Proposal for national MC development methodology

Country	**Slovenia**	
Mandatory elements:	Definition of microcredentials	**The introduction of microcredential represents an important step towards the modernization of vocational and professional education, as it enables greater flexibility, quick response to market needs and promotion of lifelong learning.** The basic guideline of the methodology for the preparation of trainings leading to microcredential is the EU definition, which requires that **microcredential must be based on quality assurance, learning outcomes and assessment**. *A 'microcredential' means a record of the learning outcomes that a learner has achieved as a result of a short training programme. These learning outcomes will be assessed against transparent and clearly defined knowledge standards. The learning experiences on the basis of which microcredentials are obtained are intended for the learner to acquire specific knowledge, skills and competences that correspond to social, personal, cultural needs or the needs of the labor market. Microcredentials are learner owned, transferable and exchangeable. They can be independent or combined into more comprehensive proofs. They are based on quality assurance in accordance with agreed standards in the relevant sector or in the relevant field of activity.*

	Identification of the learner	In order to obtain a microcredential, it is necessary to provide accurate identification of the learner to ensure that the right person receives the microcredential. Student identification consists of: 1. **Name and surname**: the student's full name, which is used in official documents. 2. **Date of birth**: to accurately distinguish between persons with the same name. 3. **Place of birth**: 4. **Email address**: contact information for communication and delivery of the microcredential. These elements help ensure that the microcredential is accurately associated with the appropriate learner and has a valid identification value. For microcredentials providers that conduct online-only assessments, we recommend using biometric instruments such as face verification, voice recognition, keystroke dynamics, and other methods to ensure learner identity and authorship (TeSLA, 2018). All learner verification tools and resources must ensure privacy rights and comply with national or regional regulations such as the EU General Data Protection Regulation (GDPR).
	Title of the microcredential	The title of the microcredential should be clear, informative and should include key information that defines the content and purpose of the microcredential. It should contain: 1. **Name of the training**: Clearly name the specifics of the training that was completed. Example: **"Python Programming Basics"** 2. **Microcredential Level or Type**: Describe the level of skill or knowledge achieved, if relevant.

		Example: **"Introductory Level"** 3. **Name of the organization or institution**: Indicate which organization or educational institution issues the microcredential. Example: **"University of Ljubljana, Faculty of Computer Science and Informatics"** The combination of these elements in the address allows the recipient and others who view the microcredential to quickly understand what it was issued for and who issued it. Example: **"Fundamentals of programming in Python - Introductory level" University of Ljubljana, Faculty of Computer Science and Informatics**
	Country/Region of the issuer	In order to identify the country that issued the microcredential, it is important to clearly indicate this information on the document itself. This information helps identify the issuer and may affect the recognition and validity of the microcredential. **State Country Explicitly:** State the country name clearly on the microcredential. Example: **"Issued in Slovenia"** **Issuing Institution Address:** Include the full address of the issuing institution, including the country name. Example: **"University of Ljubljana, Faculty of Computer Science and Informatics, Večna pot 113, 1000 Ljubljana, Slovenia"**

		Official logo or stamp: If the issuing institution has an official logo or stamp that includes the name of the country, include it on the microcredential. Example: **Logo with the inscription "University of Ljubljana, Slovenia"** **Contact Information:** Include contact information, such as a phone number or email address that includes an international dialing code or country domain extension. Example: **"Tel: +386 1 123 45 67, Email: info@uni-lj.si"** The combination of these elements ensures that the issuing country is clearly defined and recognizable on the microcredential. Example: **"University of Ljubljana, Faculty of Computer Science and Informatics Večna pot 113, 1000 Ljubljana, Slovenia Issued in Slovenia, June 15, 2024"**
	Awarding body	**Issuing Institution Address**: Include the full address of the issuing institution, including the country name. Example: **"University of Ljubljana, Faculty of Computer Science and Informatics, Večna pot 113, 1000 Ljubljana, Slovenia"** **Official logo or stamp:** If the issuing institution has an official logo or stamp that includes the name of the country, include it on the microcredential. Example: **Logo with the inscription "University of Ljubljana, Slovenia"**

		Contact Information: Include contact information, such as a phone number or email address that includes an international dialing code or country domain extension. Example: **"Tel: +386 1 123 45 67, Email: info@uni-lj.si"** **Signature or endorsement by the issuer:** Institutional stamp, signature or electronic endorsement confirming the validity of the microcredential.
	Date of issuing	**Microcredential Issue Date:** When the microcredential is issued. Example: **"Issued: June 15, 2024**
	Learning outcomes	The learning outcomes acquired by the learner on the basis of training programs and leading to microcredentials enable the targeted acquisition of skills and competences adapted to a rapidly changing society and the labor market, without replacing traditional qualifications. Their goal is complementation. With microcredentials, we want to provide a clear definition and European standards that will enable employers, learners and education and training institutions to easily recognize and understand the learning outcomes of short training programs, as well as guiding principles to be followed when creating or issuing quality microcredentials. With the help of EU approaches to the development and use of microcredential, we want to support and strengthen national efforts for the quality, transparency, cross-border comparability, recognition and transferability of microcredential. We want to build trust in microcredential for the benefit of learners, employers and education and training institutions. Learning outcomes are learning goals defined from the perspective of the learner (what the learner knows, understands and is able to do after completing the learning process) and not from the perspective of the teacher or mentor (subjects of teaching). This distinction is crucial because learning outcomes are not just statements. The correct implementation of learning outcomes

		means that teaching and learning methods must be chosen sensibly so that the learner can develop the agreed learning outcomes. Similarly, when assessing student achievement, it should be properly assessed whether the student has achieved the agreed learning outcome and not some other results (Kennedy, 2007). **Recording learning outcomes for microcredential is critical because it clearly defines what participants are expected to know, understand or be able to do after completing the learning activity. <u>Well-written learning outcomes are specific, measurable, achievable, relevant and time-bound (SMART).</u>** Steps for recording learning outcomes: 1. **Identify key knowledge and skills:** Determine what participants should acquire during the training. 2. **Use active verbs:** Use verbs that clearly define what participants will know or do (eg describe, analyze, develop, implement). 3. **Be specific and measurable:** Ensure that the outcomes are clear and that it is possible to assess whether they have been achieved. 4. **Link to the level of competence**: Link the results to the appropriate level of EOK or QF-EHEA. 5. **Focus on the participant:** Use terms that focus on what the participants will know or do. **Learning outcomes:** **1. [Active verb] [specific knowledge/skills]** o Upon completion of the training, the participant will be able to [specific action]. **2. [Active verb] [specific knowledge/skills]** o The participant will be able to [specific action]. By recording learning outcomes in this way, you ensure that the objectives of the microcredential are clear and achievable, facilitating both learning and assessing participant performance.

		Example of learning outcomes: Defining learning outcomes for 3D printing and additive manufacturing training is important to ensure that participants acquire the necessary knowledge and skills to successfully use these technologies. **<u>Learning outcomes for training in 3D printing and additive manufacturing</u>** 1. **Understanding the basics of 3D printing and additive manufacturing:** o Participants will understand the history and development of 3D printing and additive manufacturing. o Participants will be able to describe basic concepts and terminology related to 3D printing and additive manufacturing. o Participants will understand different 3D printing technologies (eg FDM, SLA, SLS) and their applications. 2. **Getting to know software for 3D modeling and preparation for printing:** o Participants will know how to use 3D modeling software (eg Tinkercad, Fusion 360, Blender). o Participants will be able to create complex 3D models. o Participants will understand how to prepare models for printing (eg checking for errors, optimizing models, generating supports). 3. **Management of 3D printer and additive manufacturing equipment:** o Participants will know how to set up and calibrate different types of 3D printers. o Participants will understand how to prepare the printing surface and apply different types of materials (eg filaments, resins, powders). o Participants will be able to perform printer maintenance and solve common problems (eg blockages, incorrect gluing of the first layer). 4. **Printing process and control:** o Participants will be able to choose appropriate print settings depending on the model and material (eg print speed, layer thickness). o Participants will be able to control the printing process and identify potential problems and eliminate them in time.

		○ Participants will understand how to optimize the printing process to reduce errors and improve quality. 5. **Post-production and finishing:** ○ Participants will understand post-production processes (eg removing supports, sanding, painting). ○ Participants will be able to assess the quality of the final product and make the necessary corrections. ○ Participants will understand how they can finalize printed products to improve aesthetics and functionality. 6. **Applications and industrial use**: ○ Participants will understand the various applications of 3D printing and additive manufacturing in industry (eg prototyping, medical devices, aerospace). ○ Participants will be able to analyze use cases and determine when the use of 3D printing and additive manufacturing makes sense. ○ Participants will understand the economic and environmental impacts of additive manufacturing. 7. **Safety and maintenance:** ○ Participants will be familiar with safety protocols when working with 3D printers and additive manufacturing equipment. ○ Participants will know how to properly maintain a 3D printer and additive manufacturing equipment to ensure a long life of the device. ○ Participants will understand the importance of recycling and responsible handling of waste material.

		Evaluation methods: • **Practical tests**: Participants will have to perform certain tasks on a 3D printer and additive manufacturing equipment. • **Project tasks**: Participants will create and print their own 3D models and perform additive manufacturing. • **Theoretical tests**: Written or oral tests to check understanding of the theoretical basics. • **Case analysis:** Participants will analyze industrial use cases of additive manufacturing. With these learning outcomes and assessment methods, 3D printing and additive manufacturing training can become effective and comprehensive, allowing students to acquire all the necessary skills to work with this technology.
	Notional workload needed to achieve the learning outcomes (in ECTS credits, wherever possible)	**Workload is the estimated time invested by participants in achieving the stated learning outcomes. Workload can be reported as a simple function of time, e.g. in hours, or using a composite indicator such as credits built into credit systems.** Examples of expressing workload in credit points include the European Credit Transfer and Accumulation System4 (ECTS) and the European Credit System in Vocational Education and Training (ECVET). In the ECTS manual, ECTS credits are defined as "a volume of learning based on defined learning outcomes and the associated workload". To illustrate: "60 ECTS credits are allocated to the learning outcomes and related workload of a regular academic year or an equivalent academic year" and using this analogy "one credit corresponds to 25 to 30 hours of work" (European Commission, 2015). The issuers of microcredentials in Slovenia should assess the workload to achieve the knowledge and skills for which the microcredentials is issued with ECTS points, because they are also used by the Slovenian vocational and professional education system. Hours should also be listed for wider visibility.

		Example: **2 ECTS (50 hours)** **Microcredentials should have a max. 5 ECTS (max - 125 to 150 hours of estimated work).**
	Level (and cycle, if applicable) of the learning experience leading to the microcredential (EQF, QF-EHEA), if applicable	Defining the levels (cycles) of the learning experience leading to microcredential is important for compliance with international standards and facilitates the comparability and recognition of microcredential. Two important frameworks for this are the European Qualifications Framework (EQF) and the Qualifications Framework for the European Higher Education Area (QF-EHEA). Here is how we can define these levels: The European Qualifications Framework (EQF) has eight levels covering different levels of knowledge, skills and competences. **EOK levels should also be taken into account for microcredentials.** • EOK 1: Basic general knowledge and basic skills. • EOK 2: Basic practical knowledge and skills for performing tasks and solving routine problems. • EOK 3: Ability to perform tasks and solve problems in a familiar context. • EOK 4: Use of specific knowledge and skills to perform tasks in different contexts. • EOK 5: Advanced knowledge and skills that enable the implementation of demanding tasks and solving complex problems. • EOK 6: In-depth knowledge and skills for solving complex problems that require analysis and evaluation. • EOK 7: Specialized knowledge that enables critical awareness and innovation. • EOK 8: The highest level of knowledge and skills that enable the development of new ideas and projects in the field of research. QF-EHEA defines three cycles of higher education:

		• **First cycle (Bachelor):** Acquisition of knowledge, skills and competences at the basic higher education level. This includes acquiring the practical and theoretical foundations that enable further study or the start of a career. This cycle is usually comparable to EOK level 6. Example: "Bachelor's Degree in Computer Science" • **Second cycle (Master):** Advanced knowledge and skills that enable specialization in a specific field, usually after completion of the first cycle. This cycle is usually comparable to EOK level 7. Example: "Master of Business Administration" • **Third cycle (Doctorate):** The highest level of education, which includes the implementation of original research work. This cycle is usually comparable to EOK level 8. Example: "PhD in Biochemistry" If we want to define microcredential according to levels, we can use the following descriptions: • **Microcredential - EOK 4**: Basics of digital marketing, acquired skills include implementation in digital companies. • **Microcredential - QF-EHEA First cycle:** Fundamentals of economics, knowledge and skills comparable to the undergraduate program. • **Microcredential - EOK 7**: Advanced project management training, includes specialized knowledge and innovative approaches for managed projects. By defining the level of microcredential, we ensure clarity and visibility, which is key to the recognition and evaluation of learning achievements at an international level.

		Integrating microcredential into the national qualifications framework **The learning outcomes of microcredentials need to be described with reference to the level of the relevant national qualifications frameworks.** Reference to qualification frameworks increases understanding of the value of microcredential for businesses and others on the demand side of the microcredential ecosystem. We propose two approaches to the inclusion of microcredential in the existing national framework of qualifications: 1. Within the framework of the national qualifications framework, a new type of qualifications can be defined: **microcredentials - supplementary qualifications**. 2. Microcredentials can be described as **sub-units of additional qualifications in NOK.**
	Type of assessment	The **learning outcomes of microcredentials are assessed on the basis of transparent and clearly defined criteria** (Council of the EU, 2022). Where short training programs offer only non-assessed certificates, such as certificates of attendance, they are not considered microcredentials according to the EU definition. In order to avoid complex recognition processes and increase confidence in microcredential for their recognition, all microcredential providers must ensure that evaluation criteria and methods are provided and documented. Their **relevance (suitability) to the assessment of the learning outcomes identified in the microcredential should be assessed in consultation with stakeholders, training or assessment providers, and tested to assess their effectiveness and practicality**. The quality of the assessment and the design of the assessment methods and criteria are crucial for ensuring the reliability, objectivity and validity of the assessment and the credibility of its results. • The criteria and method of evaluation, as well as the evaluation criteria, must be published in advance.

		• Assessment must enable participants to demonstrate the extent to which the intended learning outcomes have been achieved. • Participants should receive feedback, which is linked to advice on the learning process if necessary. • Assessors or assessment designers must be familiar with existing methods of testing and verification of knowledge and receive support in developing their own skills in this area. • Assessment must be consistent, fairly applied to all participants and carried out in accordance with the stated procedures. **We recommend that the assessment be adapted to the purpose and quality assurance of microcredential assessment, for recognition in further education and training.** Designers and issuers of microcredential should design criteria, formats and assessment procedures that are most appropriate for assessing the tasks with which participants can best demonstrate the achievement of the agreed learning outcomes. Although multiple-choice tests and other easily automated assessment techniques can offer scope at low cost, they are not always the best choice for demonstrating a particular unit of learning. When evaluating microcredential, project-based or problem-based learning should be evaluated. **A combination of assessment methods, such as a written question or exam, combined with practical work or a project presentation followed by answers to questions, ensures greater credibility of the participants' performance.**
	Form of participation in the learning activity	The forms of participation in the learning activity that lead to the acquisition of microcredential can be different, depending on the training, the educational institution and the specific needs of the participants.

		1. Online training • **Asynchronous online training**: Participants can access learning content (video lectures, materials, assignments) and complete them at their own pace. • **Synchronous online training**: Training delivered in real time via video conferencing or webinars where participants interact live. 2. Classical training in the classroom • **Lectures and seminars**: Traditional form of education where participants attend lectures and participate in discussions in physical classrooms. • **Workshops**: Interactive sessions where participants take part in practical exercises and projects. 3. Hybrid training (Blended Learning) • A combination of online and physical learning activities. Participants can process part of the content remotely and part in the classroom. 4. Independent study • **E-learning materials**: Participants have access to a variety of learning resources such as e-books, interactive exercises and self-paced quizzes. • **Independent projects**: Participants carry out individual projects, which they then present and defend in front of mentors. 5. Collaborative learning • **Group projects**: Participants work in groups to solve problems or implement projects, which encourages teamwork and cooperation. • **Discussion groups and forums**: Online platforms where participants exchange opinions, ask questions and discuss training-related topics.

		6. Mentoring and tutoring • **Mentorship**: Participants work with a mentor who provides them with individual support and guidance in their learning. • **Tutoring**: More experienced students or tutors help new participants understand the content and solve tasks. 7. Practical training • **Practice at the workplace**: Participants gain experience working in real workplaces under the supervision of mentors. • **Laboratory exercises**: Participants perform practical experiments and exercises in a controlled environment. 8. Examinations and assessment • **Online quizzes and tests**: Participants take assessment tests online. • **Final exams**: Formal exams that test the knowledge and skills acquired during the training. An example of defining the form of participation in microcredential **Title of the microcredential**: "Basics of digital marketing - EOK 4" **Form of cooperation:** • Asynchronous online training with access to video lectures, e-learning materials and interactive exercises. • Independent project: Participants create their own digital marketing campaign and present it to the mentor. • Collaborative learning: Participation in discussion forums to exchange ideas and feedback.

		By defining the form of participation in the learning activity, we ensure clarity and structure of the training and enable participants to better prepare for their learning experiences.
	Type of quality assurance used to underpin the microcredential	**Quality standards to ensure the credibility and visibility of microcredential** It is necessary to prepare procedures that will ensure the quality of training programs leading to microcredential. In particular, this applies to assessment and certification procedures. At the heart of quality assurance processes is the requirement to collect feedback from demand-side actors for microcredential, such as learners and employers. This can improve the quality and reputation of the microcredential training provider as well as improving the quality and reputation of the microcredentials they issue. In essence, quality assurance is important to ensure that learners seeking to obtain a microcredential can obtain high-quality learning opportunities. Only this enables them to acquire the knowledge and skills they need, and they can also be recognized for the purposes of education and training or employment. External quality is primarily based on the assessment of contractors and not on individual training programs and the effectiveness of their internal quality assurance procedures. Microcredential training providers can decide for themselves how to ensure external quality. **They can do this in several ways:** • Accreditation or licensing processes where, as part of a regulatory requirement, an external quality assurance process must be completed before a microcredential can be issued. • Certificates for training providers - employer groups or large employers will compile lists of "approved" training providers. • External certification schemes for quality assurance carried out by standardization bodies such as ISO 21001 – Educational Organization Management Systems or ISO 17024 –

		Conformity Assessment – General Requirements for Bodies Certifying Persons or ISO 17024 – General Requirements for Bodies, who carry out the certification of persons. • Certification schemes with platforms - massive open online training (MOOC) platforms (or other online platform) carry out their own evaluation of the training program before enabling their offer through the platform (example of neighboring Austria - https://microcredentials.at/ A comprehensive approach to external quality combines self-assessment, external review and improvement processes. The standards that should be followed by external quality assurance reviews based on the recommendation of the EU Council (2017) include: • Microcredentials, which are obtained on the basis of training programs based on learning outcomes prepared by employers or experts. • Certification procedures and assessment of learners in accordance with agreed and transparent standards based on learning outcomes. • Quality assurance processes (eg internal quality assurance) should consist of feedback mechanisms and processes for continuous improvement of microcredential and be based on clear and measurable objectives, standards and guidelines. • Involvement of all relevant stakeholders in all phases of ensuring and improving the quality of microevidence. • Correctness of evaluations that link self-assessment and external review. • Quality assurance must be an integral part of internal management and supported by adequate resources. • Electronic availability of evaluation results. An essential principle is that the internal quality assurance system of microcredential providers must be externally assessed. This is best done by an organization that is independent of the organization that manages the provider's quality assurance system.

		Publication of quality data Given that there are thousands of microcredentials providers in the world offering tens of thousands of microcredentials and that almost all of them are easily accessible to learners via online platforms, it is almost impossible for a verifier to identify these microcredentials based on reputation alone. Therefore, the publication of information related to the quality of microcredential is essential to establish trust for the recognition of microcredential. Quality-related information includes provider quality assurance processes, assessment results, reputation indicators, lecturer evaluation processes, learner evaluations and microevidence feedback. In order to publish quality data, the provider must use several interleaving techniques: • Publication of the quality assurance plan on the website. • A summary of the quality procedures used for training and assessment, the content of the microcredential that the learner receives when they demonstrate knowledge or skills. • Publish the results of external quality assurance on the website. • Publication of student evaluation results on the website. • Publication of training programs that lead to microcredentials with clearly defined knowledge or skills, method of proof and methods and criteria of verification - evaluation.
Optional elements, where relevant (non-exhaustive list)	Prerequisites needed to enrol in the learning activity	Prerequisites for enrolling in a microcredential learning activity are important to ensure that participants have the basic knowledge and skills necessary to successfully participate in and complete the training. These prerequisites may vary depending on the level and type of learning activity. General prerequisites 1. **Education level**: Determine the minimum level of education that participants must have. Example: "Completed high school program or equivalent education."

		2. **Prior knowledge**: Identify specific knowledge and skills that participants must have prior to enrollment. Example: "Basic knowledge of computers and use of the Internet." 3. **Work experience**: In some cases, it may be necessary for participants to have certain work experience. Example: "At least one year of work experience in marketing." 4. **Certifications or Prior Training**: Indicate if any certifications or completed training are required. Example: "Completed 'Programming Fundamentals' training or equivalent." Specifik prerequisites for a more advanced microcredential Microcredential: "Advanced digital marketing - EOK 6" 1. **Educational level:** o "Completed undergraduate studies (first cycle) in marketing, business sciences or a related field." 2. **Prior knowledge:** o "Basic understanding of digital marketing, including SEO, PPC and content marketing concepts." 3. **Work experience**: o "At least two years of work experience in the field of digital marketing." 4. **Certificates or previous training:** o "Completed 'Basics of Digital Marketing' training or equivalent." Specific prerequisites for a beginner microcredential

		Microcredential: "Fundamentals of programming in Python - EOK 4" 1. **Educational level:** o "Elementary school program completed." 2. **Prior knowledge:** o "Basic knowledge of working with a computer and using the Internet." 3. **Work experience:** o "No previous work experience required." 4. **Certificates or previous training**: o "No prior certifications or training required." With clearly defined prerequisites, we can ensure that the participants are adequately prepared for the training and that they will be able to successfully complete the learning activity and obtain a microcredential.
	Supervision and identity verification during assessment (unsupervised with no identity verification, supervised with no identity verification, supervised online, or onsite with identity verification)	With microcredential, control and identity verification during evaluation is critical to ensure the fairness and credibility of the evaluation process. Depending on the level of security and verification, we can choose between different approaches that suit specific needs and circumstances. 1. Unsupervised without identity verification • **Description**: Participants can perform assessment tasks without supervision or identity verification. • **Use:** Suitable for informal training or introductory modules where the main objective is to acquire knowledge without official recognition. • **Advantages**: Simplicity, accessibility and low cost. • **Disadvantages:** There is no guarantee that the participant doing the assessment is really the one who was enrolled in the training. Example: An online self-assessment quiz where participants test their knowledge on their own without official recognition.

		2. Controlled without identity verification • **Description**: The evaluation takes place under supervision, but without verifying the identity of the participants. • **Use:** Suitable for training where it is important to control the environment, but identity verification is not critical. • **Advantages**: Fraud prevention with control, but without complex identity verification procedures. • **Disadvantages**: The possibility that someone else does the assessment instead of the registered participant. **Example**: An online exam with a lecturer who monitors the proceedings via video link, but does not verify the identity of the participant. 3. Controlled online with identity verification • **Description**: The assessment is conducted online under supervision by verifying the identity of the participants. • **Uses**: Suitable for training and evaluations where credibility and official recognition are critical. • **Advantages**: It ensures the fairness and credibility of the assessment, the possibility of flexibility in the choice of time and place. • **Disadvantages**: Requires technical resources and may incur costs for participants or organizers. **Example:** An online exam using control software, where the participant verifies his identity with a personal document before the exam and the camera monitors his performance.

		4. Controlled on site with identity verification • **Description**: The assessment takes place in a physical location under supervision by verifying the identity of the participants. • **Application:** Ideal for demanding training or certification where the highest level of security and credibility is required. • **Advantages:** The highest level of security and verifiability. • **Disadvantages:** Less flexibility in terms of time and place, can lead to higher costs and logistical challenges. **Example:** A certification exam at an official test location where participants present ID upon arrival before beginning the proctored exam. **Title of the microcredential:** "Advanced digital marketing - EOK 6" **Control and identity verification during assessment:** 1. **Unsupervised without identity verification**: o Independent online self-assessment quizzes. 2. **Controlled without identity verification**: o Online exam with the lecturer via video link. 3. **Monitored online with identity verification**: o Final exam using control software, where the participant's identity is checked with an ID before the exam. 4. **Controlled on site with identity verification:** o Final project and on-site presentation with mandatory identity verification upon arrival.

		These approaches can provide different levels of assessment security and credibility tailored to the specific needs and context of microcredential.
	Grade achieved	The record of the achieved grade for microcredential is important in order to clearly and transparently present the performance of the participant. Grades may be given in a variety of formats, such as letter grades, percentages, descriptive grades, or other methods. The assessment tells us to what extent the student has mastered the learning objectives. It can be numerical or descriptive. In the Slovenian education system, a positive grade is 2 to 5 and a grade of "passed", while a negative grade is a grade 1 and a grade of "failed" (Regulations, Article 16). **Marking record in the microcredential:** • "Score achieved: 5 (Excellent)" **Marking record in the microcredential:** • "Grade achieved: 85%" **Example record**: • Descriptive grades: Very successful, Successful, Less successful, Failed **Marking record in the microcredential:** • "Grade achieved: Very successful" **Example record:** • Rating in points: 85/100 **Marking record in the microcredential:** • "Score achieved: 85 out of 100 points" **Record of assessment in microcredential – combination of records:**

		• "Grade achieved: 4 (Pass) - 85%"
		
		Title of the microcredential: "Advanced digital marketing - EOK 6"
		
		Score achieved:
		
		• **Numerical score**: 5-1
		  ○ "Score achieved: 5 (Excellent)"
		• **Percentages:** 0-100%
		  ○ "Grade achieved: 92%"
		• **Descriptive grades**: Very successful, Successful, Less successful, Failed
		  ○ "Grade achieved: Very successful"
		• **Point system**: 0-100
		  ○ "Score achieved: 85 out of 100 points"
		
		An example of a record in a microcredential
		
		Title of the microcredential: "Basics of digital marketing - EOK 4"
		
		Recipient: Janez Novak
		
		Release date: June 15, 2024
		
		Score achieved:
		  ○ "Grade achieved: 5 (Excellent) - 95%"
		
		With these examples and structures, we can clearly and transparently record the grades achieved in microcredentials, enabling recipients and employers to accurately understand the level of knowledge and skills achieved.

	Integration/stackability options (standalone, independent microcredential/integrated, stackable towards another microcredentials)	The integration and stacking of microcredentials allows flexibility and further recognition of knowledge and skills acquired through various trainings. **1. Self-contained, independent microcredential** • Each microcredential is a separate unit that certifies specific knowledge or skills. • Can be used for personal or professional growth, without direct connection to other qualifications. **Advantages:** • Flexibility: Participants can choose and complete a microcredential based on their needs and interests. • Speed: Faster acquisition of knowledge and skills for immediate use. • Accessibility: Smaller scale and costs allow for wider accessibility. **Examples:** • Microcredential "Basics of digital marketing" • "Introduction to Python Programming" microcredential • Microcredential "Basics of project management" **2. Integrated, collapsible microcredentials** **Description:**

		• Several microcredentials that are linked together and can build a larger qualification or certificate. • Participants can gradually acquire microcredentials that add up to a comprehensive program. **Advantages:** • Coherence: Enables a systematic approach to learning, where individual microcredentials are connected into a logical whole. • Recognition: Easier recognition of knowledge and skills in formal education systems or work environments. • Continuation: Encourages continuing education and personal development. **Examples:** *Integrated microcredential in digital marketing* 1. **Microcredential 1:** "The Basics of Digital Marketing" 2. **Microcredential 2:** "Advanced Social Media Advertising" 3. **Microcredential 3:** "Data analysis in digital marketing" **Final qualification:** Upon completion of all three microcredentials, the participant receives the "Digital Marketing Expert" certificate. **Independent microcredentials** are great for quickly acquiring specific knowledge and skills and for personal and professional development without long-term commitment. **Integrated microcredentials**, on the other hand, allow gradual progression and the acquisition of

		comprehensive qualifications, which is useful for those who want to achieve deeper and more structured education and official certifications.
	Further information	Additional information about the microcredential helps the recipient and other stakeholders understand the context, purpose and details of the learning activity and the validity of the knowledge and skills acquired. **1. Title of the microcredential** • A clear and concise name that describes the content of the training. • Example: "Basics of Digital Marketing" **2. Description of training** • A brief summary of the learning content, objectives and scope. • Example: "This microcredential certifies that the recipient has successfully completed the 'Basics of Digital Marketing' training, which includes learning key concepts of digital marketing, the basics of SEO, PPC advertising and social media management." **3. Learning outcomes** • Specific learning outcomes that describe what the recipient should know, understand or be able to do after completing the training. • Example: "After completing the training, the recipient will be able to: 1. Describe the basic concepts of digital marketing. 2. Analyze data from digital marketing campaigns. 3. Develop a basic digital marketing strategy. 4. Use basic digital marketing tools."

		4. Prerequisites • Necessary prior knowledge or experience to participate in the training. • Example: "Completed high school program and basic knowledge of computer and Internet use." **5. Form of cooperation** • How the training was delivered (online training, classroom lectures, hands-on training, etc.). • Example: "Online training with asynchronous video lectures, interactive exercises and independent projects." **6. Identity control and verification** • Methods of control and identity verification during assessment. • Example: "Final exam using control software, where the participant's identity is checked with an ID before the exam." **7. Score achieved** • Method of assessment and grade achieved. • Example: "Grade achieved: 5 (Excellent) - 95%" **8. Date of issue** • The date the microcredential was issued. • Example: "Issued: June 15, 2024"

		9. Issuer • The name and contact information of the organization or institution that issued the microcredential. • Example: "University of Ljubljana, Faculty of Computer Science and Informatics, Večna pot 113, 1000 Ljubljana, Slovenia. Tel: +386 1 123 45 67, Email: info@uni-lj.si" **10. Logo and stamp** • The official logo and/or stamp of the institution issuing the authenticity of the microcredential. • Example: Logo of the University of Ljubljana **11. Signature or confirmation by the issuer** • Institutional stamp, signature or electronic confirmation confirming the validity of the microcredential. **12. Unique identification number** • A unique number or microcredential code for authentication. • Example: "ID: 2024-DM-00123" **13. Validity and Transferability** • Information on whether the microevidence is internationally recognized and whether it can be used for further education or career advancement.

		• Example: "This microcredential is recognized under the European Qualifications Framework (EQF) and may be considered as part of the 'Digital Marketing Specialist' qualification." **14. Contact for support** • Contact information for help and support related to microcredential. • Example: "For additional information or support, please contact: podpora@uni-lj.si" **An example of a complete microcredential record** **Title of the microcredential:** "Basics of Digital Marketing" **Training description:** • This microcredential certifies that the recipient has successfully completed the "Basics of Digital Marketing" training, which includes learning the key concepts of digital marketing, the basics of SEO, PPC advertising and social media management. **Learning outcomes:** 1. Describe the basic concepts of digital marketing. 2. Analyze data from digital marketing campaigns. 3. Develop a basic digital marketing strategy. 4. Use basic digital marketing tools. **Prerequisites:** • Completed high school program and basic knowledge of computer and Internet use. **Form of cooperation:**

		• Online training with asynchronous video lectures, interactive exercises and independent projects. **Control and identity verification:** • Final exam using control software, where the participant's identity is checked with an identity document before the exam. **Score achieved:** • Grade achieved: 5 (Excellent) - 95% **Date of issue:** • Released: June 15, 2024 **Issuer:** • University of Ljubljana, Faculty of Computer Science and Informatics, Večna pot 113, 1000 Ljubljana, Slovenia. Phone: +386 1 123 45 67, Email: info@uni-lj.si **Logo and stamp:** • (Logo of the University of Ljubljana) **Confirmation by the issuer** ● Signature or electronic confirmation confirming the validity of the microcredential. **Unique identification number:**

		• ID: 2024-DM-00123 **Validity and portability:** • This microcredential is recognized within the European Qualifications Framework (EQF) and can be considered as part of the "Digital Marketing Specialist" qualification. **Contact for support:** • For additional information or support, contact: podpora@uni-lj.si By including this additional information, the microcredential can clearly and transparently represent learning achievements and provide the necessary data for recognition and evaluation.