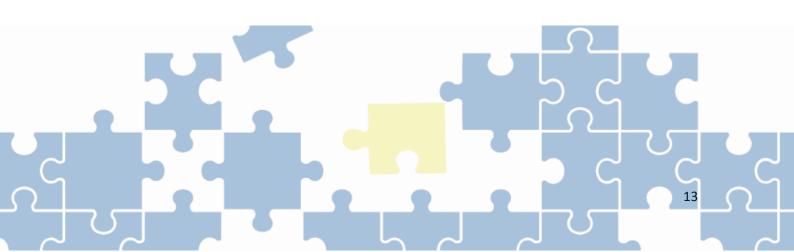




# **European project MICROBOL**

## **Report of the MICROBOL project Final Conference**

8 March 2022



## Report of the MICROBOL project Final Conference

#### 8 March 2022

## I. Outline

The MICROBOL project Final Conference took place in a hybrid setting on 8<sup>th</sup> March 2022 and could be followed by the public via livestream. The main aim of the conference was to present the final project outcomes, notably the Common Framework for Micro-credentials in the European Higher Education Area (EHEA).

As such, the project partners introduced the project and the different aspects of the framework, in particular on the topics of Quality Assurance, Recognition and Qualifications Framework and ECTS. A European Commission representative presented the proposal for the Council Recommendation on a European approach to micro-credentials for lifelong learning and employability. The conference was rounded off with a panel discussion between the experts that had been involved in the project. The full programme is annexed to this report.

#### II. Presentations and discussions

#### Presentation of the project

The welcome address was made by **Ann Verhaegen**, Secretary-General of the Flemish Department of Education and Training. She explained that micro-credentials are an emerging topic in higher education at the national and European level, as well as globally. The topic is closely linked to the wider discussion on how to make lifelong learning opportunities more available, more accessible and more flexible. This way, we can better respond to societal challenges and keep pace with social, economic, and technological changes. The COVID-19 pandemic has made the question even more urgent, as the need for upskilling and reskilling – as well as the importance of flexibility in education and employment – became ever more clear. This closely links to the Flemish priorities in higher education, as the topics inclusion and flexibility have been high on the Flemish higher education policy agenda for many years.

The project coordinator **Magalie Soenen** continued to present the MICROBOL project in more detail. She reiterated that the aim of the project was to:

- Raise awareness among national governments;
- Encourage and guide national governments to include micro-credentials on the policy agenda;
- Check whether existing Bologna tools are fit for micro-credentials and/or propose changes for adaptations on European level;
- Formulate recommendations; and
- Create a European Framework for micro-credentials.

The MICROBOL project started in March 2020 and since then, the project team has worked on a desk research, organised a kick-off conference and working groups, distributed a survey among EHEA

countries, formulated recommendations and published a framework on micro-credentials. This final conference is the last major milestone in the project.

The MICROBOL survey that was published in February 2021, served as a basis to gain a picture on the state-of-play on micro-credentials in different member states of the European Higher Education Area. It was also a means to encourage national discussion and to build a way forward on a common understanding on the topic. 35 countries participated in the survey. The survey showed that the majority of the countries were already offering and/or developing micro-credentials at the time of the survey. Yet, the understanding of what constitutes a micro-credential varied greatly across the countries surveyed. At the same time, it became clear that there are very different approaches to micro/credentials on the regulatory side. For the majority of countries, the biggest challenge that was put forward was the applicability of the Bologna Key Commitments to micro-credentials. A clear request for support on the topic emerged from the survey results.

Hence, the MICROBOL project further elaborated on the survey results and discussions in the working groups. A joint publication of 34 recommendations on QA, recognition and QF&ECTS was published in July 2021. This document not only targeted EHEA countries and stakeholder organisations, but also fed into the European Commission's proposal for a Council recommendation on micro-credentials for lifelong learning and employability. Besides the Bologna key commitments, the recommendations focused on a set of transversal themes, including a common format, legislation and digitalisation, and gave particular attention to peer exchange and support and the involvement of all actors.

## <u>Council Recommendation on a European approach to micro-credentials for lifelong learning and</u> employability

On behalf of the European Commission, **Kinga Szuly** (DG Education, Youth, Sport and Culture) presented the proposal for the Council Recommendation on a European approach to microcredentials for lifelong learning and employability. This initiative was launched by European Commissioners Mariya Gabriel and Nicolas Schmit. The European Commission notes that the number of micro-credentials in Europe and globally is already growing. However, the value and understanding of micro-credentials is not always clear, there is a wide range of providers, and there are additional questions on quality, transparency and uptake of micro-credentials between and within countries, between sectors, as well as from one job to another.

The objectives of the recommendation are to:

- Enable people to acquire the knowledge, skills and competences they need to thrive in a changing labour market and society, so they can benefit fully from both a socially fair recovery from COVID-19 and just transitions to the green and digital economy.
- Support the preparedness of providers of micro-credentials to enhance the transparency and flexibility of the learning offer in order to empower people to forge personalised learning and career pathways.
- Foster inclusiveness and equal opportunities, contributing to the achievement of resilience, social fairness and prosperity for all, in a context of demographic change and throughout all phases of economic cycles.

As such, the proposal covers micro-credentials and policies that can support their effective design and use. Micro-credentials are seen as a means to complement and enhance education and training, and the proposal does not intend to disrupt or replace existing systems or qualifications.

The proposal provides the 'building blocks' of micro-credentials, by proposing a common definition, standard elements and principles for the design and issuance of micro-credentials. The common definition proposed by the Commission is as follows:

"Micro-credential means the record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes have been assessed against transparent and clearly defined standards.

Courses leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. Micro-credentials are owned by the learner, can be shared and are portable. They may be standalone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity."

The proposal also provides recommendations to member states to develop ecosystems for microcredentials and to deliver on their potential. This concerns formal learning, non-formal and informal learning. HEIs and VET providers should be supported in their exploration of micro-credentials, while at the same time, the development of micro-credentials designed by non-formal providers should be discussed through social dialogue and validation/RPL processes should be adapted. Quality and transparency should also be addressed: we need quality assurance mechanisms for micro-credentials and integrate micro-credentials in NQFs, where relevant.

The Commission intends to support the member states and stakeholders to implement these recommendations. It will do so by developing and adapting existing EU tools, by supporting cooperation between member states and stakeholders, technical implementation through Europass and by supporting further research and data collection.

#### Common framework for Micro-credentials in the European Higher Education Area

Project coordinator **Magalie Soenen** presented the Common framework for Micro-credentials in the European Higher Education Area that was developed by the MICROBOL project. This project was carried out in parallel to the initiatives that were taken by the EU institutions and as such, the project team was in frequent dialogue with the European Commission. The MICRBOL project focused on higher education and the Bologna tools, therefore it has a more focused approach compared to the Commission's proposal for a Council Recommendation. However, the MICROBOL framework and the Commission proposal are compatible.

The MICROBOL project proposes the following concise definition:

"A micro-credential is a certified small volume of learning"

A few elements are important to highlight: micro-credentials are seen as both a learning experience and a certification. Both elements are equally important. In addition, the volume of the micro-

credential is defined as 'small', rather than 'short', as it reflects the volume of the learning outcomes, rather than the length of a course.

Regarding its purpose, micro-credentials are designed to provide the learner with specific knowledge, skills, and competences that respond to societal, personal, cultural or labour market needs. They are a way to increase and diversify lifelong learning provision to support individual learning pathways and widen access to higher education. They also provide a timely and relevant response to learners' and labour market needs. Collaboration is an important aspect for the provision of micro-credentials, not only between HEIs, but also with other providers, both nationally and internationally.

When looking at the use, credentials are owned by the learner, are portable and may be combined into larger credentials or qualifications. Micro-credentials can be earned before, during and after higher education degree programmes and as a new way to certify competences acquired earlier in life. They should not be a goal by themselves: learners are at the heart of micro-credentials. In order to guide learners through the offer of micro-credentials, catalogues can be an important source of information. They should be understood as repositories of data and information. When completing a micro-credentials, certificates can be awarded in many formats, but should ideally be provided in a digital format, as this can facilitate portability, transparency and reliability of data, thus allowing a faster recognition process and stackability. Stackability means that different micro-credentials can be combined into a degree or other type of certification.

In order to further facilitate the use of micro-credentials, countries should consider the costs of developing and delivering micro-credentials across different disciplines and how they are linked to higher education funding structures. There is also scope to further strengthen links between education and research: micro-credentials can facilitate a smooth knowledge transfer, translating the latest research results quickly into learning opportunities for the benefit of society.

The MICROBOL framework proposes a set of constitutive elements for micro-credential certificates:

- Information on the learner: identification of the learner
- Information on the provider: information on the provider, including country; information on the awarding body institution, including country (if different), including a signature or seal of the provider and/or awarding body institution
- **Information on the micro-credential**: title, date of issuance or date of assessment, verification of authenticity
- **Information on the learning experience**: learning outcomes, workload (in ECTS, when possible), assessment and form of quality assurance
- Information on the QF level: NQF level (when possible), QF-EHEA and EQF level (if self-certified/referenced), ISCED level & subject area code, SQF level (if needed)
- Form of participation in the learning activity
- Access requirements

The full framework can be found on the MICROBOL website.

## Recommendations from the MICROBOL project

The MICROBOL framework furthermore particularly addresses the three Bologna key commitments: Quality Assurance, Recognition and Qualification Frameworks & ECTS.

**Elena Cirlan** of the EUA presented the recommendations from the MICROBOL project regarding quality assurance. She underlined that the ESG apply to all higher education offered in the EHEA, in whatever format, duration or mode of delivery. The primary responsibility for the quality of provision lies with the higher education institutions. All micro-credentials should be subject to internal QA and there should be well-built systems to monitor their quality internally. It should be considered that stand-alone micro-credentials may require more elaborate QA procedures. When asked for further clarification on QA of stand-alone-micro-credentials, Elena Cirlan elaborated that the best approach would be to look at the whole institutional QA. Stand-alone micro-credentials have no relation to existing programmes, therefore their criteria would usually not overlap with the criteria for full programmes.

Transparency is crucial, therefore HEIs should publish clear policy and information on how they approach the quality of micro-credentials. Learners should be included in all steps of the development, implementation and the QA process of micro-credentials.

The application of procedures for external programme evaluation should not be followed for micro-credentials, as they may burden QA agencies and the providers. QA agencies' role is to support higher education institutions in developing policies and processes for QA. There are different types of micro-credentials, therefore they might require different evaluation approaches.

National governments should explore whether a change in legislation is needed. They should support the development of a clear policy framework with transparent standards, while at the same time supporting the increased development of micro-credentials in co-creation with all stakeholders.

As for the way forward, it is important that there is a shared vision of what a micro-credential is. In order to do this, a set of "key considerations" for QA of micro-credentials needs to be developed and it should be further explored in collaboration with alternative providers if and how QA procedures should be adapted for the provision of micro-credentials in partnerships. Hence, it will also be important to further investigate employers' acceptance of micro-credentials. It may be useful to develop a guidebook including a set of guidelines, good practices and recommendations for HEIs and quality agencies. When asked about QA agencies' support, Elena Cirlan answered that she expects QA agencies will continue to be very supportive to HEIs and that she hopes that QA agencies will act as advocates for putting good policies in place. QA agencies play an important role and should be included in discussions among HEIs and policy makers.

Chiara Finocchietti from CIMEA continued on the topic of recognition, focusing on one hand regarding the coverage of the Lisbon Recognition Convention, and on the other hand the recognition of prior learning. She noted that as far as possible, micro-credentials should be assessed according to the principles and procedures of the Lisbon Recognition Convention (LRC). It will be quite natural for micro-credentials provided by HEIs to fall under the LRC rules. However, for qualifications awarded by non-formal providers, the lack of legal instruments could leave open the question of admission/recognition predictability. We should work in the direction of streamlining procedures in line with the LRC principles. In order to so, we can build on existing initiatives and projects carried out by the ENIC-NARIC networks, such as the E-valuate project.

Recognition according to the LRC is possible when all the constitutive elements of a micro-credential are displayed. When this is not the case, it is still possible to recognise micro-credentials through recognition of prior learning. Micro-credentials even offer the opportunity to enhance the use of recognition of prior learning. This could be useful for the recognition of small volumes of formal or

non-formal learning. In this case, procedures that are fit-for-purpose and appropriate for HEIs and learners should be developed. International approaches and good practices in recognition of qualifications of refugees with partial or missing documentation could be seen as an example from which to learn and take inspiration from.

Regarding the way forward, it was highlighted that transparency of information is key for the fair assessment of micro-credentials. If all the constitutive elements are properly displayed, it is possible for HEIs or other entities within or outside of the higher education sector to assess such micro-credentials in line with the Lisbon Recognition Convention principles. Digitalization of credentials supports recognition, as it enables portability, transparency and reliability of information and verification of authenticity. The main objective would be to work towards recognition of micro-credentials that is as "automatic" as possible, starting from cases where all the elements and information are available to conduct a fair assessment.

A question from the audience addressed the question of alternative providers. Chiara Finocchietti agreed that this is an area where a lot of work still needs to be done. Cooperation will be key to support the fair recognition of micro-credentials. Recognition agreements between education providers may be useful tools. Furthermore, it will be important for non-formal providers to work towards transparent information provision, including the correct wording and elements such as workload. This way, we can work towards a culture of recognition.

Jonna Korhonen from the Finnish Ministry of Education and Culture continued on the topic of Qualification Frameworks & ECTS. She explained that the QF-EHEA is in principle fit for purpose also when addressing micro-credentials. Yet, it is important to make very clear how micro-credentials are represented within QF-EHEA, as they rarely mark the completion of a cycle. This links also to the way the NQFs are developed, used and implemented at the national level. The learning outcomes approach may help to include micro-credentials into NQFs. The decision whether to include all micro-credentials or only some of them in an NQF is made at national level. The criteria for inclusion in the NQF should be decided, such as naming, size and value. It is important that micro-credentials are distinguished from full degree programmes.

Micro-credentials should hence be included in the NQF, when possible. For the way forward, it is important that the European discussion and national solutions should be taken forward simultaneously, as European initiatives can have an impact on national solutions and the latter can in turn feed into the European discussions. Guidelines and common principles for implementing micro-credentials should be developed at national and European level, optimally after consensus has been reached on their definition.

Regarding ECTS, it was noted that ECTS were developed to permit the description of a piece of learning in a transparent and understandable form. It comprises learning outcomes and volume of learning. In addition to credits themselves, another key element of ECTS is the production of the Course Catalogue in a standard format. Micro-credentials could be included, although it will be necessary to do a thorough exercise on how we would like to see these tools develop in the future. It should be noted that micro-credentials should not be developed separately from the existing higher education system.

ECTS can and should be used for micro-credentials provided by HEIs. The question remains whether alternative providers could also use ECTS to describe competences. Here, cooperation agreements between HEIs and alternative providers could be beneficial. ECTS needs to be implemented correctly, and its many facets better known not only to academics, but also to other stakeholders. It should be

ensured that the existing ECTS Users' Guide (2015 edition) is well known and correctly followed by HEIs and its elements clarified for other stakeholders. If deemed useful, a simple guide to the relevant existing ECTS principles and features could facilitate correct understanding.

The audience asked about the volume in ECTS of micro-credentials and whether micro-credentials are not too small to be applied to the NQF instrument. Jonna Korhonen explained that the MICROBOL working group on QF & ECTS does not have a recommendation for a certain ECTS-credit range. In some cases, there was a preference for credit ranges between 5 ECTS to 15 or 30 ECTS, but there are also cases where micro-credentials are larger or smaller than this volume. Considering this, it may indeed be difficult to include micro-credentials that have a very small volume, therefore micro-credentials should be included in the NQF "when possible".

#### Panel with MICROBOL experts on the road ahead

A panel of MICROBOL experts and associate partner EQAR further discussed the topic of microcredentials in relation to the Bologna tools. The panel discussion was moderated by **Maria Kelo** (EUA).

The experts were asked what, in their view, was the most important outcome of the MICROBOL project. **Anthony F. Camilleri**, tertiary education policy consultant and founder of the Knowledge Innovation Centre, highlighted that a few years ago, it was not obvious at all that micro-credentials had a place in higher education and that the Bologna tools would be appropriate for it. Yet, the project has shown that micro-credentials fit very nicely in the original aims of the Bologna process. They can even stimulate the process, as they can enhance mobility and internationalisation. Yet, there are some difficulties: when looking outside of higher education, there is still a lot of work to do.

**Frederik De Decker**, Head of the International Relations Office at Ghent University (BE), highlighted that the Bologna key commitments indeed fit very well to micro-credentials, even when they represent small amounts of learning. This is certainly the case for the use of learning outcomes, credits (and the concept of workload), qualification frameworks and the levels linked to them and the QA principles of the ESG. We should use all these tools to our benefit when further working out micro-credentials.

The timing of the MICROBOL project was spot on, said **George Ubachs**, Managing Director of the European Association of Distance Teaching Universities (EADTU). There was a momentum to look at micro-credentials in relation to the Bologna tools, considering the European policies that are being developed in parallel. In his view, the MICROBOL framework is furthermore an important reference model in the discussions at national level to integrate micro-credentials.

On behalf of the European Quality Assurance Register (EQAR), **Colin Tück** mentioned that EQAR-registered quality assurance agencies are already quite active on evaluating micro-credentials, even outside of HEIs. He has confidence that HEIs will include their micro-credentials offer in their own internal quality assurance arrangements and that QA agencies will be successful in including micro-credentials in their external QA at institutional level. There are however still some countries where external QA is entirely focused on programmes, and here some further thinking will be necessary. In the DEQAR database, it will simply be necessary to be transparent on what the different types of institutional reviews cover.

When asked about the future and the next steps for the effective integration of micro-credentials in higher education, **George Ubachs** believed that we need to build an ecosystem for continuous

education and explore the role of micro-credentials in relation to other qualifications. At the same time, micro-credentials need to be implemented in HEIs: this does not only mean including micro-credential programmes in the offer, but HEIs should also consider student support and creating an interface between academia and the labour market.

**Anthony Camilleri** added that the element that will require the most effort, will be moving towards (semi)-automatic recognition of micro-credentials, as current provisions are too burdensome to be applied to micro-credentials. At the same time, we need to think about how to measure skills: we need to use level indicators, as this will help with the recognition process.

Several experts agreed that the main future challenge will be to find a place for alternative providers. Many large companies, NGOs and other organisations offer micro-credentials. Arrangements should be made to ensure the quality of this offer, enable recognition and apply QF levels and ECTS. As mentioned before, cooperation agreements between HEIs and alternative providers could provide an answer. It will furthermore be necessary to look beyond the Bologna tools and the things that we take for granted in higher education, such as academic freedom and scientific method.

Ann Katherine Isaacs, Bologna expert and Vice-Chair of the Bologna Follow Up Group until 2020, elaborated on how she expects the outcomes of the MICROBOL project to feed into the Bologna workplan and the future of the Bologna Process. The vision of the EHEA in 2030 describes a future that is inclusive, innovative and interconnected. This opened up higher education provision to a larger range of (potential) learners and indicated a need for more flexibility. It created a scope to integrate micro-credentials in higher education – they already existed before, but in a more chaotic manner and were not fully integrated in higher education. The MICROBOL project has shown that the EHEA tools are very suitable to micro-credentials, if understood and applied correctly in an agreed and coordinated manner. Within the Bologna Process, the topic of micro-credentials will be further discussed within specific groups and with consultative members. This will be very important to ensure that HEIs are informed about how to use the Bologna tools in the 'new way'.

Not only the EHEA is working on micro-credentials; the EU is also very active on the topic, as is reflected by initiatives such as the Commission proposal for a Council Recommendation on micro-credentials, the Strategy for Universities and the European University initiative, all within the framework of the European Education Area. **Peter van der Hijden**, independent higher education strategy advisor, believes that the MICROBOL project has played an important role in this context. Within the micro-cosmos of micro-credentials, all these policies come together. Micro-credentials have an important role to address skills mismatches, through diversification and flexibility. In addition, European University alliances are also upscaling micro-credentials and tailoring it to their specific situation. The MICROBOL framework will help to address the challenges in all these areas.

When asked by the audience whether the stacking of a micro-credentials is similar to dividing a degree, but reversed the panellists showed different opinions. Peter van der Hijden finds it an excellent comparison. George Ubachs however highlighted that those students who would opt for a micro-credential do not necessarily have the ambition to do a full degree; stackability gives an incentive to continue studying, but not necessarily to the extent of a full degree. Ann Katherine Isaacs highlighted that some micro-credentials can be stacked, but the main goal of micro-credentials is to offer flexibility. Stackability should not be an obligation. Anthony Camilleri disagrees with the statement; micro-credentials offer learners the possibility to do exactly the amount of credits they want, from any institution in the world, that suits their specific learning pathway. From a university perspective,

this means that every micro-credential needs to be top-quality, because they are individually offered and evaluated.

#### Concluding remarks

The project coordinator **Magalie Soenen** rounded off the conference with concluding remarks. The main conclusion of the MICROBOL project is that the Bologna tools are applicable to micro-credentials. They can even give a new boost to the full implementation of the Bologna tools and commitments.

In order to strive for an effective implementation and uptake of micro-credentials in the European higher education area, we do have to invest in further dialogue. Therefore, we should take up the framework that has been created, within the Bologna process and more specifically through the Bologna Thematic Peer Groups in their working programmes for the period 2021-2024. The co-chairs of the different thematic peer groups, have put the topic of micro-credentials on their agendas, to ensure a follow-up of the MICROBOL working groups.

In these further processes, all actors must be involved. This includes higher education institutions, public authorities and recognition bodies, but also employers, students, trade unions and assessment providers, just to name a few. In order to have all these actors on board and to promote a common understanding among them, it might be useful to develop guiding documents for different actors.

As brought forward by the survey and discussions in the working groups, it will be necessary to invest in peer learning and exchange of good practices.

The MICROBOL framework is a starting point. Now we need to invest in further dialogue, collaboration and uptake of micro-credentials in European Higher Education.

The project coordinator thanked the project partners and experts for their expertise, their enthusiasm and their professional way of cooperation throughout this project. She also thanked the many representatives of countries and stakeholder organisations whose input was very valuable during the working groups and other activities of the project.

#### III. Attendance

The event was open to all, but was deemed to be of particular interest to European and national policy makers, including the BFUG members of the 48 EHEA countries, higher education institutions, quality assurance agencies, recognition bodies, student representatives and other actors with an interest in micro-credentials.

In total, 480 people had registered to the event. These participants mostly came from Belgium (mostly from Belgian public authorities, Higher Education Institutions and organisations, but this also includes persons from European institutions and organisations). Spain, Hungary, Estonia and Austria complete the top 5 (see figure 1). Overall, we can see that there were participants from most European countries and that there was a good geographical balance (see figure 2). In addition, the event even attracted a global audience, as people registered from all corners of the world, including the USA, Argentina, South Africa, Iraq and India. People joined from 60 different countries.

At its peak, 217 participants were present at the event. Participants stayed for an average of one hour and a half. The quality of the questions showed that the audience had a good understanding of the

topic. From this, we conclude that the right audience was reached and that the conference was of interest to those who joined.

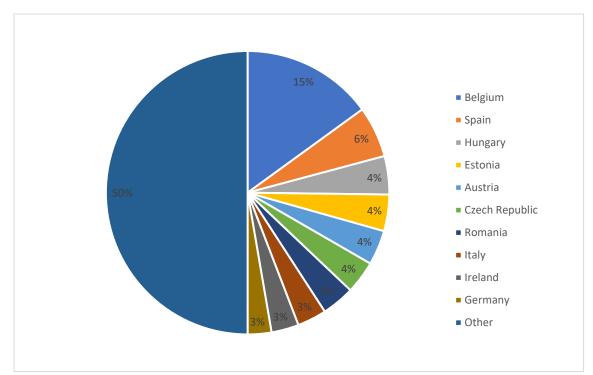
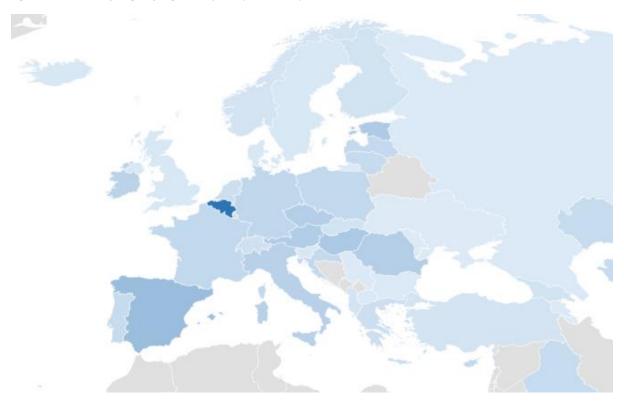


Figure 1: Top 10 countries of origin of registered participants





## **IV.List of annexes**

Annex I – Programme of the MICROBOL Final Conference

Annex II – Presentations and recordings of the MICROBOL Final Conference

## **Final Conference Microbol**

## **Tuesday 8 March 2022**



Online platform: www.auvicom.com/microbol

Central European Time (CET), Brussels, Belgium

## 13.00 Opening of the platform

#### 13.30 Welcome address

Ann Verhaegen, Secretary-general, Flemish Ministry of Education and Training

## 13.40 Presentation of the project

Magalie Soenen, Project coordinator, Flemish Ministry of Education and Training

# 14.00 Council Recommendation on a European approach to micro-credentials for lifelong learning and employability

Kinga Szuly, European Commission DG Education, Youth, Sport and Culture

## 14.30 Common framework for Micro-credentials in the European Higher Education Area

Magalie Soenen, Project coordinator, Flemish Ministry of Education and Training

#### 14.45 Health break

## 15.15 Recommendations from the MICROBOL project

QA - Elena Cirlan, EUA

Recognition - Chiara Finocchietti, CIMEA

Qualification Frameworks & ECTS – Jonna Korhonen, Finnish Ministry of Education and Culture

## 16.00 Panel with MICROBOL experts on the road ahead

MICROBOL discussion panel (Anthony F. Camilleri, Frederik De Decker, Ann Katherine Isaacs, Colin Tück, George Ubachs, Peter van der Hijden)

Moderator – Maria Kelo

## 16.50 Concluding remarks

Magalie Soenen, Project coordinator, Flemish Ministry of Education and Training

### Annex II

## **Presentations and recordings of the MICROBOL Final Conference**

The presentations made during the final conference can be consulted via the links below:

- Magalie Soenen <u>Presentation of the project</u>
- Kinga Szuly Proposal for a Council Recommendation on a European approach to microcredentials for lifelong learning and employability
- Magalie Soenen <u>Common framework for Micro-credentials in the European Higher</u> Education Area
- Elena Cirlan, Chiara Finocchietti and Jonna Korhonen <u>Recommendations from the MICROBOL</u> <u>project</u>

The recordings of the event can be viewed on the MICROBOL project website via this link.