



Micro-credentials and recognition system



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Project information

The Artificial Intelligence Skills Alliance (ARISA) fast-tracks the upskilling and reskilling of employees, job seekers, business leaders, and policymakers into AI-related professions to open Europe to new business opportunities. It is a four-year transnational project funded under the EU's Erasmus+ programme. For more information, contact info@aiskills.eu | aiskills.eu

Project partners

The ARISA consortium is led by DIGITALEUROPE. ARISA regroups leading ICT representative bodies, education and training providers, qualification regulatory bodies, and a broad selection of stakeholders and social partners across the industry.

View all [project partners](#).



List of abbreviations

AI	Artificial Intelligence
ARISA	Artificial Intelligence Skills Alliance
BFUG	Bologna Follow-up Group
D.	Deliverable
ECTS	European Credits Transfer System
EHEA	European Higher Education Area
EQF	European Qualification Framework
ESCO	European Skills, Competencies, qualifications and Occupations
HEIs	Higher Education Institutions
LRC	Lisbon Recognition Convention
NQF	National Qualification Framework
QA	Quality Assurance
RPL	Recognition of Prior Learning
T.	Task
TPG	Thematic Peer Group
WP	Workpackage

Terms and Definitions

ARISA Learning Programmes	'ARISA Learning Programmes' refers to all types of full or partial learning units developed by higher education or vocational education & training providers in the ARISA Project.
ARISA Certificate Supplement	The ARISA Certificate Supplement is comprehensive of all the elements (mandatory and optional) listed in the Annex I of the <i>EU Council Recommendation on a European Approach to micro-credentials for lifelong learning and employability</i> (Source: <i>D5.4 Application of micro-credentials into the ARISA certification system</i> ; pg. 18).
ARISA Certificate of Achievement	The ARISA Certificate of Achievement includes the essentials information, such as learner identification and key details about the course, provider, date, and location. (Source: <i>D5.4 Application of micro-credentials into the ARISA certification system</i> ; pg. 18).
Micro-credentials	'Micro-credential' means the record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes will have been assessed against transparent and clearly defined criteria. Learning experiences 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 stand-alone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity (<i>EU Council Recommendation on a European Approach to micro-credentials for lifelong learning and employability</i>).

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1. Executive Summary

Introduction

This report elaborates a comprehensive framework focused on micro-credentials, that is aimed to facilitate the recognition of the ARISA Learning Programmes, in compliance with what has been done in the WP5 *Development of a certification system*, by presenting national good practices on micro-credentials development in both EU countries and Ukraine, to foster the use of the ARISA Certificate Supplement by the ARISA piloting partners. In details, micro-credentials provide acknowledgement of the achieved Learning Outcomes and other constitutive elements of the courses.

Objectives

The main aim of T6.2 is to provide an overview on the deployment and recognition of the ARISA Learning Programmes as micro-credentials, as well as the collection of existing good practices in the WP6 piloting partners countries, both in EU and Ukraine.

Methodological approach

The task is focused on the collection of the most recent development initiatives at European level aimed to facilitate recognition of micro-credentials. All WP6 partners are involved and requested to contribute by relevant use cases, if available. A preparatory training activity was conducted, on the use of micro-credentials in the ARISA Learning Programmes to be piloted. Finally, the report on the certification methodology for the first piloted ARISA Learning Programmes was included in this document.

Results

The expected result of the document is twofold as oriented to make the ARISA partners aware about the recognition issues connected to micro-credentials and apply and test the existing tools and good practices in the framework of the certification for the piloted ARISA Learning Programmes.

Conclusions

The document aims to facilitate and test the application of micro-credentials to the certification of the ARISA Learning Programmes for facilitating their recognition both in the labour market and for further studies.

Use of this document

The results of the monitoring of the ARISA certification methodology for the piloted courses will be integrated in the T6.5 Online course Testing and Evaluation, and the recommendations arose during the T6.5 will be included in the T6.6 Recommendations and Upgrade of the curriculum, where relevant. In this way, the developed ARISA certification methodology will be tested and validated and the suggestions received will be considered for further improvement.

2. Introduction

Micro-credentials have gained increasing attention due to their specific benefits in education, professional development, and workforce training. Their value is being acknowledged by employers, educational institutions, and learners alike.

The link between micro-credentials quality and recognition is crucial for their acceptance and value in education and employment. High-quality micro-credentials - those with clear learning outcomes, rigorous assessment, transparency, and alignment with industry or academic standards - are more likely to be widely recognized by employers, educational institutions, and professional bodies.

If the role of information provision is key for all qualifications, it is even more crucial for micro-credentials, for which a lack of common set and standardised information is registered. Recognition depends on trust, which is built through quality assurance mechanisms such as accreditation, standardized frameworks and interoperability with existing qualification systems. Without robust quality standards, micro-credentials may lack credibility, limiting their usefulness for career advancement or further education.

For this reason, the elements of micro-credentials, as listed in the [Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability \(2022/C 243/02\)](#), abbreviated from now on as “EU Council Recommendation on Micro-credentials”, were taken into account in the certification of the ARISA training programmes and analysed in the framework of T5.4. Furthermore, in the framework of WP5, the ARISA Quality Assurance Label was developed, also defined in this document as the ARISA Quality Label.

In this context, the purpose of T6.2 is to provide an overview on the existing good practices and use cases in the EU countries, on policies and initiatives aimed to facilitate the recognition of micro-credentials. The document analyses the current development of micro-credentials in the ARISA piloting partner countries and promotes the use of the ARISA Certificate of Achievement (*Annex 1*) jointly with the ARISA Certificate Supplement (*Annex 2*). These were developed as part of T5.4 and the Certificate Supplement was reviewed within WP6, incorporating feedback from ARISA Project Partners collected in the framework of T6.2.

Furthermore, D6.2 analyses specifically the ARISA Certificate Supplement released by some of the ARISA Piloting Partners and provides a report on their level of transparency and of completeness of information by using the Micro-Evaluator tool developed within the [STACQ Project](#), co-funded by the Erasmus+ Programme.

The planned roadmap for T6.2 can be summarised as follows:

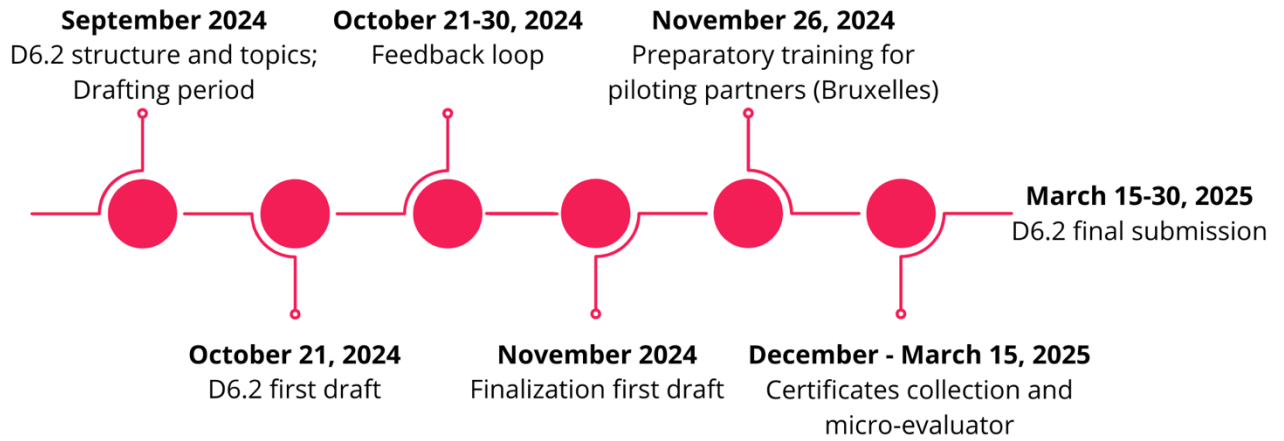


Figure 1 Roadmap T6.2

3. Methodology

Once the structure was agreed, CIMEA drafted a first version of D6.2 and shared it with partners in order to receive its final validation.

During the consortium meeting in Brussels, on November 26, 2024, CIMEA organized a preparatory training activity on the use of the ARISA Certificate Supplement for the certification of the courses to be piloted. The focus was mostly on the ARISA Certificate Supplement because it specifically details all the elements required to define a micro-credential.

After that, the results of the monitoring on the certification methodology for the first ARISA piloted Learning Programmes were collected, assessed and reported. For this purpose, CIMEA proposed Piloting Partners to provide information on the certificates to be issued to the learners. Those who could not use the proposed ARISA Certificate Supplement template were asked to provide a detailed justification. The collected draft samples were assessed against the fulfilment of the mandatory and optional elements of the EU Council Recommendation on Micro-credentials, as well as the most significant recognition criteria for micro-credentials by using the Micro-Evaluator. The results present an overview of the readiness of the ARISA Learning Programmes to be certified as micro-credentials.

T6.2 is strictly connected with the WP6 piloted Learning Programmes and linked to WP4, in which the learning and training activities were defined, and WP5, in which the certification process was identified and the ARISA Quality Label developed. The report on the use of the ARISA Certificate Supplement will be considered in the T6.5 “*Online course Testing and Evaluation*” report and can be useful for the Recommendations and Upgrade of the curriculum (D6.6).

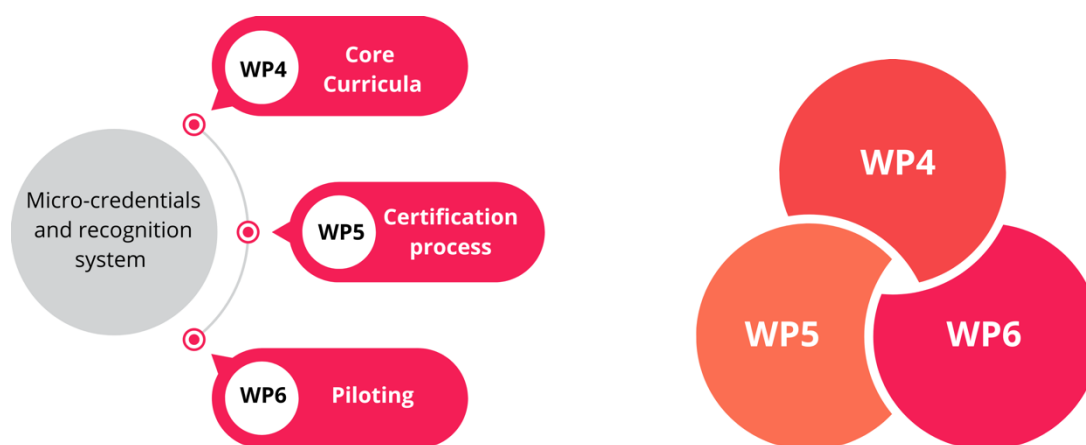


Figure 2 Link among WPs

4. European background to support recognition of micro-credentials

Considering what has been done by the Bologna Follow-up Group (BFUG) at European level to foster the transparent and clear recognition of credentials, it is important to mention the [TPG-LRC Constructing Recognition in the EHEA \(TPG-LRC CoRE\) project](#). This project aims to support the implementation of the Bologna Process focusing on its key commitment 2 (national legislation and procedures compliant with the Lisbon Recognition Convention¹) in the countries of the Thematic Peer Group B (TPG B)². To reach its specific objectives, the approach was on three main priorities: Optimizing the potential of digital technology for the recognition agenda and the Diploma Supplement; Achieving automatic recognition; Recognition of alternative pathways.

Within the TPG-LRC CoRE project, and in coherence with its main objectives, a joint document on micro-credentials was developed by a working group composed by CIMEA, the European Universities Association (EUA) and the Dutch organization for internationalization in education (Nuffic), in cooperation with the Thematic Peer Group A on Qualification Framework (TPG A on QF) and with the Thematic Peer Group C on Quality Assurance (TPG C on QA)³.

The document, named "[Micro-credential for Higher Education Institutions. Approaches developed in the EHEA using peer support](#)", outlines guidelines to support higher education institutions (HEIs) in the process of designing, implementing, awarding and recognising quality-assured micro-credentials.

Starting from the willingness of the Ministers in charge of Higher Education of the European higher Education Area (EHEA) to better explore how and to what extent this flexible units leading to micro-credentials can be defined, developed, implemented and recognized using EHEA tools (*Rome Ministerial Communiqué 2020*), the document developed nine guiding questions in the framework of international policy documents and existing literature. Key elements such as the type of micro-credentials, their learning outcomes, quality frameworks and workload, the application of the learner-centred approach, their recognition, and the use of digital solutions were further examined.

As highlighted in the above-mentioned document, specifically in the section "*How to Support the Recognition of Micro-Credentials*", the transparency and completeness of the information provided are essential to facilitate fair recognition. In the work done within D5.4, "*Application of micro-credentials into the ARISA Certification System*", the ARISA Programme main elements were aligned with the Council Recommendation on Micro-credentials, specifically with Annex I, "*European standard elements to describe a micro-credential*" in which both mandatory and

¹ The Lisbon Recognition Convention (LRC), drafted by the Council of Europe in cooperation with UNESCO, was adopted in 1997 as main legal instrument on the recognition of qualifications in Europe. It promotes fair recognition of academic qualifications and to date, it has been ratified by more than 50 states ([Council of Europe](#)).

² Co-chairs: Albania, France, Italy. Members: Albania, Armenia, Austria, Azerbaijan, Belgium Flemish Community, Bosnia and Herzegovina, Bulgaria, Council of Europe, Croatia, Cyprus, Czech Republic, Denmark, EI - ETUCE, EQAR, Estonia, ESU - European Students' Union, EUA - European University Association, EURASHE, European Commission, France, Georgia, Germany, Greece, Holy See, Hungary, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Malta, Moldova, Montenegro, The Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovak Republic, Spain, Sweden, Switzerland, Ukraine, UNESCO, United Kingdom (Composition 2021-2024). Retrieved from: <https://ehea.info/page-peer-group-B-LRC>.

³ The three Thematic Peer Groups (TPG) were established by the Bologna Follow-up group (BFUG) in September 2018 in order to offer peer support for the implementation of three key commitments: Qualification Framework (TPG A), compliance with the Lisbon Recognition Convention (TPG B), and Quality Assurance (TPG C).

optional elements are described, and Annex II, “*European principles for the design and issuance of micro-credentials*”.

Given that transparency and completeness are key factors in the recognition process, the information provided on the micro-credential should be clear, reliable, and easily accessible to both learners and the wider public. This approach ensures alignment with the EU Council Recommendation on Micro-credentials and provides a strong foundation for their recognition. Therefore, both mandatory and optional information must be included in the certification and made available on the awarding institution's website.

5. National good practices

In EU countries, national higher education and vocational education and training systems reflect diverse approaches towards the development and recognition of micro-credentials. The common thread is a focus on fostering partnerships between educational institutions and industries, ensuring alignment with labour market needs while supporting lifelong learning for individuals. As micro-credentials continue to evolve, these practices can serve as a foundation for broader adoption and acceptance throughout Europe.

The development and recognition of micro-credentials in the EU have gained traction in recent years, with several EU Member States implementing effective policies and practices. While the EU Council Recommendation on Micro-credentials includes common quality assurance principles, the different national and regional contexts show major differences as to the lengths of courses leading to micro-credentials, their level of formalisation and their funding.

Micro-credentials represent a flexible way to certify specific skills and knowledge. They can be issued by a variety of providers, each operating under different quality assurance systems, leading to variations in their recognition, and value at national level. Several countries are at various stages of implementing micro-credentials systems.

An overview is presented below on the national implementation of micro-credentials in the countries of the piloting institutions. The mentioned references provide direct access to the national authorities responsible for the implementation of micro-credentials and their alignment with national qualifications frameworks. Specific policy documents can be accessed through these ministries and agencies.

1. Estonia

Estonia is at the forefront of digital innovation, and micro-credentials are becoming part of its lifelong learning and higher education strategies. Estonian universities are working closely with tech companies and government bodies to develop micro-credential programmes that support digital skills and entrepreneurship. Estonia's approach is in line with the European Union's Digital Education Action Plan, making it a leader in this space.

NQF: Estonia has made progress in incorporating micro-credentials into its Estonian Qualifications Framework (EstQF). The country is aligning its efforts with the European model, particularly in recognizing digital micro-credentials that meet labour market needs.

Resources

Ministry of Education and Research ([HTM](#)); Estonian Qualifications Framework ([EstQF](#)): Part of the Estonian Qualifications Authority; Estonia's leadership in digital education is highlighted through the Estonian Lifelong Learning Strategy 2020.

2. Hungary

Hungary is still in the early stages of micro-credential adoption, but there is growing interest. Universities and vocational institutions are starting to explore how to integrate these short, skill-based certifications into their offerings. The government is keen on using micro-credentials to enhance digital skills and lifelong learning. The Hungarian government is aligning with the EU guidelines on micro-credentials, although national policy frameworks are still under development.

NQF: Micro-credentials have not yet been formally integrated into the Hungarian National Qualifications Framework (Magyar Képesítési Keretrendszer - MKKR). However, there are ongoing discussions about how to incorporate them into the framework in alignment with the EQF.

Resources

[Ministry of Innovation and Technology](#): Relevant for micro-credential initiatives in education and skills; Hungarian National Qualifications Framework ([MKKR](#)): Hungary's NQF aligns with the European system and can be referenced through the Educational Authority ([Oktatási Hivatal](#)).

3. Italy

Italy is developing a national framework for micro-credentials, focusing on reskilling and upskilling, and integrating them into the National Recovery and Resilience Plan (NRRP), leveraging EU funding to enhance digital and green skills. The focus is on aligning micro-credentials with vocational education and training systems, and recognising non-formal and informal learning.

NQF: Micro-qualifications are components of the National Directory and undergo a referencing process to the National Qualifications Framework (Quadro Nazionale delle Qualifiche – QNQ). When public bodies apply for referencing a qualification, they may also submit references for the micro-qualifications that compose it, in order to be able to indicate the NQF/EQF level in the certificates attesting the possession of those competences.

In the [‘Italian Referencing Report on the qualifications to the European Qualifications Framework’](#) ‘Micro-qualifications’ are *‘qualifications composed of one or more competences, as part of a broader qualification, issued at the end of short-term and modular (also flexible and personalized) learning pathways’*. The definition aims to promote the wide use of micro-qualifications in public lifelong learning offer, also considering the opportunities for recognising, validating and certifying competences in a tailored learning pathways perspective.

Resources

Ministry of University and Research ([MUR](#)); National Recovery and Resilience Plan (PNRR): Available through government websites or the Ministry of Economy and Finance ([MEF](#)); Italian National Qualifications Framework ([QNQ](#)): Detailed under the qualifications authority.

4. Netherlands

The Netherlands is considered one of the frontrunners in the micro-credential space. Universities and higher education institutions are working closely with industry and government to align micro-credentials with market needs. The country has participated in several pilot programmes through the SURF foundation, a collaborative IT organization for education and research. The Dutch government's focus is on embedding micro-credentials in both higher education and professional training pathways, with recognition across the EQF.

NQF: The Netherlands has taken significant steps towards integrating micro-credentials into the Dutch National Qualifications Framework (Nederlands Kwalificatieraamwerk - NLQF). Many micro-credentials are already being developed in accordance with the European Credit Transfer and Accumulation System (ECTS), which allows for easier integration into formal education and NQF recognition.

Resources

Ministry of Education, Culture and Science ([OCW](#)); [SURF Foundation](#): Leading the micro-credential pilot programs; Dutch National Qualifications Framework ([NLQF](#)).

5. Poland

Poland has been gradually incorporating micro-credentials into its education system, with a strong emphasis on vocational training and continuous education. Polish universities and technical institutes are offering micro-credentials as a way to address skill shortages in key industries such as IT and engineering. The government's approach focuses on integrating micro-credentials with higher education and the National Qualifications Framework, which aligns with EU standards.

NQF: Poland's National Qualifications Framework (Polska Rama Kwalifikacji - PRK) is already open to recognizing micro-credentials, especially as part of vocational education and non-formal learning. The government has been aligning with the European framework, and further integration into the PRK is expected in the coming years.

Resources

Ministry of Education and Science ([MEiN](#)); Polish National Qualifications Framework (PRK): Managed by the Educational Research Institute ([IBE](#)).

6. Spain

Spain has been actively promoting micro-credentials, particularly within the framework of lifelong learning and higher education. Universities and vocational training institutions are encouraged to offer these short courses to address skill gaps in the labour market. Spanish universities, supported by the Universities Strategy 2030, aim to integrate micro-credentials into digital education initiatives. The country aligns with the European approach to micro-credentials and has started to embed them in public policy on higher education.

NQF: Micro-credentials are not yet fully integrated into Spain's National Qualifications Framework (Marco Español de cualificaciones - MECU). However, efforts are underway to align them with the EQF and the national system. The NQF already allows for the recognition of non-formal learning, which provides a pathway for micro-credentials to be recognized in the future.

Resources

Ministry of Universities ([Ministerio de Universidades](#)); Universities Strategy 2030: Available through the Ministry's documents; European Qualifications Framework: Spain aligns with this framework, with further details available on the Ministry of Education and Vocational Training ([Ministerio de Educación y Formación Profesional](#)); National Agency for Quality Assessment and Accreditation (ANECA). [Documento marco para el aseguramiento de la calidad de las microcredenciales.](#)

7. Slovenia

Slovenia is focused on the role of micro-credentials within lifelong learning and adult education. Slovenian higher education institutions are exploring ways to embed micro-credentials into existing programs, particularly in the field of digital transformation and green skills. The Slovenian government, in line with the European Digital Education Action Plan, is promoting micro-credentials to help individuals acquire new skills in a rapidly changing labour market.

NQF: Slovenia is working on including micro-credentials within its National Qualifications Framework (Slovensko ogrodje kvalifikacij - SOK). The country has been aligning its system with the European approach, and micro-credentials could soon become formally recognized under specific qualification levels.

Resources

Ministry of Education, Science and Sport ([MIZŠ](#)); Slovenian Qualifications Framework ([SQF](#)): Available through the National Institute for Vocational Education and Training ([CPI](#)).

8. Ukraine

Ukraine is in the process of adopting micro-credentials as part of its broader effort to modernize its education system. The government is promoting micro-credentials to help the workforce adapt to rapid changes, particularly in the tech sector. Ukrainian universities and private institutions are experimenting with micro-credentials to certify specific competencies, focusing on digital skills and entrepreneurial training. The move is supported by international collaborations and the country's aspirations to align with European standards.

NQF: Ukraine's National Qualifications Framework is still evolving, and micro-credentials have not yet been fully integrated. However, ongoing education reforms, especially related to European Union alignment, indicate that micro-credentials will be incorporated into the NQF in the near future.

References

[Ministry of Education and Science of Ukraine](#); [Ukrainian National Qualifications Framework](#) (NQF): Outlined by the Ministry of Education and Science and reforms can be tracked through international collaborations.

6. Use cases for the recognition of micro-credentials

MARTE – A technological approach to micro-credentials

The project [MARTE – A technological approach to micro-credentials](#) was an Erasmus+ project that started in January 2023 and ended in December 2024. The project partners are the ENIC-NARIC centres of Italy (CIMEA, project coordinator), Ireland ([QQI](#)) and the Netherlands ([Nuffic](#)). The project also involves two higher education institutions, [Università di Pisa](#) (UNIFI) and [Università Iuav di Venezia](#) (IUAV), and [LEICA](#) as third parties.

The primary goal of the MARTE Project was to facilitate the implementation of the EU Council Recommendation on Micro-credentials, specifically promoting the automatic mutual recognition of qualifications and study periods abroad. The project focuses particularly on testing the practical application of automatic recognition to micro-credentials by utilising text-mining technology to analyse learning outcomes in partner countries.

It follows three main phases:

Phase one: Mapping

During this phase, the learning outcomes of existing micro-credentials offered by higher education institutions in partner countries were mapped, and current practices for cross border recognition of micro-credentials were analysed. This process resulted in the creation of a sample of courses from HEIs, where 1 to 59 credits were recognised (MICROBOL Project)⁴. Following this approach, 1,048 micro-credentials were collected across Italy, Ireland, and the Netherlands.

Phase two: Text-mining

Following phase one, the data collected were prepared for text-mining analysis through a process of data cleaning and metadata review. Learning outcomes were extracted from course descriptions, and only usable cases were selected, with those lacking learning outcomes excluded. Once this was completed, text-mining technology was applied to the learning outcomes of the gathered micro-credentials. The research focused on two key questions: whether there were common patterns in how learning outcomes were written across partner countries, and whether these outcomes aligned with the skills demanded by the labour market. The analysis confirmed both the existence of shared patterns in the writing of learning outcomes among partners and a low alignment (42%) with the ESCO⁵ classification. This process provided detailed insights into the criteria used to structure and write learning outcomes.

Phase three: Pilot micro-credentials

The project consortium has conducted a pilot activity to test the development and recognition of a micro-credential designed to be recognisable and reflective of labour market needs. As it is

⁴ The project MICROBOL - Micro-credentials linked to the Bologna Key Commitments (2020-2022), supported ministries and stakeholders of the European Higher Education Area (EHEA) in exploring the possible application of the tools and practices designed in the context of the Key Commitments of the Bologna Process (Qualifications Framework and ECTS, Recognition, Quality Assurance) to the fast-emerging phenomenon of micro-credentials. Within the MICROBOL common framework for micro-credentials, the possible credit range is indicated between 1 and 59, even though the document also states that most micro-credentials tend to have a volume of 1 to 15 credits.

⁵ ESCO (European Skills, Competences, Qualifications and Occupations) is the European multilingual classification of Skills, Competences and Occupations. It works as a dictionary, describing, identifying and classifying professional occupations and skills relevant for the EU labour market and education and training.

offered by a non-traditional provider (LEICA), the pilot phase also aims to assess its potential recognition by a higher education institution (IUAV), thereby creating a bridge between the labour market and the academic sector. This phase tested a methodology for developing a micro-credential based on the needs of a non-academic provider, meeting the needs of both traditional and non-traditional providers, in line with the EU Council Recommendation on Micro-credentials. It was reviewed by IUAV with the aim of verifying the possibility to recognize the piloting activities at institutional level.

In December 2024 the report “[MARTe - A Technological approach to micro-credentials: building bridges for automatic recognition and employability](#)” was published. It provides a detailed overview of the project findings and on the methodology used to design the pilot micro-credential and to structure its learning outcomes.

7. Report on certification of ARISA Learning Programmes

Considering the above-mentioned developments in the field of micro-credentials, it is clear that this topic is gaining increasing attention at EU and national level. Within this framework, as previously mentioned, ensuring transparency and completeness of information, in relation to micro-credentials, are key factors for facilitating their recognition. In the ARISA project, recognition is a key focus. Particularly, the work carried out in WP5 “*Development of a Certification system*”, facilitate the cross-border recognition of the ARISA Learning Programmes, by designing and testing the ARISA Quality Label ([D5.1 Quality Label Methodology](#)). The award of this quality label, demonstrates that the ARISA Learning Programmes comply with certain criteria and standards of quality education.

While the ARISA Quality Label was tested and implemented within WP5, in the framework of T6.2, the ARISA Learning Programmes were assessed using the Micro-Evaluator tool⁶, to determine the extent to which they can be recognized as micro-credentials in accordance with the [Lisbon Recognition Convention Principles](#), once all the required elements in the EU Council Recommendation on Micro-credentials are included.

During T6.2 the piloting of the ARISA Learning Programmes started, and the piloting partners were requested to provide information on the certificates they issued. The analysis was based on an evaluation of the samples received from piloting partners who had already started piloting their ARISA Learning Programme, as well as future steps for the ones who will begin the piloting in the next months.

Two piloting partners delivered a full ARISA Certificate Supplement. Both included all the requested information on the ARISA Certificate Template, resulting in compliance with the EU Council Recommendation on Micro-credentials required elements (both mandatory and optional). Moreover, in accordance with the information provided, the Micro-Evaluator tool was applied.

⁶ The [Micro-Evaluator tool](#) was developed as part of the STACQ Project, *Stacking Credits and the Future of the Qualifications* (2020-2022), co-funded by the Erasmus+ Programme and led by Nuffic, the Dutch ENIC-NARIC Centre. This tool, deeply explained in D5.4 “*Application of micro-credentials into the ARISA Certification System*”, assists credential evaluators in assessing the transparency and completeness of information when reviewing micro-credentials (whether online, blended, or face-to-face). The tool follows a traffic light model to evaluate seven key criteria such as: Quality, Verification, Level of the course, Learning outcomes, Workload, Assessment, and Identification of the learner.

The collected information is presented below.

7.1. Kharkiv National University of Radio Electronics

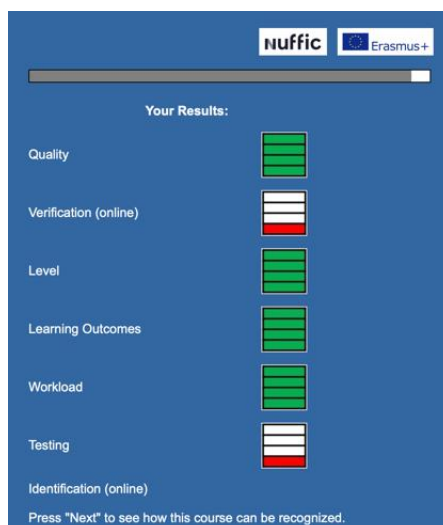


Figure 3 Micro-Evaluator results. NURE

Overall, the assessment is positive.

It shows a very good evaluation on four parameters: **Quality, Level, Learning Outcomes, Workload**, as clear and comprehensive.

Verification could be improved in the future by uploading the certificate using trusted online means (for example, e-badge or enter a verification number on the website of the university). Furthermore, online information about the course is not available for the moment, and this could compromise transparency of contents and their verifiability. It is suggested to share on the institutional and project website detailed information on the piloted courses to make them visible to the public and facilitate their recognition. Moreover, to foster clarity of information, the link to the online content can be added in the section “Further information” of the Certificate Supplement.

Testing could be further detailed (oral, written) as it is only broadly included (exam, test). In one sample it is not defined at the time of writing because piloting activities are still in progress (workload).

7.2. Warsaw School of Computer Science

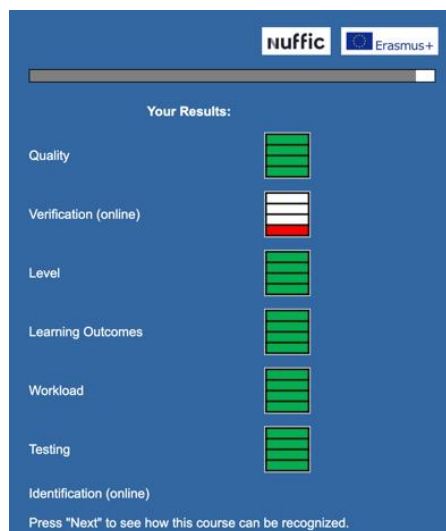


Figure 4 Micro-Evaluator results. WSCS

Overall, the assessment is very positive.

It shows a very good evaluation on five parameters: **Quality, Level, Learning Outcomes, Workload** and **Testing**, as clear and comprehensive.

Verification could be improved in the future by uploading the certificate using trusted online means (for example, e-badge or enter a verification number on the website of the university). Furthermore, online information about the course is not available for the moment, and this could compromise transparency of contents and their verifiability. It is suggested to share on the institutional and project website detailed information on the piloted courses to make them visible to the public and facilitate their recognition. Moreover, to foster clarity of information, the link to the online content could be added in the section “Further information” of the Certificate Supplement.

7.3. Adecco Training

Under its piloting (AI for Decision Makers), ADECCO does not issue micro-credentials, as for other short training courses.

7.4. Budapest University of Technology and Economics

BME sent out an online form to the students who completed the courses in the pilot, asking them to sign-up for the certificate, including a deadline of two weeks; after the two weeks BME will send the certificates in a per-student, per-course basis in pdf formats based on the general ARISA Certificate of Achievement.

7.5. Universidad Internacional de La Rioja

UNIR is considering to issue its own micro-credentials for the course tested in ARISA.

7.6. University of Applied Sciences Utrecht

For the pilot course AI for Decision Makers, HU intends to use the D6.2 certificate. However, no certificates have been issued yet, as the pilot course has not taken place. HU anticipated issuing them in June 2025, following the completion of the first iteration of the pilot course.

7.7. University of Lubijana

UL plans to issue their own micro-credentials. They could probably use both (Certificate of Achievement and Certificate Supplement).

7.8. Global Knowledge and Baltic Computer System

Information on the certification methodology is not available at this stage.

8. Conclusions

Micro-credentials have been widely explored at the EU level due to their significant role in bridging the gap between academia and industry. As demonstrated in *D5.4 Application of Micro-Credentials in the Certification System*, the ARISA project fully aligns with the described micro-credentialing frameworks. Furthermore, the European Union countries are currently starting the implementation of the EU Council Recommendation on Micro-credentials at the national level as described in Chapter 5 and Chapter 6. This document aims to lay the foundation for issuing micro-credentials with transparent, clear, and complete information, ensuring compliance with the EU Council Recommendation on Micro-credentials and alignment with the recognition principles defined in the Lisbon Recognition Convention.

In this context, the ARISA activities carried out within T6.2 align with both the ongoing developments and growing interest at the EU and national levels. All piloting partners have demonstrated interest for integrating micro-credentials within their institutions. At this stage some of them cannot fully implement and issue micro-credentials, as well as verify the extent of their recognition. Nevertheless, significant efforts have been made to progress towards this objective, as described in Chapter 7.

Furthermore, to enhance the clarity of the information provided, it is strongly recommended to include details about the courses on both the official ARISA webpage and the institutional websites of the piloting partners. This will facilitate a smoother and more straightforward recognition process.

These topics could be further explored through follow-up activities after the project's conclusion, supporting the sustainability of its outcomes and fostering new initiatives in this field.

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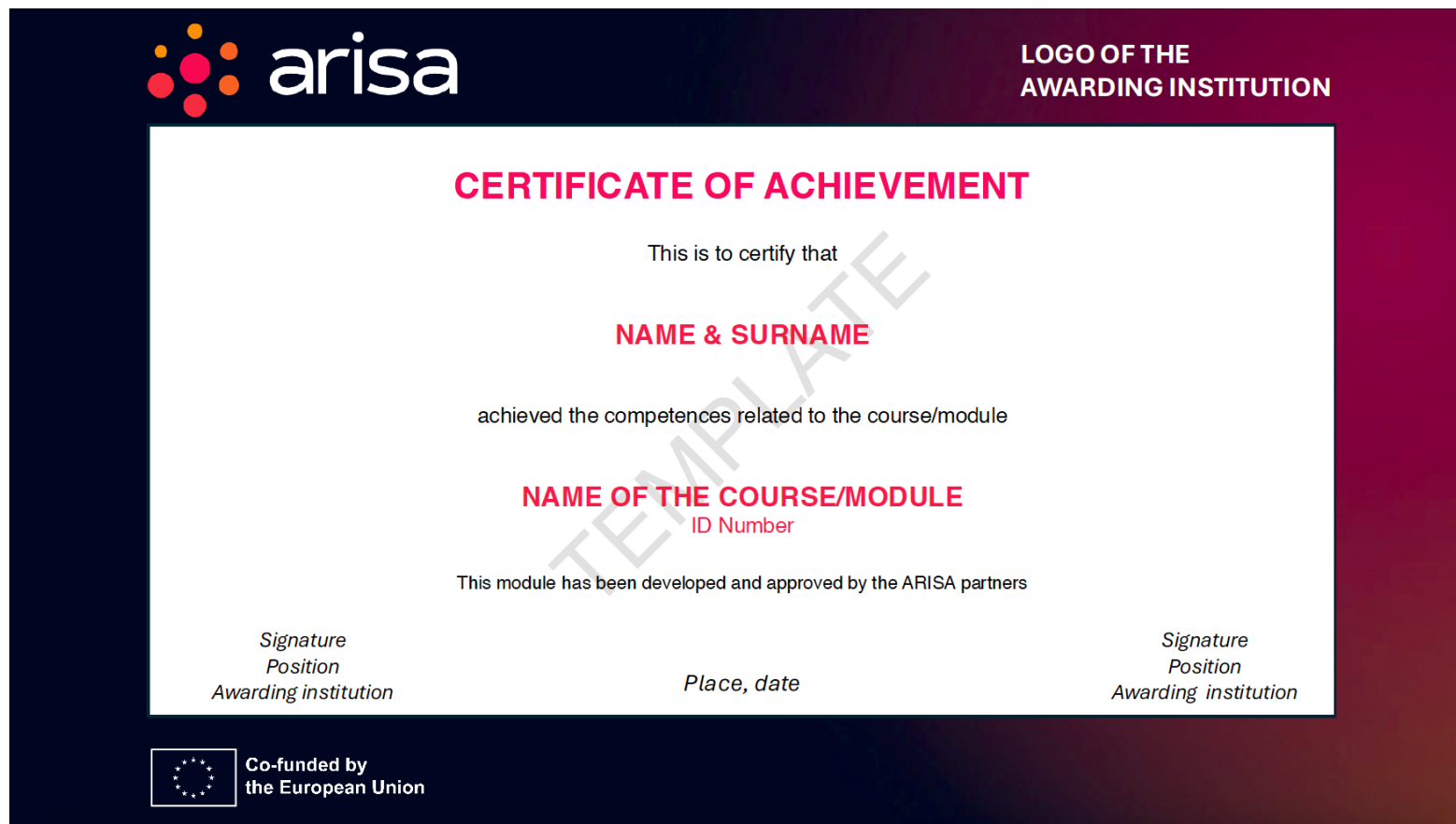
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10.ANNEXES

10.1. ANNEX I – Certificate of Achievement



The image shows a certificate template with a dark blue and maroon border. In the top left corner is the 'arisa' logo. In the top right corner, it says 'LOGO OF THE AWARDING INSTITUTION'. The main content area is white and contains the following text: 'CERTIFICATE OF ACHIEVEMENT', 'This is to certify that', 'NAME & SURNAME', 'achieved the competences related to the course/module', 'NAME OF THE COURSE/MODULE', 'ID Number', and 'This module has been developed and approved by the ARISA partners'. At the bottom, there are three signature lines: two on the left for the awarding institution and one on the right for the awarding institution, with a 'Place, date' line in the center.

 **arisa**

LOGO OF THE
AWARDING INSTITUTION

CERTIFICATE OF ACHIEVEMENT

This is to certify that

NAME & SURNAME

achieved the competences related to the course/module


NAME OF THE COURSE/MODULE
ID Number

This module has been developed and approved by the ARISA partners

Signature
Position
Awarding institution

Place, date

Signature
Position
Awarding institution

 Co-funded by
the European Union

10.2. ANNEX II – Certificate Supplement

LOGO OF THE AWARDING INSTITUTION

CERTIFICATE SUPPLEMENT

Certificate holder:

Title of Module/Course:

Language of instruction:

Brief description of the Module/Course:

Country of the issuer:

Awarding body:

Date of Issuing:

Learning outcomes

Workload:

EQF Level: -

Final assessment:

Form of participation: -

Type of quality assurance:

Co-funded by the European Union*This Certificate is released in line with the EC European Approach to Micro-credentials*



Artificial Intelligence Skills Alliance

www.aiskills.eu

info@aiskills.eu



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