners before, during and after studies that lead a degree.
- **Recommendation 2:** support a learner-centred approach and foster various forms of collaboration in developing micro-credentials with relevant stakeholders. Collaboration of HEIs with other providers or employers should be encouraged, as this might increase the relevance of the micro-credentials for the labour market.
- **Recommendation 3:** explore the usefulness of micro-credentials in evidencing knowledge, skills and competences acquired at work, alongside RPL.
- **Recommendation 4:** explore the potential of micro-credentials in facilitating the transfer of latest findings from research quickly in learning opportunities, also in the context of lifelong learning and diverse learners.

### 3.2. Consensus of what a micro-credential is

The very first step for having a common approach to the way the qualifications frameworks and ECTS are used to support the development of micro-credentials is to build **a common understanding of what is considered a micro-credential**.

Within the MICROBOL project we have **the following working definition**:

*“A micro-credential is a small volume of learning certified by a credential. In the EHEA context, it can be offered by higher education institutions or recognised by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable. A micro-credential is designed to provide the learner with specific knowledge, skills or competences that respond to societal, personal, cultural or labour market needs. Micro-credentials have explicitly defined learning outcomes at a QF-EHEA/NQF level, an indication of associated workload in ECTS credits, assessment methods and criteria, and are subject to quality assurance in line with the ESG” ([“European project MICROBOL. Micro-credentials linked to the Bologna Key Commitments”](#), August 2020, p. 7).*

Later on, **a second definition** was developed as final output of the EU-level micro-credentials higher education consultation group and presented in the report [“A European approach to micro-credentials”](#):





*“A micro-credential is a proof of the learning out-comes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards. The proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body and, where applicable, the qualifications framework level and the credits gained. Micro-credentials are owned by the learner, can be shared, are portable and may be combined into larger credentials or qualifications. They are under pinned by quality assurance following agreed standards”.*

Taking into account the fact that the concept and common understanding are still very much evolving, **having a broad working definition is an important condition to ensure adaptability and innovativeness.**

- **Recommendation 5:** develop a shared definition that is broad and inclusive to stimulate innovation and support adaptability of the MCs to various needs of individuals, labor market and society, in general.

### 3.3. Qualifications frameworks and ECTS

The Framework of Qualifications of the European Higher Education Area (QF-EHEA), originally adopted in 2005 and modified in 2018, serves as the basis to which National Qualifications Frameworks (NQFs) in the EHEA are referenced. The framework consists currently of the following cycles: first cycle, second cycle, third cycle and an optional short cycle. Each cycle is described in terms of learning outcomes and competences through generic descriptors and, with the exception of the third cycle, in terms of typical ECTS credit ranges,.

**The QF-EHEA is in principle fit for purpose also when addressing micro-credentials.** However, further work is needed to explore the opportunities and possible challenges when applying them to MCs. For example, QF-EHEA descriptors describe qualifications that mark the completion of each cycle. Learning outcomes provided by MCs will rarely, if ever, mark the completion of a QF-EHEA cycle so it will be important to make very clear how are they represented within QF-EHEA, e.g. as intermediate qualifications within a cycle, as part of larger qualification that is QF-EHEA compliant. The work on European level should be supported by discussion and work at national level. **How the NQF is developed, implemented and used at national level has a direct impact on how MCs can benefit from the NQF and the QF-EHEA.**

MCs offered by HEIs seem to be compatible with QF systems and may be included as **qualifications within NQFs. A common approach to principles** for including them within the NQF is needed both at European level and at national level, as the Member States are responsible for their respective NQFs. If MCs are included within the NQF at a certain level, this also indicates the QF-EHEA level of the MC, as per self-certification.

MCs can be viewed in the context of a traditional degree programme, extracted and adapted or developed as a single course unit/module or individual learning component. In principle, **these can be described as being within a level (1st, 2nd, 3rd cycle of the QF-EHEA), in the same way as they**



would be “part of a full degree programme”. This also gives an indication of associated workload in ECTS credits, assessment methods and criteria, and ensures quality assurance in line with the ESG.

Viewed in a wider context, aiding flexible learning paths, a **learning outcome approach** to developing MCs and well managed qualifications processes, including QF-EHEA Dublin Descriptors (generic cycle/level descriptors), can support **the inclusion of MCs in QFs**. NQF ‘level indicators’ can be compatible with MCs, taking the form of generic statements about the breadth and kind of knowledge, the range and selectivity of skills, the role and context competences, learning competences and insight.

MCs offered by providers other than HEIs can be recognised by HEIs using recognition procedures in line with the Lisbon Recognition Convention or validation/ recognition of prior learning, where applicable, assessing evidenced learning.

The decision whether to include all MCs or only some of them in an NQF is made on a national level. There are issues that should be taken into account. **Firstly, there is the principle of openness and flexibility** of the NQF regarding MCs as opposed to the NQF that currently includes only traditional degrees. **Secondly, including MCs on NQFs will support the recognition, quality, transparency and uptake of MCs.**

If the national decision is to include MCs in the NQF, **the criteria for inclusion in the NQF should be decided**. These criteria may include the size, naming, value /relevance and quality assurance of the MCs. **Progression and transfer opportunities** attached to the level of the MCs in the NQF are other possibilities, to name a few.

The indication of the level may be useful to create transparency and facilitate stackability. In this case, **MCs could also be distinguished**, e.g. by size and naming conventions, from other types of qualifications included within the same level of the NQF to avoid confusion among learners, employers and societal stakeholders, for instance, in terms of progress between the levels. Proliferation of titles that leads to confusion or misunderstanding is best avoided.

As mentioned before, in some cases instead of indicating the level of the MCs, a description of learning outcomes could also be sufficient. In this case, **the descriptors of the NQF as well as the QF-EHEA** can be used as a basis for formulating the learning outcomes provided by the MC.

Moreover, it is crucial that there be enough information about European and national qualifications frameworks. Information is needed especially about the criteria for including the MCs within the national frameworks and principles based on which the NQF level of the MC can be included in the certificates and/ or in national or European qualifications registers or databases.

- **Recommendation 6.** The European discussion and national solutions should be taken forward simultaneously. The European discussion on MCs can have an impact on national solutions. At the same time, it is important that the national solutions and their consequences be considered and discussed on European level.





- **Recommendation 7.** Micro-credentials should be included in the NQF, when possible. The decision on including the MCs within the national frameworks is to be made at national level. MCs as qualifications are included within an NQF which is then self-certified as compatible with the QF-EHEA.
- **Recommendation 8.** Guidelines and common principles for implementing MCs should be developed at national and European level, optimally after consensus has been reached on their definition.

### 3.4. ECTS

ECTS, officially the European Credit Transfer and Accumulation System, began when Erasmus mobility was just starting, as a practical ‘rule of thumb’ way of describing mobile learners’ accomplishments abroad so that on return they could be recognized by their home institution. The central purpose of ECTS was to permit the description of a piece of learning in a form that would be **transparent** and **understandable** for others. Its initial purpose was not to describe a full degree programme, but the smaller quantities of learning that a mobile student would need to have recognized.

Thus, in the present search for tools that can permit the shift to more flexible learning paths, which includes the exploration of the potential of micro-credentials, **ECTS is inherently very useful**. The translation of ECTS into workload is particularly useful when communicating about MCs to potential learners and employers.

As ECTS has evolved, its credits express two key elements, tightly linked: **learning outcomes**, which are descriptions of what competences the learner is able to demonstrate at the end of a learning experience, and **volume of learning**, understood as the amount of time a normal learner will need to form those competences. Thus, the basic element of ECTS, the ECTS credit, is ready for use to describe a micro-credential. In fact, unsurprisingly, the possibility of using it for a stand-alone course unit or piece of learning is already contemplated in the 2015 Users’ Guide, and indeed, ECTS credits are regularly awarded for such learning experiences as summer schools or special courses of various kinds.

In addition to credits themselves, another key element of ECTS is the production of **the Course Catalogue in standard format**, and made available on-line: this includes a succinct description of all degree programmes and all course units/individual components of learning offered by a higher education institutions. Micro-credentials (or, in principle, any ‘small piece’ of learning), **could be included in an HEI’s Course Catalogue**. The same standard format could also be used by ‘other providers’ to present their offer. How the Course Catalogue would relate to the current discussion on the registry of micro-credentials should be further explored. This highlights the fact that the MCs should not be developed separately from the existing higher education system.

Whether micro-credentials should have **a specific number of credits, or a broader or narrower range of credits** is a question that has been discussed in earlier meetings. In the varied taxonomy of the ‘small pieces of learning’ rapidly becoming available, examples go from badges indicating very brief learning experiences (less than 1 credit) to longer mini-courses that may even require a year of a full-





time learners' life. There is a need for flexibility, but at the same time, for clarity. The most common idea seems to describe micro-credentials as something of the order of **a course module**, usually something between 3 and 15 ECTS credits. As the concept and its content are still very much evolving, we should allow quite a broad range, but one that distinguishes MCs clearly on the one hand both from full degree programmes, and on the other, perhaps, from very small pieces of learning (e.g. under 1 ECTS credits).

The question arises as to **whether all MCs**, including those offered by other educational sectors and employers, **should be described in terms of ECTS**. Are there cases in which competences and describing learning outcomes are enough? One argument is that a principle aim of MCs is to upskill or reskill current or future employees, and that employers only need to know that a person has the required competences, and that credits are irrelevant in this regard. It seems however that most employers are interested in having competences described using the widely known and accepted language of ECTS. 'Other providers' too would find it beneficial to be able to present their offer in that language. But in some countries, only recognised higher education institutions can award ECTS.

ECTS should be used for micro-credentials provided by higher education institutions. This seems to be a foregone conclusion, as HEIs are trusted providers, and can easily adapt to describing MCs in the system they use for other courses, whether stand-alone or not. But how can 'other providers' guarantee that they use ECTS properly? The easiest way would seem to be to promote **cooperation agreements** between 'other providers' and HEIs: in this way the HEIs can verify that the LOs and the volume of learning are correctly described in terms of ECTS. Such partnerships can be encouraged as they provide a path for employers and HEIs understanding each other's needs and profiting by having access to each other's know-how. For those countries with restrictions in awarding ECTS by other providers, awarding ECTS would continue to be guaranteed by the HEI but in close cooperation and coordination with the provider. Such a practice would also encourage 'co-creation' of MCs, and so their responsiveness and relevance to the rapidly changing context.

A careful reading of the ECTS Users' Guide (2015 edition) shows that **ECTS in its current form supports the development of stand-alone MCs**, and already comprises numerous features that can be deployed for this purpose. Unfortunately, experience shows that frequently ECTS is understood only in a superficial way, and sometimes it is applied incompletely or incorrectly. Not all HEIs offer an updated Course Catalogue, completed according to the suggested format. There are instances, furthermore, in which an excessive number of ECTS credits are awarded, for example for summer schools, thus debasing the ECTS currency ("selling ECTS credits").

If ECTS and micro-credentials are to have credibility ECTS needs to be implemented correctly, and its many facets better known not only to academics, but also to other stakeholders. It is particularly important to clarify that ECTS credits represent two elements, learning outcomes as well as volume of learning in student time. Because all issues relating to MCs are covered, a new Users' Guide is not required. However, a specific 'Addendum' might be useful in order to clarify ECTS and learning outcomes issues in relation to micro-credentials, and point out to potential users the solutions that can be applied.



- **Recommendation 9:** ensure that the existing ECTS Users' Guide (2015 edition) is well known and correctly followed by HEIs and its elements clarified for other stakeholders.
- **Recommendation 10:** If deemed useful, formulate a simple guide to the relevant existing ECTS principles and features, to facilitate the correct understanding and application of ECTS to MCs.
- **Recommendation 10.** Encourage cooperation between HEIs and other education sectors as well as private providers in order to facilitate the correct definition of learning outcomes and indication of workload, as well as co-creation of learning activities.

### 3.5. Other aspects: A common format

Besides the qualifications frameworks and ECTS, the development of micro-credentials includes other aspects that need to be taken into consideration when building a European common framework. Some of these aspects are discussed more deeply by the other two working groups of the MICROBOL-project.

The success of a European Approach of micro-credentials depends on its common understanding throughout the European Higher Education Area. Therefore, we should agree on certain constitutive elements in the certification itself to assure fair and transparent recognition and permeability between national systems and higher education institutions.

**A common format** to issue micro-credentials will be necessary for providers to document the value of micro-credentials. At the same time it should be ensured that the mandatory information needed for recognition is kept to **the minimum necessary in order to avoid imposing an unnecessary burden**, also in terms of overlapping approaches.

Taking the above mentioned considerations into account, the following format is proposed for the purposes of **issuing** a micro-credential.

#### 1. Compulsory

- **Information on the learner:** identification on the learner
- **Information on MC:** Title, information on the provider (including country), information on the awarding body institution, if different (including country), date of issuance or date of assessment.
- **Information on learning experience:** learning outcomes, workload (in ECTS, whenever possible), assessment and form of quality assurance

#### 2. Optional

- NQF level (whenever possible, and if self-certified /referenced QF-EHEA and EQF level)
- Field(s) of learning or subject area





- Form of participation in the learning activity,
  - Prerequisites needed to enrol
  - ISCED level
  - Expiration date
- 
- **Recommendation 11:** support knowledge and enhance awareness of the importance of the common European format to document micro-credentials, create consensus on them, contribute to their implementation and develop good practices.





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