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VET21001 Report

Development of the VET21001 Competence Profiles for
ISO 21001-EQAVET System Manager and Lead Auditor

V1



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Introduction

1.1 Context

VET21001¹ is an applied research project, designed to respond to the problem of the low European Quality Assurance Framework for Vocational Education and Training (EQAVET)² adoption since 2009 and is funded by the ERASMUS+ Programme, in the framework of the European priorities (EU, 2019)

- Sustainable investment, quality and efficiency of education, training and youth systems: supporting the development of evidence-based policies and reforms that aim at delivering quality education and training more efficiently;
- Increasing the quality in VET through the establishment of feedback loops to adapt VET provision, in line with the Recommendation on the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET).

VET21001 has the **Mission** to

- contribute to a self-sustainable market dynamics, conducive to a wider adoption of the EQAVET criteria (VET21001 Consortium, 2019a).

and the **Vision** to

- contribute to the continuous improvement of European VET and HVET services and its worldwide recognition as a brand of excellence (VET21001 Consortium, 2019a).

To accomplish its mission and achieve its vision, the project includes five intellectual outputs:

IO1	Gap analyses of EQAVET Adoption
IO2	Competence Profiles for EQAVET Professionals
IO3	Rules for an EQAVET Accredited Certification Scheme
IO4	"Mastering EQAVET" Curricula
IO5	"VET21001" - A Standardised Toolkit for easy EQAVET integrated implementation

The relationship between these intellectual outputs is illustrated in figure 1 at the next page. This report describes the development of intellectual output 2 "Competence Profiles for EQAVET Professionals".

¹ At the application phase, the project was named EQAVET+. It was re-named VET21001 after funding approval, by request of the European Commission. See details [here](#).

² EQAVET first emerged from the [2009 Recommendation of the European Parliament and Council](#), which invited Member States to use indicative descriptors and indicators to strengthen the quality of VET provision. It was meanwhile substituted by the [2020 Recommendation on vocational education and training for sustainable competitiveness, social fairness and resilience](#). The VET Recommendation describes how EQAVET can be used to strengthen the quality of initial and continuing VET and presents the complete EQAVET framework.

VET21001

RELATIONSHIP BETWEEN INTELLECTUAL OUTPUTS

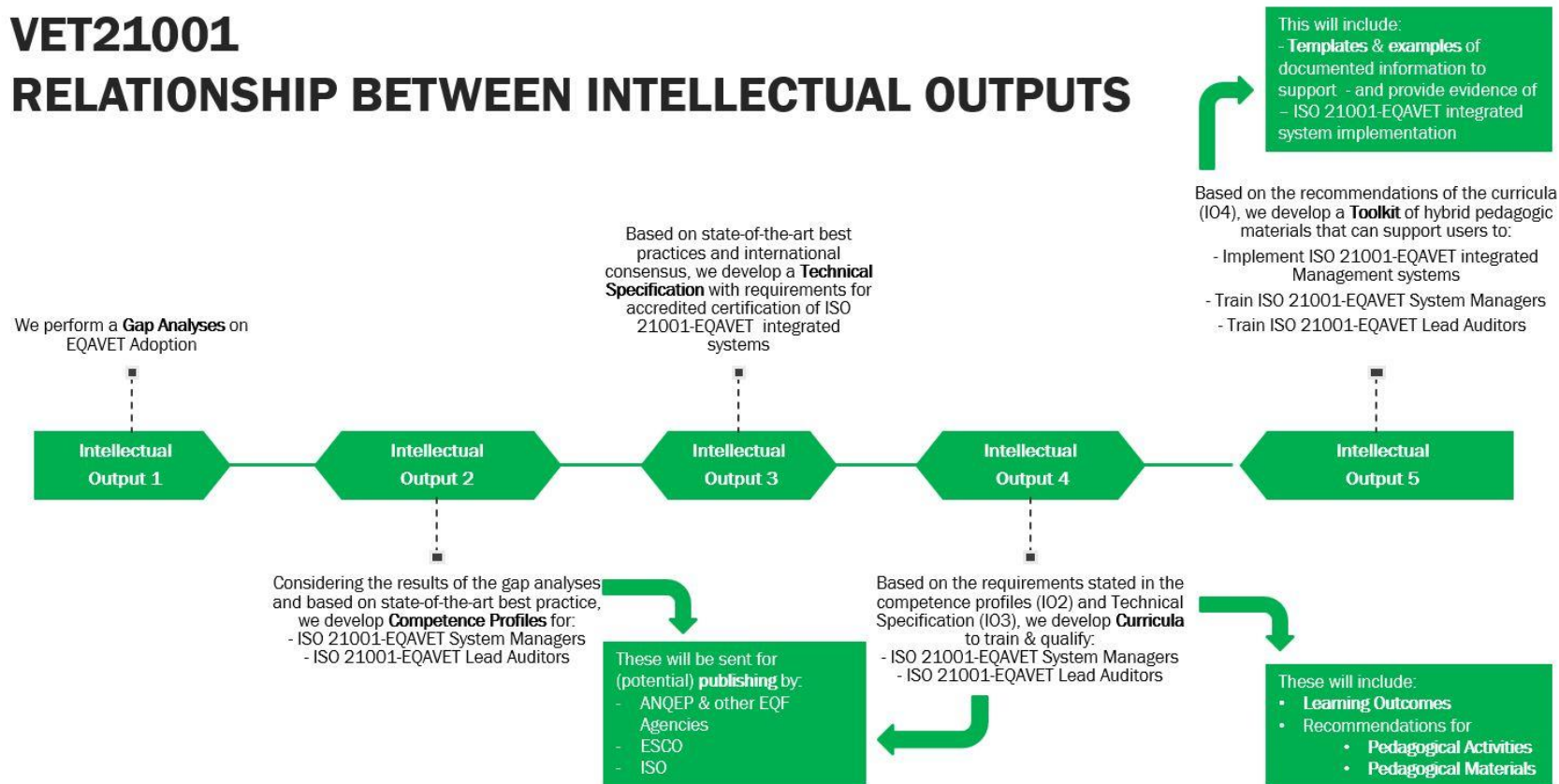


Figure 1

1.2 Aims and objectives

VET21001 Intellectual Output 2 (IO2) was designed to respond directly to two of the causes of the low EQAVET adoption problem - namely, the lack of recognition of EQAVET Professionals as such and the lack of recognition of EQAVET Competences as a Profile in the National Qualification Catalogues. It planned to offer these documents to the EQAVET National Agencies of the countries represented in the VET21001 Consortium, with the following objectives (VET21001 Consortium, 2019a, 2019b):

- To grow the national qualification catalogues database and its usage;
- To facilitate the mobility of EQAVET professionals across Europe and beyond, through facilitated recognition of their competences.

The rationale for this, as explained at the application (VET21001 Consortium, 2019b), was:

“Based on the results of the gap analysis (IO1), the consortium will identify the needed competence profiles for two types of EQAVET professionals – Implementers and Evaluators. These Competence profiles were never developed before and are needed as input for the development of the accredited certification scheme for EQAVET (IO3) and the “Mastering EQAVET” Curricula (IO4).

Moreover, as the consortium will publish them at the project website as an open resource and will also proactively share it with relevant VET and EQAVET stakeholders, they can easily be used to feed further initiatives by other organizations in the future. By involving Associate partners inserted in European and International networks, whom will support the project by disseminating its intellectual outputs, the infrastructure for easy transferability is assured, being a question of translations in different languages.”

The strategy deployed to achieve the above objectives, included three activities aligned in sequence:

- IO2A1. Competence profile for Implementers
- IO2A2. Competence profile for Evaluators
- IO2A3. Publication of the Competence Profiles

The development of these activities, as well as their evaluation, is fully described at sections 3 and 4.

1.3 Glossary

Given the high technicity of the subject and the proliferation of definitions for the same terms often used in the sector, the VET21001 Consortium has worked on the construction of a common glossary with a selection of terms and definitions agreed upon for the purpose of this document.

Audit

Process for obtaining relevant information about an object of conformity assessment and evaluating it objectively to determine the extent to which specified requirements are fulfilled.

Note 1: The specified requirements are defined prior to performing an audit so that the relevant information can be obtained.

Note 2: Examples of objects for an audit are management systems, processes, products and services.

Note 3: For accreditation purposes, the audit process is called "assessment".

(ISO 17000:2020, 6.4)

Accreditation

Third-party attestation related to a conformity assessment body, conveying formal demonstration of its competence, impartiality and consistent operation in performing specific conformity assessment activities.

(ISO 17000:2020, 7.7)

Certification:

Third-party attestation related to an object of conformity assessment, with the exception of accreditation.

(ISO 17000:2020, 7.6)

Skills

Ability to apply knowledge and use know-how to complete tasks and solve problems.

(Cedefop; European Parliament and Council of the European union, 2008)

Knowledge

Outcome of assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices related to a field of study or work.

(Cedefop, 2008; European Parliament and Council of the European Union, 2008)

Competence

Proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.

(Cedefop; European Parliament and Council of the European union, 2008)

2 Method

The methods followed by the Consortium to develop IO2 were:

- 1) comparative analyses; and
- 2) the iterative method of developing documents in consensus.

Firstly, each partner conducted a desk research through available international and national catalogues and repertories focusing on professional profiles involved in quality management and auditing. The sources consulted were international (ISO), European (ESCO) and national VET catalogues and profiles published by national EQAVET agencies, certification bodies (e.g. Bureau Veritas, SGS, TUV) or higher education curricula.

The research was conducted across eight countries (Italy, Portugal, Malta, Slovenia, France, United Kingdom, Austria and The Netherlands), four more than the number of countries in the consortium. This allowed to enrich the geographical scope of the research thus increasing the applicability of the profiles within different national contexts and publication into various international and national catalogues. The findings can be found in section 3 “Findings” of this report.

The profiles collected were then compiled by the partners in a collaborative online table created in Google Spreadsheets. A comparative analysis focused on the commonalities and differences among the similar profiles identified was performed as well as a selection of the most relevant competences for the VET21001 profiles. Partners were asked to highlight, using a LEAN colour approach, the parts of the profiles that could be used by the VET21001 Profiles.

The consortium held a series of meetings to discuss the compilation and develop the VET21001 Competence Profiles, using the selected parts of the profiles already published, adapting these parts as needed to fit the new context and developing creating new content, as necessary.

The names of the profiles also evolved into formulations more used across countries. The final consensually agreed contents of both profiles – the VET21001 Competence Profiles – as well as their designed version for publication, can be found in section 4 “Results” of this report.

3 Findings: The Research Base

3.1 Competence Profiles for Implementers

3.1.1 International Profile (based on ISO 10019)

Category of Information	International (Adapted from ISO 10019:2005)
Name	Consultant in Quality Management
Activities	<p>Assisting the organization to ensure that the design and the implementation of the quality management system is suited to the organization's culture, characteristics, level of education and specific business environment;</p> <p>Illustrating the concepts concerning quality management in a clear and understandable way throughout the organization, paying special attention to the understanding and adoption of quality management principles;</p> <p>Communicating with all relevant individuals, at all levels, involving them actively in the quality management system realization;</p> <p>Advising and supporting the organization in identifying the appropriate processes needed for its quality management system and defining the relative importance, sequence and interaction of those processes;</p> <p>Assisting the organization in identifying needs for documentation essential to ensure the effective planning, operation and control of its processes;</p> <p>Evaluating the effectiveness and efficiency of the quality management system processes to stimulate the organization to look for opportunities for improvement;</p> <p>Assisting in promoting a process approach and continual improvement of the quality management system within the organization;</p> <p>Assisting in identifying the training needs to enable the organization to maintain the quality management system;</p> <p>Assisting the organization, where applicable, to identify the relationship between its quality management system and any other relevant management system (e.g. environmental or occupational health and safety) and facilitate the integration of such systems.</p>
Competences	
Know-Know (Knowledge)	<p>Quality management system consultants should be able to understand and apply relevant International standards that can affect the organization, such as</p> <ul style="list-style-type: none"> — ISO 9000, Quality management systems — Fundamentals and vocabulary, — ISO 9001, Quality management systems — Requirements, — ISO 9004, Quality management systems — Guidelines for performance improvements, — ISO 19011, Guidelines for quality and/or environmental management systems auditing, and — other relevant International Standards as listed in the Bibliography. <p>In addition, the consultant should have knowledge of other standards that are necessary for the consulting services.</p> <p>NOTE Typical examples include</p>

Category of Information	International (Adapted from ISO 10019:2005)
	<p>a) sector-specific standards, b) measurement control systems standards, c) accreditation standards, d) conformity assessment standards, e) product standards, f) dependability management standards, and g) standards related to safety aspects.</p> <p>Quality management system consultants should have general knowledge of</p> <p>a) the standardization, certification and accreditation systems at national and international level, and the requirements for certification for such systems (e.g. ISO/IEC Guide 62), and b) the processes and procedures for national certification of products, systems and personnel.</p> <p>Quality management system consultants should have knowledge of, and be able to apply, appropriate quality principles, methodologies and techniques. The following list indicates such fields where the consultant's experience and ability may be valuable:</p> <p>a) quality management principles; b) continual improvement tools and techniques; c) appropriate statistical techniques; d) auditing methodologies and techniques; e) principles for economics of quality; f) team work techniques; g) PDCA (Plan-Do-Check-Act) methodology; h) policy deployment methodology; i) process mapping techniques; j) problem solving techniques; k) techniques for monitoring customer/employee satisfaction; l) brainstorming techniques.</p> <p>Quality management system consultants should have knowledge of relevant management practices to understand how the quality management system integrates and interacts with the overall management system of the organization, including its human resources, and how it will be deployed to secure the goals and objectives of the organization.</p> <p>In some cases, additional competencies can be required to meet the organization's needs, expectations and overall objectives for its quality management system, such as business and strategic planning, risk management, and business improvement tools and techniques</p>
Know-How (Skill)	<p>Quality management system consultants should be able to understand and apply relevant International standards that can affect the organization, such as</p> <ul style="list-style-type: none"> — ISO 9000, Quality management systems — Fundamentals and vocabulary, — ISO 9001, Quality management systems — Requirements, — ISO 9004, Quality management systems — Guidelines for performance improvements, — ISO 19011, Guidelines for quality and/or environmental management systems auditing, and — other relevant International Standards as listed in the Bibliography. <p>In addition, the consultant should have knowledge of other standards that are necessary for the consulting services.</p> <p>NOTE Typical examples include</p> <p>a) sector-specific standards, b) measurement control systems standards,</p>

Category of Information	International (Adapted from ISO 10019:2005)
	<p>c) accreditation standards, d) conformity assessment standards, e) product standards, f) dependability management standards, and g) standards related to safety aspects.</p> <p>Quality management system consultants should have knowledge of, and be able to apply, appropriate quality principles, methodologies and techniques. The following list indicates such fields where the consultant's experience and ability may be valuable:</p> <p>a) quality management principles; b) continual improvement tools and techniques; c) appropriate statistical techniques; d) auditing methodologies and techniques; e) principles for economics of quality; f) team work techniques; g) PDCA (Plan-Do-Check-Act) methodology; h) policy deployment methodology; i) process mapping techniques; j) problem solving techniques; k) techniques for monitoring customer/employee satisfaction; l) brainstorming techniques.</p>
Know-how-to-be (Behaviour)	<p>ethical: fair, truthful, sincere, honest and discreet; observant: constantly and actively aware of organizational culture and values, physical surroundings and activities; perceptive: aware of and able to understand the need for change and improvement; versatile: able to adapt to different situations and provide alternative and creative solutions; tenacious: persistent, focused on achieving objectives; decisive: capable of reaching timely conclusions based on logical reasoning and analysis; self-reliant: able to act and function independently while interacting effectively with others; communicative: able to listen to, and effectively interface with, all levels of an organization, confidently and with sensitivity to its culture; practical: realistic and flexible with good time management; accountable: able to take responsibility for his/her own actions; facilitative: able to assist an organization's management and employees through the quality management system realization.</p>
Pre-Requirements	NA

3.1.2 European Profile (ESCO)

Category of Information	European - ESCO
Name	Quality engineer

Category of Information	European - ESCO
Activities	Quality engineers define quality standards for the creation of products or services. They check to make sure the products and services are in compliance with the quality standards and they coordinate quality improvements.
Competences	
Know-Know (Knowledge)	quality assurance methodologies quality assurance procedures quality standards test procedures audit techniques communication
Know-How (Skill)	analyse test data define quality standards identify improvement actions identify process improvements inspect quality of products perform risk analysis recommend product improvements record test data report test findings set quality assurance objectives support implementation of quality management systems undertake inspections write inspection reports
Know-how-to-be (Behaviour)	(3) ESCO identifies Skill and Behaviour together
Pre-Requirements	NA

Category of Information	European - ESCO
Name	Quality services manager
Activities	Quality services managers manage the quality of services in business organisations. They ensure the quality of in-house company operations such as customer requirements and service quality standards. Quality services managers monitor the company's performance and implement changes where necessary.
Competences	
Know-Know (Knowledge)	business knowledge business processes corporate social responsibility database quality standards

Category of Information	European - ESCO
	quality assurance methodologies quality standards business strategy concepts customer service project management
Know-How (Skill)	adhere to organisational guidelines analyse test data create solutions to problems define quality standards follow company standards improve business processes liaise with managers oversee stock quality control perform quality audits plan health and safety procedures strive for company growth train staff in quality procedures analyse business processes assess supplier risks communicate test results to other departments lead inspections perform pre-assembly quality checks perform project management provide technical documentation set quality assurance objectives use measurement instruments define data quality criteria
Know-how-to-be (Behaviour)	(3) ESCO identifies Skill and Behaviour together
Pre-Requirements	NA

Category of Information	European - ESCO
Name	Quality engineering technician
Activities	Quality engineering technicians work with quality engineers or managers to analyse and solve quality problems and improve productivity. They examine machines for imperfections and inspect products to make sure they meet the standards. They also provide personnel with training in inspection techniques and prepare inspection plans.
Competences	

Category of Information	European - ESCO
Know-Know (Knowledge)	<ul style="list-style-type: none"> quality assurance methodologies quality assurance procedures quality standards test procedures automation technology database quality standards electricity electronics materials science mechanics non-destructive testing statistics
Know-How (Skill)	<ul style="list-style-type: none"> conduct performance tests ensure compliance with company regulations ensure compliance with legal requirements execute software tests inspect material inspect quality of products oversee quality control perform test run record test data report test findings set quality assurance objectives undertake inspections write inspection reports analyse test data apply health and safety standards apply statistical analysis techniques communicate test results to other departments create solutions to problems develop material testing procedures ensure compliance with environmental legislation maintain test equipment manage chemical testing procedures manage manufacturing documentation perform laboratory tests perform physical stress tests on models perform product testing provide technical documentation read standard blueprints support implementation of quality management systems train employees
Know-how-to-be (Behaviour)	(3) ESCO identifies Skill and Behaviour together

Category of Information	European - ESCO
Pre-Requirements	NA

Category of Information	European - ESCO
Name	Industrial quality manager
Activities	Industrial quality managers monitor and control information assets by detailing processes and procedures to ensure compliance with industrial standards. They perform audits in industrial processes, advise on preventive and corrective actions, and ensure compliance with industrial standards.
Competences	
Know-Know (Knowledge)	audit techniques correctional procedures database quality standards industrial design industrial engineering industrial software internal auditing quality standards
Know-How (Skill)	analyse test data check quality of products on the production line check quality of raw materials conduct workplace audits create solutions to problems define manufacturing quality criteria develop audit plan evaluate industrial hygiene follow safety standards in industrial contexts identify improvement actions identify preventive actions inspect industrial equipment liaise with industrial professionals manage corrective actions monitor manufacturing quality standards oversee quality control perform quality audits provide technical expertise record production data for quality control revise quality control systems documentation support implementation of quality management systems
Know-how-to-be (Behaviour)	(3) ESCO identifies Skill and Behaviour together
Pre-Requirements	NA

3.1.3 National Profiles

3.1.3.1 Austria

Category of Information	National - Austria
Name	IT Quality Management Coordinators
Activities	IT Quality Management Coordinators implement quality management systems (QMS) and develop them further. If necessary, they attend the implementation/realisation of the corporate mission in relation to quality, goals & policy. They supervise the abidance and conformity of the QMS regarding to fundamental frameworks (especially ITIL, Spice, ISO 9001, ISO 20000). IT Quality Management Coordinators document outcomes and, if there are deviations, they have to work on revisions. They assist the leadership/authority/management in enhancing the quality strategy and policy as well as raising awareness of quality-consciousness among the employees.
Competences	
Know-Know (Knowledge)	
Know-How (Skill)	<p>Maintaining and developing of quality systems</p> <ul style="list-style-type: none"> -Collaborating on planning/preparing and implementing quality audits. -Coordinating concrete measures with classification numbers for quality improvements. - Tracking the process of quality improvement -Reviewing the effectiveness of the quality improvement using classification numbers -Creating verifications about the effectiveness of the QMS system -Assessing the effectiveness and necessity of more action -Supporting the review and update of the quality strategy & policy -Supporting the development of quality goals -Informing employees about current quality goals -Coordinating the development of measures (including classification numbers) to achieve the quality goals -Reviewing the effectiveness of measures in consideration of classification numbers -Reviewing the effectiveness of the measures to achieve the quality goals -Coordinating and taking care of the quality documentation -Reporting results to the leadership/management/authority <p>Operating QM activities of IT-projects</p> <ul style="list-style-type: none"> -Applying the guidelines of QMS on a concrete project -Supervising reviews during the IT projects -Supervising the specification regarding the compliance of guidelines -Supervising the compliant implementation of the specification (of the IT project) -Supervising the test phase -Supervising the test-implementation -Coordinating the documentation of QM activities for IT projects -Operating (project-) intern reviews -Coordinating the inspection of the guidelines through 'Lessons learned'
Know-how-to-be (Behaviour)	<p>Professional Abilities/Qualifications</p> <ul style="list-style-type: none"> -willingness to learn -responsibility -self-management -systematic-methodical approach -communication skills -ability to cooperate -conscientiousness -ability to make a judgement -planning skills -ability to work in a team

Category of Information	National - Austria
	-problem solving -conflict management skills
Pre-Requirements	

3.1.3.2 France

Category of Information	National - France
Name	Responsible for Quality, Hygiene, Security Environment (QHSE)
Activities	<p>"Quality management: to implement or to keep a quality management system with or without certification: formal procedures, interested parties integration, to analyse, to measure, to audit, to improve</p> <p>Environment management: to define and develop a regulatory methodology, to make an environmental analysis, to sensitize, to train</p> <p>Safety, health and hygiene management: to define and develop a regulatory methodology, to make a professional risks analysis, to supervise, to survey, to measure labour health and safety performances</p> <p>To manage an integrated system: to implement the documented information of the Integrated management system, to manage quality, safety and environment risks and opportunities</p> <p>To manage a project, to communicate, to lead a workgroup,..."</p>
Competences	
Know-Know (Knowledge)	<p>ISO 9001, aeronautical referential, IATF, nuclear, agro-food,</p> <p>Legal and reglementary demands: ICPE, environment code,</p> <p>Legal and reglementary demands: reglementary control, labour code, conformity of the equipment, sanctions, ...</p>
Know-How (Skill)	<p>The organization: problem-solving method, autonomous maintenance</p> <p>The tools: 5S, SPC, SMED, AMDEC, HACCP, measure tools management,</p> <p>The referential and starting the process ISO 14001, eco-conception</p> <p>Environmental techniques: water, air, sun, waste, energy, biodiversity,</p> <p>The referential and starting the process: ISO 45001, single document, accidents management,</p> <p>Safety techniques: fire risks, MST, chemicals, external companies management, psychosocial risks,</p> <p>Agrofood hygiene specificities</p> <p>An integrated system: coherence, tools and good practices</p> <p>Balance scorecard: indicators, client satisfaction measurement, interpretation of results</p> <p>Audits: analysis referential, methodology,</p> <p>Project leading method and tools</p> <p>Managing economic data</p> <p>To communicate with interested parties, namely in English</p>
Know-how-to-be (Behaviour)	<p>Leading a workgroup, a meeting</p> <p>Communicating, sensitizing, training</p>
Pre-Requirements	<p>This training has several levels of admission:</p> <ul style="list-style-type: none"> - having a Bac+2 or professional background (2-year training) - having a QSE/QHSE certification in alternation (1-year training)

3.1.3.3 Italy

Category of Information	National - Italy
Name	Tecnico di gestione dei sistemi per la qualità
Activities	"The quality management systems expert defines the quality control plan and procedures and plans internal verification audits, and non-conformity detection procedures and activation of corrective actions. He draws up periodic summary reports and documents which he submits to colleagues and company managers. It generally operates in structured organizational contexts, planning one's own activities and those of others, identifying the decisions to be taken and managing any critical issues."
Competences	
Know-Know (Knowledge)	<p>Elements of organizational analysis applied to the correct evaluation of data during internal controls Methods for verifying the results of effectiveness and efficiency of the procedures activated Techniques for conducting internal audits on the quality management system Problem solving techniques Main techniques of data analysis applied to techniques for continuous improvement</p> <p>Techniques and methods for handling complaints; Methodologies for the implementation of the monitoring and measurement of the performance of the quality management system; Function of the software for processing and coding quantitative and qualitative data; Techniques and methods for detecting customer / supplier and staff satisfaction Characteristics and types of the main Quality Management Systems Characteristics and criticalities of business processes Forms required for the implementation of the Quality Management System Specificity of the sector regulations Procedure for issuing, managing and maintaining quality system certifications</p> <p>Criteria, indices and methods of qualitative evaluation of customers / suppliers, personnel Methods of managing the non-conformities found Techniques and methods for detecting non-conformities towards customers / suppliers, personnel Risks and with particular regard to the company production sector, regulatory changes, innovations in prevention measures General concepts on the subject of prevention and safety at work (risk, damage, prevention, protection, organization of company prevention, rights and duties of the various subjects corporate bodies, supervisory, control, assistance bodies) Specific knowledge in relation to their duties in the field of health and safety at work"</p>
Know-How (Skill)	<p>Implementation of internal checks Provide for the analysis of the data and information found and verified following the performance of internal audits Adopt methods for continuous improvement (eg kaizen method, pdca model, etc.)Schedule audits to be carried out according to the established standards and internal needs Provide to verify, through documentary and procedural analysis, the correct application of the quality management system, proposing improvement solutions if necessary Definition of complaints management procedures Adopt methods for continuous improvement (eg kaizen method, pdca model, etc.);Define the most effective methodology for measuring customer / supplier and staff satisfaction, also setting up the related evaluation questionnaires; Set up a monitoring system for activities based on the quality policies adopted by the company; Define the most effective methodology for handling complaints by also setting up the related complaint forms Definition of company quality procedures Communicate the quality system management procedures to the staff Define the general procedures for the various company processes / sub-processes, discussing with the staff and the management Define, according to the standards envisaged, the standard operating procedures relevant to the quality system; Prepare the forms to be updated / changed / filled in for the quality management system Prepare the forms to be updated / changed / filled in for the quality management system</p>

Category of Information	National - Italy
	<p>Draw up the company quality management manual, containing all the procedures in accordance with the regulations for compliance with quality specifications</p> <p>Management of non conformities</p> <p>Adopt the qualitative and quantitative criteria for evaluating suppliers;</p> <p>Set corrective actions following the detection of one or more non-conformities;</p> <p>Detect and report, according to the established procedures, compliance with customers / suppliers and / or internal staff, with respect to the indicators provided for by its quality management system</p> <p>SafetyWork directly to eliminate or reduce emergencies or dangers that may occur within the company;</p> <p>Identify and evaluate risk factors for safety and health, general and related to tasks with repetitive operations or in disadvantaged workstations, tasks with possible cause of work-related stress, tasks that require prolonged use of the display screen, preventing and managing any unforeseen events or emergencies according to the established procedures;</p> <p>Operate by applying techniques suitable for carrying out planning, monitoring and evaluation activities in safe conditions;</p> <p>Operate using equipment and materials adequately and in accordance with the prescriptions;</p> <p>Take part in the training and training programs prescribed by current legislation and periodically undergo health checks at the competent doctor;</p> <p>Identify and evaluate risk factors for safety and health, general and related to tasks with repetitive operations or in disadvantaged workstations, tasks with possible cause of work-related stress, tasks that require prolonged use of the display screen, preventing and managing any unforeseen events or emergencies according to the established procedures;</p> <p>Carry out planning, monitoring and evaluation activities in safe conditions ;</p> <p>Operate using equipment and materials according to the prescriptions;</p> <p>Help eliminate or reduce emergencies or dangers that may occur within the work context</p>
Know-how-to-be (Behaviour)	
Pre-Requirements	NA

Category of Information	National - Italy
Name	Tecnico della gestione del sistema qualità aziendale
Activities	"The expert of the company quality system management takes care of the company quality policies starting from the identification of risk areas and opportunities present in the organizational and environmental context, identifying objectives, indicators, tools and control methods with a view to continuous improvement. S/he defines a control plan for the procedures through the realization of periodic controls (Audit), the detection of non-conformities and complaints, the identification and resolution of anomalies found. It collaborates and relates with the institutions of certification"
Competences	
Know-Know (Knowledge)	<p>"Knowledge of:</p> <p>Business organization</p> <p>Production processes</p> <p>Corporate bodies and functions</p> <p>Method of description and graphic representation</p> <p>Organizational types</p> <p>Data collection techniques</p> <p>Business risk classification and assessment</p> <p>UNI EN ISO 9000: quality management systems, fundamentals and vocabulary</p> <p>UNI EN ISO 9004: managing an organization for a lasting success</p> <p>UNI EN ISO 19011: guidelines for audits</p> <p>Measurement tools and techniques</p>

Category of Information	National - Italy
	<p>Classification of indicators</p> <p>Activity planning</p> <p>Business organization and production processes</p> <p>Business risk classification and assessment</p> <p>Principles of communication</p> <p>Conflict management</p> <p>Relevant legislation</p> <p>Certification bodies and certification marks</p> <p>Product and process certification</p> <p>Technical requirements and tests</p> <p>Service quality standards"</p>
Know-How (Skill)	<p>Definition of the quality system</p> <p>Analyze an organization by identifying roles, functions and tasks</p> <p>Representing the system of relationships between processes and between the company and the reference environment</p> <p>Define possible critical areas and opportunities for improvement</p> <p>Define the most appropriate tools and indicators for achieving the objectives set</p> <p>Definition of the methods for carrying out controls (Internal audits)</p> <p>Define the documentation necessary for the registration of activities (Forms)</p> <p>Define operating instructions, procedures and guidelines useful for describing the phases of implementation of the activities, the subjects involved and the required documentation</p> <p>Identify tools and methods for controlling non-conformities, complaints and customer / staff satisfaction</p> <p>Define the methods for managing and closing the anomalies found and the corrective actions identified</p> <p>Organize the information in a specific summary document of the quality system adopted by the organization</p> <p>Verify the compliance with the quality management system</p> <p>"Define devices, measurement tools, personnel and timing</p> <p>Prepare the materials to carry out the check</p> <p>Schedule control interventions</p> <p>Periodically carry out the Audits</p> <p>Sharing with managers and staff involved the methods of verification and quality management</p> <p>Verify correct document management</p> <p>Verify the expected results taking into account the indicators set for the process and for the organization in general</p> <p>Detect and manage compliance and non-compliance</p> <p>Detect and manage complaints</p> <p>Identify and manage corrective actions</p> <p>Verify that the anomaly has been resolved and close the report of non-compliance and / or complaint</p> <p>Implement the quality system"</p> <p>Product/service certification</p> <p>"Apply the principles and standards required by the quality certification system of a product / service</p> <p>Prepare the documentation in compliance with the required standards</p> <p>Verify through internal audits the adequacy of the service / product to the required standards</p> <p>Train the organization to the expected standards and procedures</p> <p>Take charge of any anomalies found</p> <p>Manage the resolution of the anomaly</p> <p>Schedule periodic verification audits for the maintenance of certification</p>
Know-how-to-be (Behaviour)	
Pre-Requirements	NA

3.1.3.4 Malta

Although a competence profile for financial auditors, exists at national level, a profile for both the quality implementer and quality evaluator is not available. Hence it was agreed by the Consortium Partners that the Maltese Partners' contribution would consist of a desk research. The following two key documents were identified.

Category of Information	National - Italy
Name	Research Article : The House of Competence of the Quality Manager (Þór Ingason H & Ragnhildur Jónsdóttir E Shaofeng L , 2017)
Activities	Ensuring that the products or services delivered by the organisation are fit for purpose and meet both internal and external stakeholder requirements. This is achieved by (a) coordinating the activities required to identify and determine the necessary quality standards and (b) coordinating the activities to ensure the activities are met.
Competences	
Know-Know (Knowledge)	Knowledge of how to use problem solving skills. Knowledge of how to use policy deployment tools. Knowledge of root cause analysis Knows time management Costings and added value Individual and organisational behaviour Project management
Know-How (Skill)	Has emotional intelligence skills that include a mixture of self-awareness, self-management, social awareness, and relationship management. Has an analytical mindset. Competent in giving constructive feedback. Competent in systems thinking. Use of statistical analysis and analysing data Excellent communication skills Strategy skills coaching and mentoring skills Teamwork skills Organisational efficiency skills Auditing skills
Know-how-to-be (Behaviour)	Sets out clear objectives and achieves them. Promotes acceptance of quality management throughout organisation. Knows how to work under pressure Demonstrates leadership behaviour in an appropriate manner Fair and conscientious disposition
Pre-Requirements	NA

Category of Information	National - Italy
Name	Research Article : Towards a Quality Management Competence Framework: Exploring needed competencies in quality management (Martin J, Elg M, Gremyr I & Wallo A, 2021).
Activities	The research study identifies four possible roles for a QM that depend on whether the QM has a strategic OR operational remit, and whether the QM has a centralized OR local role.

Category of Information	National - Italy
	<p>The research study goes on to create a rubric to differentiate between a QM with a high/low for strategic/operational roles and differentiate for a QM with high/low of centralised/local roles. Hence this study could influence the expectations (minimum entry requirements) for Quality Managers in the different organisational set-ups as well as the envisaged activities.</p> <p>Hence (and this my conclusion), a QM in a strategic/centralised role would therefore benefit from an (eg) MBA, whereas, on the other side of the spectrum, a QM in an operational/local rule would suffice to have a diploma in (eg) quality system / assurance / audits.</p> <p>This rationale would therefore influence the set of competencies required as well as the minimum / maximum training profile. Again in my opinion, some of the training profiles (LOs) for QMs in strategic positions will require units of study on leadership, organisational behaviour, change management, management accounting etc.</p>
Competences	
Know-Know (Knowledge)	<p>Human Competence Dimension Indirect/direct leadership skills, interdisciplinary interaction 'ambassador' and carrier of quality management values. Adaptive communicative skills. Interpreting organisational contexts.</p> <p>Methods and Process Dimension The ability to coordinate and integrate a portfolio of standards, concepts and tools applicable to the organisation</p> <p>Conceptual Competence Dimension Key actor in customer understanding and customer focus. An ability to handle and evaluate a multitude of variables interconnecting various interdisciplinary contexts. Balancing short and long-term issues and the quality dilemma.</p> <p>Contextual Competence Dimension Knowing local organisation in detail and overall organisation in general. Business, market and competitive intelligence skills. Detailed knowledge on products and services.</p>
Know-How (Skill)	This was not part of the research study aim.
Know-how-to-be (Behaviour)	This was not part of the research study aim...
Pre-Requirements	NA

3.1.3.5 Netherlands

Category of Information	National - Netherlands
Name	Quality coordinator
Activities	<p>"The most important duties of a Quality coordinator are:</p> <p>Core task1: Controls quality of product and process and manages quality care system</p> <p>1.1 Prepares quality controls and takes specimens</p> <p>1.2 Carries out quality controls</p> <p>1.3 Assesses and reports on analysis data</p> <p>1.4 Supervises colleagues in technical professional areas</p> <p>Core task2: Manages quality care systems</p> <p>2.1 Supports the quality system</p> <p>2.2 Monitors implementation of quality policy</p> <p>Core task3:</p>

Category of Information	National - Netherlands
	Carries out investigation projects 3.1 Formulates investigations for the improvement of product and process 3.2 Carries out investigations 3.3 Supervises by the implementation of investigations 3.4 Reports on the investigation data"
Competences	
Know-Know (Knowledge)	
Know-How (Skill)	
Know-how-to-be (Behaviour)	
Pre-Requirements	

3.1.3.6 Portugal

Category of Information	National – Portugal (ANQEP)
Name	Quality technician
Activities	Organizing and implementing the different procedures that guarantee the quality of the company's raw materials, means of production, semi-finished and finished products and participating in the improvement of production methods, the organization of production and equipment and machines, with a view to quality.
Competences	
Know-Know (Knowledge)	Notions of: Production Management. Human Resources Management. Chemistry and Physics. Knowledge of: Foreign language (interpretation of technical documentation). Computer skills in the user's perspective. Standardization and specific legislation of quality. Socio-economic framework of the sector, national and international. Planning and organisation techniques. Technology of materials, equipment and production process. Management and quality assurance. Occupational safety, hygiene and health. Diagnosis methods. Communication and interpersonal relations. In-depth knowledge of: Methods of statistical analysis. Quality tools. Diagnosis methods.
Know-How (Skill)	1. Participate with the bodies responsible for quality, in the implementation of the Quality Assurance System. 1.1. Collaborate in the preparation of the Quality Manual, taking into account the standards relating to Quality Assurance; 1.2. Collaborate in the improvement of production procedures and the form of organization of production. 2. Define the procedures relating to quality control for each functional area, according to the needs and objectives of the company.

Category of Information	National – Portugal (ANQEP)
	<p>2.1. Analyse technical information regarding product specifications and production process;</p> <p>2.2. prepare procedures for quality control of the product and the necessary record sheets;</p> <p>2.3. prepare procedures for calibration and maintenance of equipment used in the manufacture of the product and the necessary record sheets;</p> <p>2.4. prepare procedures for the control and registration of documentation;</p> <p>2.5. prepare procedures for the control of the production process;</p> <p>2.6. prepare internal audit plans;</p> <p>2.7. prepare procedures for statistical treatment of quality control.</p> <p>3. implement and monitor quality control procedures.</p> <p>3.1 Disseminate the procedures, providing the necessary clarifications to each functional area of the company;</p> <p>3.2. ensure compliance with the application of quality control procedures;</p> <p>3.3. ensure compliance with the established calibration and maintenance procedures;</p> <p>3.4. propose specific information/training actions in quality or in areas determining quality according to the training needs diagnosed.</p> <p>4. evaluate the results of the application of quality control procedures in the company.</p> <p>4.1. Identify non-conformities in products and in the production process and diagnose their causes;</p> <p>4.2. define corrective and preventive actions for non-conformities and monitor their implementation;</p> <p>4.3. evaluate the effectiveness of the results of corrective actions developed, adapting the procedures drawn up;</p> <p>4.4. develop internal audits, verifying the conditions and quality procedures in the various phases of the production cycle, according to a pre-established plan and draw up the respective reports;</p> <p>4.5. Accompany the external audit teams, providing the necessary information and clarifications</p> <p>5. Interpreting and systematizing technical and organizational information of the company.</p> <p>6 Interpret standards and quality procedures, national and international.</p> <p>7 Identify materials and their technical specifications for the definition of procedures and control operations to be performed.</p> <p>8 Apply techniques for the preparation of procedures for product quality control, calibration and maintenance of equipment and control and recording of information.</p> <p>9 Use the techniques of planning and organization in the implementation of the quality assurance system.</p> <p>10 Apply techniques of control of documents and data related to quality control.</p> <p>11 Detect non-conformities of products and production process and diagnose the causes.</p> <p>12 Define and implement corrective/preventive actions.</p> <p>13 Apply techniques for evaluating the effectiveness of corrective/preventive actions.</p> <p>14 Apply internal audit procedures.</p> <p>15 Support external audits to provide information and other necessary means.</p> <p>16 To apply techniques for organising and disseminating information.</p> <p>17 To apply specific IT tools in the management of the quality system.</p>
Know-how-to-be (Behaviour)	<p>To take the initiative in order to find, in a timely manner, adequate solutions in the resolution of concrete situations.</p> <p>To understand and adapt to different organisational contexts and different groups.</p> <p>Motivating employees and teams to adopt quality behaviours in their professional activity.</p> <p>To facilitate interpersonal relationships with internal and external interlocutors with a view to developing a good level of cooperation.</p> <p>Communicate clearly and precisely, both individually and in public.</p> <p>Adapting to technical and organisational innovations</p>
Pre-Requirements	NA

Category of Information	National – Portugal (ANQEP)
Name	Specialist Technician in Quality, Environment and Safety Management

Category of Information	National – Portugal (ANQEP)
Activities	Plans, coordinates, ensures and promotes the implementation and continuous improvement of the Quality, Environment and Safety Management Systems, in accordance with the normative references and applicable legislation, contributing to the efficiency and competitiveness of the organisations.
Competences	
Know-Know (Knowledge)	<p>Notions of:</p> <ul style="list-style-type: none"> Mathematics. English. English. <p>Knowledge of:</p> <ul style="list-style-type: none"> Portuguese quality system. Conflict management and team management. Applied computing. Procurement and logistics. Quality tools. Statistical methods applied to Quality. Metrology and calibration. Measurement techniques and customer satisfaction monitoring. General and environmental microbiology. Chemical, biological and physical agents. Environmental and occupational health and safety legislation. Risk evaluation and control. Environmental and pollution prevention. Prevention in work context. Hygiene and security at work. Organization of emergencies. <p>In-depth knowledge of:</p> <ul style="list-style-type: none"> Quality Management Systems. Environmental Management Systems. Safety Management Systems. Process Management. Integration of Management Systems. Training Management. Management Systems Audits. Quality Improvement Techniques.
Know-How (Skill)	<p>To implement quality, environment and safety management systems in accordance with the applicable normative references and regulatory and statutory requirements</p> <ul style="list-style-type: none"> Supporting Top Management in the control of quality, environment and safety aspects within the organisation Participate, together with the Top Management, in the definition of the policy and objectives of quality, environment and safety and in the identification of the processes and resources necessary for the implementation of the management system taking into account the policy and objectives defined. To articulate, with the top management and with the other functional areas, the quality, environment and safety management strategy, so that the objectives may converge in the development of the global strategy of the organisation. Control the documentation, records and data analysis of the quality, environment and safety management system. Control the monitoring and measuring devices. Promote internal and external communication in relevant aspects of the quality, environment and safety management system. Participate in the handling of non-conformities and develop corrective and preventive action programmes. Develop and implement continuous improvement programmes. <p>Support Human Resources Management</p> <ul style="list-style-type: none"> Identify training needs related to quality, environment and safety. To identify the skills necessary for the recruitment and selection of employees to perform functions that affect the quality of the product/service.

Category of Information	National – Portugal (ANQEP)
	<p>To support the human resources management in the planning, organisation and evaluation of the effectiveness of the training actions defined by the training plan.</p> <p>To manage the audit programme and act as internal auditor Developing and coordinating the audit program, of an organization, which contributes to determining the effectiveness of its management system. Carry out audits of the quality, environment and safety management system in accordance with the standards NP EN ISO 9001, NP EN ISO 14001, OHSAS 18001 and applicable legislation. To accompany the certifying entities and/or external audits in the certification process.</p> <p>Collaborate in the selection, approval and evaluation of suppliers, in accordance with previously defined criteria.</p> <p>Collaborate in the analysis and evaluation of customer satisfaction, through Quality management techniques, in accordance with the applicable normative references.</p> <p>Collaborate in the revision of the quality, environment and safety management systems.</p> <p>Identify the best strategic options in various contexts and situations from the perspective of Quality, Environment and Safety management.</p> <p>Research and apply the legislation, regulations and standards inherent to the different specific sectors of intervention.</p> <p>Plan, coordinate and promote the implementation stages of Quality, Environment and Safety management systems.</p> <p>Elaborate technical and specific documentation and determine its implementation.</p> <p>Design various documentary media for the dissemination of information at all levels of the organisation, within the scope of quality, environment and safety management systems.</p> <p>Process management and implementation of measurement and monitoring indicators.</p> <p>Plan and coordinate the implementation of integrated management systems.</p> <p>Determine the purchasing needs, select and evaluate suppliers and define the respective procedures for the acquisition of goods and/or services.</p> <p>Use statistical process control techniques.</p> <p>Control and handle measuring, monitoring and control equipment.</p> <p>Determine the applicable statistical and reliability parameters.</p> <p>Control the metrological conformity of monitoring and measuring equipment.</p> <p>Use techniques for diagnosis of environmental performance of institutions.</p> <p>Prepare and apply checklists of compliance with legislation in a real work context.</p> <p>Develop and apply checklists for hazard identification and risk assessment.</p> <p>Apply techniques for the identification, control and assessment of risks.</p> <p>Implement a programme of control of occupational risks in an industrial environment.</p> <p>Apply standards and procedures for action in emergency situations.</p> <p>Apply communication techniques appropriate to the context of intervention.</p> <p>Apply the standards of safety, hygiene, health and environmental protection concerning the professional activity.</p> <p>Use management systems auditing techniques.</p> <p>Use techniques to analyse and evaluate customer satisfaction.</p> <p>Evaluate the effectiveness of the implemented measures, according to the results obtained by the company and the evaluation process of customer satisfaction.</p> <p>Use techniques for the development and implementation of improvement programmes associated to quality, environment and safety.</p>
Know-how-to-be (Behaviour)	<p>Manage work teams, demonstrating leadership ability and ensuring employees' levels of responsibility and motivation.</p> <p>Demonstrate communication skills</p> <p>Adapt to technical and methodological developments.</p> <p>Ensure compliance with safety, hygiene, health and environmental protection standards in the performance of their professional activity.</p> <p>To ensure compliance with the standards and procedures of the integrated Quality, Environment and Safety management systems.</p> <p>Communicate with different interlocutors, facilitating internal and external interpersonal relationships.</p> <p>Adopt behaviours of emotional stability and resistance to stress.</p>

Category of Information	National – Portugal (ANQEP)
	<p>Work goal-oriented and under deadline pressure.</p> <p>To demonstrate critical spirit, adaptability and flexibility to new situations</p> <p>Decide on appropriate solutions to resolve conflicts, problems and unforeseen situations.</p> <p>Demonstrate proactivity, assertiveness and results-orientation.</p> <p>Act based on principles of tolerance and cooperation.</p> <p>Demonstrate responsibility, initiative, autonomy and leadership.</p> <p>Demonstrate ability to meet deadlines, schedules and pre-defined procedures.</p>
Pre-Requirements	NA

3.1.3.7 Slovenia

Category of Information	National - Slovenia
Name	Master's degree in quality management"
Activities	
Competences	
Know-Know (Knowledge)	<p>Students will be able to:</p> <p>(general competences)</p> <ul style="list-style-type: none"> • understand and take into account the diversity of the global environment in the organisation, implementation and constant improvement of overall quality and business excellence, • demonstrate familiarity with and understanding of social, organisational and inter-organisational processes and their complex analysis, • recognise the need for changes and their introduction, • apply methodological tools, i.e. implement, coordinate and organise research, use various research methods and techniques, • perform critical assessment in the selection, application and improvement of modern approaches, models and tools of quality and excellence, • formulate original ideas, concepts and solutions to specific problems, • demonstrate coherent mastery of basic knowledge and integrate knowledge from various areas providing a basis for quality and business excellence, • develop communication skills for communication with different circles, • present acquired basic knowledge and research findings in the form of a project assignment, applied research and development assignment or technical paper, • pursuing education and mentor work in promoting quality and business excellence, • take responsibility for professional development and learning, improve their own work through evaluation with the aim of bettering oneself and thereby constantly improving the quality and excellence of work,
Know-How (Skill)	<p>(subject-specific competences)</p> <ul style="list-style-type: none"> • internalise the autopoietic concept of mastering quality and excellence founded on the spiral-screw sequence of plan-do-check-act, • internalise the basic building blocks of the modern paradigm of quality and excellence, • focus on the needs of current and potential users of products and services with the aim of increasing their loyalty, • develop mutually beneficial relations with partners based on trust, exchange of knowledge and integration, • guide creative capacities of co-workers based on shared values and a culture of trust and empowerment

Category of Information	National - Slovenia
	<p>that encourages everyone to be involved,</p> <ul style="list-style-type: none"> • master the formulation and constant improvement of procedurally conceived organisation based on processes and facts, • guide and exchange knowledge in the context of a culture of constant learning, innovation and improvement, • demonstrate a comprehensive command of fundamental knowledge in the area of quality and business excellence and of the methodology of research and its interdisciplinary use, • understand and apply critical analysis methods and development of theories, and apply them in solving problems in the field of quality and business excellence, • develop skills in the application of knowledge in the field of quality and business excellence, • demonstrate advanced knowledge and understanding of organisations and processes in the modern business environment, • master selected approaches, models and tools in the field of quality and business excellence, • use information and communication technologies and systems in the area of quality and business excellence, • demonstrate organisational and leadership skills for guiding the work of an organisation, • perform advisory work (transfer of knowledge).
Know-how-to-be (Behaviour)	<p>Students will be able to:</p> <ul style="list-style-type: none"> • pursue team work, i.e. be willing to cooperate, show cooperativeness, respect the opinions of others and fulfil an agreed role within a team or group, • demonstrate a knowledge of professional ethics, legislation, recognise and respect moral and ethical principles and values and apply them in work, • internalise behaviour that creates clarity and unity of purpose within the bounds of the organisation and environment in which the organisation and its employees can demonstrate their excellence, • operate with social responsibility based on ethics and exceeding the expectations and rules of wider society, • focus on results with the aim of balanced satisfaction of the needs of all parties involved, • solve specific work problems through the application of scientific methods and procedures,
Pre-Requirements	NA

Category of Information	National - Slovenia
Name	<p>Doktor znanosti/doktorica znanosti s področja menedžmenta kakovosti</p> <p>Doctorate in the field of quality management</p>
Activities	
Competences	
Know-Know (Knowledge)	<p>Students will be able to:</p> <p>(general competences)</p> <ul style="list-style-type: none"> • identify a given research problem, analyse it and determine possible solutions, • recognise paradigm shifts and formulate modern innovative concepts and approaches intended to improve the quality of life of individuals, organisations and communities, • master standard methods, procedures and processes of research work in the field of quality and excellence, • apply acquired theoretical knowledge in practice, • demonstrate autonomy in research and technical work,
Know-How (Skill)	<p>(subject-specific competences)</p> <ul style="list-style-type: none"> • formulate and implement original scientific solutions to given problems and opportunities in the fields of quality and excellence, • solve in an original way specific research problems in various fields of quality and excellence as well as related disciplines, • develop new skills in the application of knowledge in their specific research and work area of quality and excellence and related disciplines,

Category of Information	National - Slovenia
	<ul style="list-style-type: none"> develop new empirical research methods for quality and excellence and related disciplines (econometric modelling, decision-making theory, empirical marketing research), present scientific results obtained in the form of publication in international scientific periodicals.
Know-how-to-be (Behaviour)	<p>Students will be able to:</p> <ul style="list-style-type: none"> demonstrate a commitment to professional ethics,
Pre-Requirements	

3.1.3.8 United Kingdom

Category of Information	National – United Kingdom
Name	Quality Manager
Activities	<p>"Responsibilities.</p> <ol style="list-style-type: none"> devise and establish a company's quality procedures, standards and specifications. review customer requirements and make sure they are met. work with purchasing staff to establish quality requirements from external suppliers. set standards for quality as well as health and safety. make sure that manufacturing or production processes meet international and national standards. look at ways to reduce waste and increase efficiency. define quality procedures in conjunction with operating staff. set up and maintain controls and documentation procedures. monitor performance by gathering relevant data and produce statistical reports. review existing policies and make suggestions for changes and improvements and how to implement them. measure performance and identify any areas of weakness, recommending and implementing improvements. liaise with other managers and staff and provide training, tools and techniques to enable others to achieve quality standards. assess the effectiveness of changes made. make sure the company is working as effectively as possible to keep up with competitors. train and manage a team of quality control technicians."
Competences	
Know-Know (Knowledge)	
Know-How (Skill)	<ol style="list-style-type: none"> communication and interpersonal skills. analytical and problem-solving ability. planning and project management skills. persistence and the ability to influence others. the ability to lead and motivate a team. a strategic approach to work. the ability to facilitate change. skills in numerical and statistical analysis. attention to detail. an understanding and appreciation of other people's work disciplines, such as engineering and science

Category of Information	National – United Kingdom
Know-how-to-be (Behaviour)	
Pre-Requirements	

3.2 Competence Profiles for Evaluators

3.2.1 European Profile (ESCO)

Category of Information	European - ESCO
Name	ICT Audit Manager
Activities	
Competences	
Know-Know (Knowledge)	<p>Essencial</p> <p>ICT project management</p> <p>audit techniques</p> <p>control objectives for information and related technology cyber security</p> <p>quality standards</p> <p>Optional</p> <p>AJAX</p> <p>ICT process quality models</p> <p>ICT quality policy</p> <p>ICT security legislation</p> <p>ICT security standards</p> <p>JavaScript</p> <p>PHP</p> <p>cloud technologies</p> <p>information confidentiality</p> <p>information structure</p> <p>legal requirements of ICT products</p> <p>organisational resilience</p> <p>systems development life-cycle</p> <p>web programming"</p>
Know-How (Skill)	<p>Essencial</p> <p>build business relationships</p> <p>develop ICT workflow</p> <p>develop audit plan</p> <p>ensure adherence to organisational ICT standards</p> <p>ensure compliance with legal requirements</p> <p>execute ICT audits</p> <p>identify legal requirements</p> <p>implement ICT risk management</p> <p>manage IT security compliances</p> <p>manage standard enterprise resource planning system</p> <p>monitor technology trends</p> <p>perform contract compliance audits</p> <p>prepare financial auditing reports</p> <p>Optional</p>

Category of Information	European - ESCO
	coach employees develop ICT test suite develop information security strategy ensure information privacy implement corporate governance manage changes in ICT system provide technical documentation train employees use markup languages
Know-how-to-be (Behaviour)	ESCO identifies Skill and Behaviour together
Pre-Requirements	

3.2.2 National Profiles

3.2.2.1 Italy

Category of Information	National - Italy
Name	Auditor dei sistemi informativi
Activities	The Information Systems Auditor, on behalf of the client, provides a service to verify and guarantee the safety, quality, conformity and added value of the internal information system. S/he evaluates the risks associated with the use of IT tools and the quality of the supervisory and control processes of the technological infrastructure. S/he operates within medium-large companies belonging to any sector interested in guaranteeing the quality of their information systems. It can also operate from outside the organization, guaranteeing absolute independence in the assessments expressed. If internal, s/he reports to the General Management or to the Administrative Management; if external, s/he responds to the same functions of the client organization, while operating in close connection with the Information Systems function
Competences	
Know-Know (Knowledge)	Knowledge of: Approaches to estimate the development of an IT system System design techniques and implementation Project management techniques Organizational change management methodologies Statistical methods for data analysis Software design techniques according to a consolidated approach Effective communication techniques Configuration Change Management Procedures Technical and functional characteristics of IT management models (eg COBIT) Privacy protection legislation Characteristics of new technological opportunities and their correspondence with business needs Quality control procedures Types of software package and implementation life cycle Systems for risk management and IT security IT risk assessment techniques Business organization systems Types of report structures

Category of Information	National - Italy
	<p>Report drafting procedures</p> <p>Technical and functional characteristics of spreadsheet software</p> <p>Concepts of descriptive statistics for data analysis</p> <p>Business process analysis procedures</p> <p>Quality control methodologies</p> <p>Data and information security regulations</p> <p>Software license regulations</p> <p>Software Testing Techniques</p> <p>IT infrastructure control systems and procedures</p> <p>Risk analysis and assessment techniques</p> <p>Techniques for drafting technical documentation (operational manuals, tables etc.)</p>
Know-How (Skill)	<p>Define areas for improvement and proposals for intervention on the information system</p> <p>Adopt methods of estimating the effort required for the development of an IT system</p> <p>Adopt methods for assessing the impact of IT solutions on the company</p> <p>Adopt project evaluation methods</p> <p>Use effective communication techniques</p> <p>Use information system architecture design techniques</p> <p>Use project management techniques</p> <p>Apply the rules of prevention and safety at work</p> <p>Compare the performance of an information system with ideal management models</p> <p>Adopt change management and system configuration methods Adopt data protection methodologies</p> <p>Use operational planning procedures</p> <p>Use network security procedures</p> <p>Use IT operational management techniques (e.g. ITIL)</p> <p>Use cyber risk assessment techniques</p> <p>Use techniques for evaluating the functional coverage of software packages</p> <p>Use verification and comparison techniques between alternative software solutions</p> <p>Create analysis reports on the information system</p> <p>Adopt methods of returning data, in relation to the type and needs of the users of the data.</p> <p>Adopt research report submission techniques</p> <p>Use document drafting techniques</p> <p>Use standard templates to write data analysis reports</p> <p>Use spreadsheet software (Microsoft Excel, Lotus 123 or similar)</p> <p>Use reporting tools</p> <p>Carry out a review (audit) of the information system</p> <p>Adopting conformity assessment methods for an information system</p> <p>Adopt methods for verifying the impact of the IT infrastructure</p> <p>Use methods for performance evaluation</p> <p>Use audit methodologies of an information system</p> <p>Use process optimization methodologies</p> <p>Adopt structured methodologies for the design of an information system (soft system, Data Flow Diagrams, PHD, ..)</p> <p>Use quality control procedures</p> <p>Use quality system improvement procedures</p> <p>Use statistical sampling techniques</p> <p>Use software testing techniques</p>
Know-how-to-be (Behaviour)	
Pre-Requirements	

3.2.2.2 Malta

Category of Information	National - Malta
Name	Doctorate in the field of quality management
Activities	
Competences	
Know-Know (Knowledge)	<p>Students will be able to: (general competences)</p> <ul style="list-style-type: none"> • identify a given research problem, analyse it and determine possible solutions, • recognise paradigm shifts and formulate modern innovative concepts and approaches intended to improve the quality of life of individuals, organisations and communities, • master standard methods, procedures and processes of research work in the field of quality and excellence, • apply acquired theoretical knowledge in practice, • demonstrate autonomy in research and technical work.
Know-How (Skill)	<p>(subject-specific competences)</p> <ul style="list-style-type: none"> • formulate and implement original scientific solutions to given problems and opportunities in the fields of quality and excellence, • solve in an original way specific research problems in various fields of quality and excellence as well as related disciplines, • develop new skills in the application of knowledge in their specific research and work area of quality and excellence and related disciplines, • develop new empirical research methods for quality and excellence and related disciplines (econometric modelling, decision-making theory, empirical marketing research), • present scientific results obtained in the form of publication in international scientific periodicals.
Know-how-to-be (Behaviour)	<p>Students will be able to:</p> <ul style="list-style-type: none"> • demonstrate a commitment to professional ethics.
Pre-Requirements	

3.2.2.3 Portugal

Category of Information	National – Portugal (ESTG-IPP)
Name	Management Systems Auditor [ESTG-PP (MGIQAS-ASG) Profile]
Activities	
Competences	
Know-Know (Knowledge)	<p>Concepts and principles</p> <ul style="list-style-type: none"> - Types of audits - Roles and responsibilities - Audit scope and audit criteria - Audit phases and tasks - Audit methods
Know-How (Skill)	<ul style="list-style-type: none"> - Plan, conduct, report and follow up an audit in accordance with ISO 19011 and by interpreting the standard(s) used as criteria - Audit communication (written and verbal) - Management of audit programmes - Singularities of integrated systems audits.

Category of Information	National – Portugal (ESTG-IPP)
Know-how-to-be (Behaviour)	- Attitudes and behaviour while auditing
Pre-Requirements	

Category of Information	National – Portugal (ANQEP)
Name	TECHNICIAN / THE AUDITOR SPECIALIST FOR MANAGEMENT SYSTEMS
Activities	<p>1. Plan, coordinate and conduct audits of quality management systems, environmental management, occupational safety and health management, food safety management and laboratory accreditation.</p> <p>1.1. Analyze the description of the Management systems;</p> <p>1.2. Collaborate in the selection of the audit team and coordinate the work of the audit team;</p> <p>1.3. Plan system audits according to audit objectives, scope and criteria;</p> <p>1.4. Prepare working documents and manage information related to the audit process;</p> <p>1.5. Conduct the Audit according to schedule;</p> <p>1.6. Conduct interviews;</p> <p>1.7. Check the accuracy of the information collected;</p> <p>1.8. Perform the audit in order to ensure the adequacy and sufficiency of the audit evidence to support findings and conclusions;</p> <p>1.9. Prepare the conclusions of the audit, conduct the closing meeting and prepare a final report.</p> <p>2. Proceed to assess the process of implementing the audits and their effectiveness.</p> <p>3. Promote the continuous improvement of the audit process in terms of its monitoring and review and the identification of the need for corrective / preventive actions and the existence of opportunities for improvement.</p> <p>4. Support Human Resources Management, namely in terms of the identification of training needs related to quality, the environment, safety and health at work, food safety and laboratory accreditation and evaluation of their effectiveness.</p>
Competences	
Know-Know (Knowledge)	<p>Knowledge of:</p> <ol style="list-style-type: none"> 1. English. 2. Mathematics. 3. Statistics. 4. Communication techniques. 5. Team management techniques. 6. Leadership techniques. 7. Conflict management techniques. 8. Information flow management. <p>In-depth knowledge of:</p> <ol style="list-style-type: none"> 9. Legislation and Norms applicable to the activity (quality, environment, safety and health at work, food safety, laboratory accreditation. Laboratory accreditation. 10. Organization management (theories, organizational culture, worker participation and responsibility for the management of the scope) 11. Process management 12. Integration of management systems 13. Quality management 14. Environmental management 15. Occupational safety and health management 16. Food safety management 17. Laboratory accreditation

Category of Information	National – Portugal (ANQEP)
	18 Metrology and Calibration 19. Informatics from the user's perspective 20. Auditing techniques, principles and instruments
Know-How (Skill)	1. Identify the stages of a Quality Management System Implementation process. 2. Identify and use methodologies for implementing a Quality Management System. 3. Collect information by conducting interviews, observing and reviewing documents, records and data 4. Using process management techniques. 5. Use techniques for setting goals and choosing indicators. 6. Use techniques for drawing up monitoring and measurement plans. 7. Use goal planning techniques. 8. Use the activity-based costing method (CBA). 9. Use management system integration techniques. 10. Interpret norms, regulations and procedures (national and international) associated with your activity (quality, environment, health and safety at work, food safety). 11. Identify and define the stages of a process for the implementation of a quality management system 12. Identify national and international Quality organizations 13. Identify, interpret and implement the requirements of the quality management system, based on the NP EN ISO 9001 standard (documentation, management responsibility, resource management, product realization and measurement, analysis and improvement) 14. Use methodologies for implementing a quality management system 15. Identify, interpret and implement the requirements of the environmental management system, based on the standard NP EN ISO 14001 (environmental policy, planning, implementation and operation and verification and review by management) and its additional requirements (environmental statement and EMAS registration system) 16. Use methodologies for the implementation of an environmental management system. 17. Identify, interpret and implement the occupational health and safety management system requirements, based on OHSAS 18001: 1999 and NP (occupational health and safety policy, planning, implementation and operation, verification and corrective actions, review by the direction). 18. Use methodologies for the implementation of an occupational health and safety management system. 19. Identify, interpret and implement the requirements of the food security system, based on the ISO 22000 standard (food security policy, management responsibility, resource management, planning and realization of insurance products, verification, validation and improvement of the management system food security). 20. Use methodologies for the implementation of a food safety management system. 21. Use the HACCP methodology to develop and apply an HACCP plan. 22. Apply the Competency Requirements for Testing and Calibration Laboratories, based on the normative reference NPEN ISO / IEC 17025. 23. Use the principles of metrology and normative references to perform the management of measurement and calibration systems. 24. Use communication techniques in audit situations. 25. Apply the principles, procedures and techniques of Auditing. 26. Apply the principles of audits within the framework of the ISO 19011 framework. 27. Use auditing techniques to quality management systems. 28. Use auditing techniques to environmental management systems. 29. Use auditing techniques to occupational health and safety systems. 30. Use auditing techniques to the food safety management system. 31. Use auditing techniques for the laboratory accreditation process. 32. Use techniques for preparing documentation related to audits. 33. Use techniques to assess the effectiveness of audits performed
Know-how-to-be (Behaviour)	1. Adapt to different working groups. 2. Demonstrate communication skills. 3. Adapt to the emergence of new audit methods and tools. 4. Demonstrate responsibility, initiative and autonomy. 5. Demonstrate assertiveness. 6. Lead, lead and participate in meetings. 7. Work with goal orientation and under deadline pressure. 8. Decide quickly and effectively in resolving concrete situations. 9. Ability to interpersonal relationships with internal and external interlocutors with a view to developing a good level of collaboration. 10. Lead and manage work teams, ensuring their motivation.

Category of Information	National – Portugal (ANQEP)
	11. To transmit knowledge associated with the performance of audits to your team and to the other employees of the organization.
Pre-Requirements	

Category of Information	National – Portugal (ANQEP)
Name	TECHNICIAN / THE AUDITOR SPECIALIST FOR MANAGEMENT SYSTEMS
Activities	<p>1. Plan, coordinate and conduct audits of quality management systems, environmental management, occupational safety and health management, food safety management and laboratory accreditation.</p> <p>1.1. Analyze the description of the Management systems;</p> <p>1.2. Collaborate in the selection of the audit team and coordinate the work of the audit team;</p> <p>1.3. Plan system audits according to audit objectives, scope and criteria;</p> <p>1.4. Prepare working documents and manage information related to the audit process;</p> <p>1.5. Conduct the Audit according to schedule;</p> <p>1.6. Conduct interviews;</p> <p>1.7. Check the accuracy of the information collected;</p> <p>1.8. Perform the audit in order to ensure the adequacy and sufficiency of the audit evidence to support findings and conclusions;</p> <p>1.9. Prepare the conclusions of the audit, conduct the closing meeting and prepare a final report.</p> <p>2. Proceed to assess the process of implementing the audits and their effectiveness.</p> <p>3. Promote the continuous improvement of the audit process in terms of its monitoring and review and the identification of the need for corrective / preventive actions and the existence of opportunities for improvement.</p> <p>4. Support Human Resources Management, namely in terms of the identification of training needs related to quality, the environment, safety and health at work, food safety and laboratory accreditation and evaluation of their effectiveness.</p>
Competences	
Know-Know (Knowledge)	<p>Knowledge of:</p> <ol style="list-style-type: none"> 1. English. 2. Mathematics. 3. Statistics. 4. Communication techniques. 5. Team management techniques. 6. Leadership techniques. 7. Conflict management techniques. 8. Information flow management. <p>In-depth knowledge of:</p> <ol style="list-style-type: none"> 9. Legislation and Norms applicable to the activity (quality, environment, safety and health at work, food safety, laboratory accreditation. Laboratory accreditation. 10. Organization management (theories, organizational culture, worker participation and responsibility for the management of the scope) 11. Process management 12. Integration of management systems 13. Quality management 14. Environmental management 15. Occupational safety and health management 16. Food safety management 17. Laboratory accreditation 18. Metrology and Calibration 19. Informatics from the user's perspective 20. Auditing techniques, principles and instruments

Category of Information	National – Portugal (ANQEP)
Know-How (Skill)	<ol style="list-style-type: none"> 1. Identify the stages of a Quality Management System Implementation process. 2. Identify and use methodologies for implementing a Quality Management System. 3. Collect information by conducting interviews, observing and reviewing documents, records and data 4. Using process management techniques. 5. Use techniques for setting goals and choosing indicators. 6. Use techniques for drawing up monitoring and measurement plans. 7. Use goal planning techniques. 8. Use the activity-based costing method (CBA). 9. Use management system integration techniques. 10. Interpret norms, regulations and procedures (national and international) associated with your activity (quality, environment, health and safety at work, food safety). 11. Identify and define the stages of a process for the implementation of a quality management system 12. Identify national and international Quality organizations 13. Identify, interpret and implement the requirements of the quality management system, based on the NP EN ISO 9001 standard (documentation, management responsibility, resource management, product realization and measurement, analysis and improvement) 14. Use methodologies for implementing a quality management system 15. Identify, interpret and implement the requirements of the environmental management system, based on the standard NP EN ISO 14001 (environmental policy, planning, implementation and operation and verification and review by management) and its additional requirements (environmental statement and EMAS registration system) 16. Use methodologies for the implementation of an environmental management system. 17. Identify, interpret and implement the occupational health and safety management system requirements, based on OHSAS 18001: 1999 and NP (occupational health and safety policy, planning, implementation and operation, verification and corrective actions, review by the direction). 18. Use methodologies for the implementation of an occupational health and safety management system. 19. Identify, interpret and implement the requirements of the food security system, based on the ISO 22000 standard (food security policy, management responsibility, resource management, planning and realization of insurance products, verification, validation and improvement of the management system food security). 20. Use methodologies for the implementation of a food safety management system. 21. Use the HACCP methodology to develop and apply an HACCP plan. 22. Apply the Competency Requirements for Testing and Calibration Laboratories, based on the normative reference NPEN ISO / IEC 17025. 23. Use the principles of metrology and normative references to perform the management of measurement and calibration systems. 24. Use communication techniques in audit situations. 25. Apply the principles, procedures and techniques of Auditing. 26. Apply the principles of audits within the framework of the ISO 19011 framework. 27. Use auditing techniques to quality management systems. 28. Use auditing techniques to environmental management systems. 29. Use auditing techniques to occupational health and safety systems. 30. Use auditing techniques to the food safety management system. 31. Use auditing techniques for the laboratory accreditation process. 32. Use techniques for preparing documentation related to audits. 33. Use techniques to assess the effectiveness of audits performed
Know-how-to-be (Behaviour)	<ol style="list-style-type: none"> 1. Adapt to different working groups. 2. Demonstrate communication skills. 3. Adapt to the emergence of new audit methods and tools. 4. Demonstrate responsibility, initiative and autonomy. 5. Demonstrate assertiveness. 6. Lead, lead and participate in meetings. 7. Work with goal orientation and under deadline pressure. 8. Decide quickly and effectively in resolving concrete situations. 9. Ability to interpersonal relationships with internal and external interlocutors with a view to developing a good level of collaboration. 10. Lead and manage work teams, ensuring their motivation. 11. To transmit knowledge associated with the performance of audits to your team and to the other employees of the organization.

Category of Information	National – Portugal (ANQEP)
Pre-Requirements	

4 Results: The VET 21001 Competence Profiles

4.1 VET 21001 Competence Profile for ISO 21001-EQAVET System Manager

Category of Information	VET21001 Consortium
Name	ISO 21001-EQAVET System Manager
Activities	<p>Diagnose the educational organization gaps regarding compliance towards EQAVET and ISO 21001 requirements</p> <p>Plan the implementation of EQAVET and ISO 21001 requirements</p> <p>Implement EQAVET and ISO 21001 requirements</p> <p>Define the audit programme and monitor its effectiveness</p> <p>Select auditors and assemble audit teams</p> <p>Analyse the management system and promote its continuous improvement</p> <p>Identify training needs related to the management system and evaluate training effectiveness</p> <p>Evaluates suppliers' performance</p> <p>Evaluates interested parties' satisfaction (learners & educators/trainers, staff and suppliers)</p>
Competences	
Know-Know (Knowledge)	<p>Basic</p> <p>English</p> <p>Mathematics</p> <p>Statistics</p> <p>Communication techniques</p> <p>Information flow management</p> <p>Management applied to education and training organizations</p> <p>Pedagogy applied to different education and training levels</p> <p>Human resources</p> <p>ISO 19011</p> <p>Advanced</p> <p>Quality Infrastructures (Standardization, Conformity Assessment (Certification and Accreditation), Metrology)</p> <p>Statutory and regulatory requirements applied to the education sector and its subsectors</p> <p>EQAVET Recommendation</p> <p>ISO 21001</p> <p>ISO 100xx Series</p> <p>Quality Tools (7 Basic, 7 New, LEAN, 5S, SMART Indicators)</p> <p>Risk Management</p> <p>Policy deployment methodology</p> <p>Process mapping techniques</p> <p>Problem solving techniques</p> <p>Techniques for monitoring interested parties' satisfaction (learners & educators/trainers, staff and suppliers)</p> <p>Brainstorming techniques</p> <p>Suppliers management</p>

Category of Information	VET21001 Consortium
Know-How (Skill)	Implement EQAVET and ISO 21001 requirements Identify internal and external contexts of the organization Define and deploy education management policy Describe processes Define SMART indicators Apply Risk-based thinking Apply Quality Tools Identify interested parties and its relevant requirements and monitor its satisfaction Evaluates Suppliers' performance
Know-how-to-be (Behaviour)	Ethical Observant Perceptive Versatile Tenacious Decisive Self-reliant Communicative Practical and Objective Accountable Empathic and Facilitative
Pre-Requirements	NA

4.2 VET 21001 Competence Profile for ISO 21001-EQAVET Lead Auditor

Category of Information	VET21001 Consortium
Name	ISO 21001-EQAVET Lead Auditor
Activities	Plan audits Lead audit teams Conduct audits Report audits
Competences	
Know-Know (Knowledge)	Basic Team management Leadership Conflict management Statutory and regulatory requirements applied to the education sector and its subsectors in the auditor's perspective Advanced EQAVET Recommendation criteria in the auditor perspective ISO 21001 requirements in the auditor's perspective Audit concepts, terminology and principles (ISO 19011) Audit methods, tools and good practices (ISO 19011)

Category of Information	VET21001 Consortium
Know-How (Skill)	Plan management system audits according to audit objectives, scope and criteria Prepare audit documentation Conduct audit opening meetings Lead audit teams Collect evidences through analyses of documents, staff interviews and observation of activities Validate the information collected through triangulation methods Assure the adequacy and sufficiency of the audit evidences collected to support audit findings and conclusions Prepare audit reports Conduct audit closing meetings
Know-how-to-be (Behaviour)	Honest and free from conflict of interests Self-aware of own biases Open-minded and capable of suspending judgment Empathetic, diplomatic and in control of own emotions Tenacious and firm in the pursue of objective evidences Versatile and capable to adapt to different organizational cultures Rigorous and fair while reporting findings and conclusions Discreet, trustful and capable of respecting information confidentiality
Pre-Requirements	Hold an ISO 21001-EQAVET Systems Manager Qualification 2 years of work experience within an education and training organization in an academic or quality management role

4.3 VET21001 Competence Profiles in designed version for publication

The VET21001 Competence profiles in designed version for publication were created in such a way to highlight the tri-dimensional approach to Competence followed by the Consortium, as well as the job role orientation.

The designed versions contain the following elements:

- Name of the Profile (coincident with the name of the profession/job role)
- List of the activities pertaining to the job description of the profession/job role
- List of pre-requirements to access the profession/job role
- Competences, grouped by typology
- Knowledge (divided in basic and advanced)
- Skills
- Attitudes
- A block of triangles to illustrate the tri-dimensionality of competence.

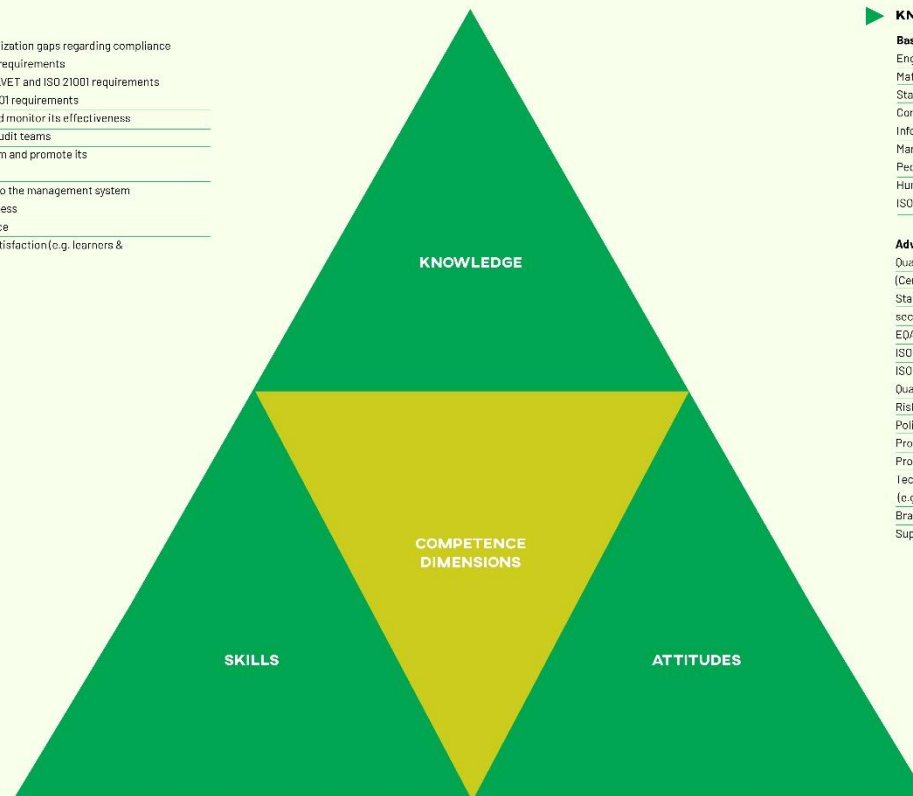
Figures 3 and 4 in the next pages correspond to the VET21001 Competence Profiles “ISO 21001-EQAVET System Manager” and “ISO 21001-EQAVET Lead Auditor“, respectively.

COMPETENCE PROFILE

ISO 21001-EQAVET System Manager

ACTIVITIES

Diagnose the educational organization gaps regarding compliance towards EQAVET and ISO 21001 requirements
Plan the implementation of EQAVET and ISO 21001 requirements
Implement EQAVET and ISO 21001 requirements
Define the audit programme and monitor its effectiveness
Select auditors and assemble audit teams
Analyse the management system and promote its continuous improvement
Identify training needs related to the management system and evaluate training effectiveness
Evaluates suppliers' performance
Evaluates interested parties' satisfaction (e.g. learners & educators/trainers, staff)



KNOWLEDGE

Basic

English
Mathematics
Statistics
Communication techniques
Information flow management
Management applied to education and training organizations
Pedagogy applied to different education and training levels
Human resources
ISO 19011

Advanced

Quality Infrastructures (Standardization, Conformity Assessment (Certification and Accreditation), Metrology)
Statutory and regulatory requirements applied to the education sector and its subsectors
EQAVET Recommendation
ISO 21001
ISO 100xx Series
Quality Tools (7 Basic, 7 New, LEAN, 5S, SMART Indicators)
Risk Management
Policy deployment methodology
Process mapping techniques
Problem solving techniques
Techniques for monitoring interested parties' satisfaction (e.g. learners & educators/trainers, staff)
Brainstorming techniques
Suppliers' management

SKILLS

Implement EQAVET and ISO 21001 requirements
Identify internal and external contexts of the organization
Define and deploy education management policy
Describe processes
Define SMART Indicators
Apply Risk-based thinking
Apply Quality Tools
Identify interested parties and its relevant requirements and monitor its satisfaction
Evaluates Suppliers' performance

ATTITUDES

Ethical
Observant
Perceptive
Versatile
Tenacious
Decisive
Self-reliant
Communicative
Practical and Objective
Accountable
Empathic and Facilitative

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Figure 3

COMPETENCE PROFILE

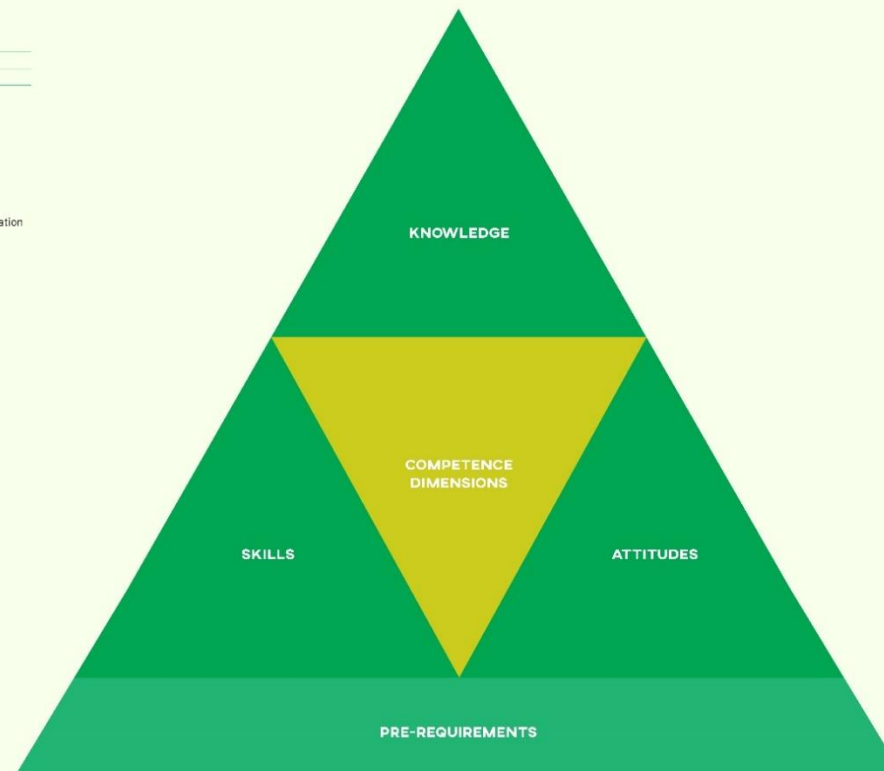
ISO 21001-EQAVET Lead Auditor

ACTIVITIES

Plan audits
Lead audit teams
Conduct audits
Report audits

PRE-REQUIREMENTS

Hold an ISO 21001-EQAVET Systems Manager Qualification
2 years of work experience within an education and training organization
in an academic or quality management role



KNOWLEDGE

Basic

Team management
Leadership
Conflict management
Statutory and regulatory requirements applied to the education sector
and its subsectors in the auditor's perspective

Advanced

EQAVET Recommendation criteria in the auditor's perspective
ISO 21001 requirements in the auditor's perspective
Audit concepts, terminology and principles (ISO 19011)
Audit methods, tools and good practices (ISO 19011)

SKILLS

Plan management system audits according to
audit objectives, scope and criteria
Prepare audit documentation
Conduct audit opening meetings
Lead audit teams
Collect evidences through analyses of documents, staff
Interviews and observation of activities
Validate the information collected through triangulation methods
Assure the adequacy and sufficiency of the audit evidences collected
to support audit findings and conclusions
Prepare audit reports
Conduct audit closing meetings

ATTITUDES

Honest and free from conflict of interests
Self-aware of own biases
Open-minded and capable of suspending judgment
Empathetic, diplomatic and in control of own emotions
Tenacious and firm in the pursue of objective evidences
Versatile and capable to adapt to different organizational cultures
Rigorous and fair while reporting findings and conclusions
Discreet, trustful and capable of respecting information confidentiality

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VE121001

Figure 4

5 Monitoring and Evaluation

5.1 IO2A1

Activity 1 of Intellectual Output 2 (IO2A1) “*Competence profile for Implementers*” consisted in the identification of competences needed for professionals that implement and manage EQAVET and ISO 21001 management systems. What was initially planned, as well as any adaptations made and results obtained, is described below.

Planned	Adaptations & Results
The Consortium will identify the competences needed by educational organization staff (quality officers) responsible for quality, to implement the EQAVET criteria.	No adaptations were needed. The consortium identified the competences for ISO 21001-EQAVET System Managers, based on similar profiles published in Europe and beyond and through the discussions held among partners to reach consensus on content to be re-used, adapted and new content to be developed.
The competences will be identified considering a tri-dimensional approach – knowledge, skills, responsibility and autonomy –	No adaptations were needed. The competences were identified with the tri-dimensional approach. The Knowledge dimension was sub-divided in Basic and Advanced.
and compiled in a “Competence Profile” base document formatted to facilitate their integration in the national qualification catalogues (or similar databases) of the partner countries.	No adaptations were needed. A VET21001 Competence Profiles was developed for ISO 21001-EQAVET System Manager. This was presented in VET21001 branded template (designed version) and also in the templates of the EQAVET Agencies of the partner countries.
Activity Target: NA	NA
Activity Monitoring Indicators: <ul style="list-style-type: none">Consistency with the results of IO1A4;Number of adaptations made to national formats;	<input checked="" type="checkbox"/> The contents of the VET21001 Competence Profiles for ISO 21001-EQAVET System Manager are consistent with IO1A4 <input checked="" type="checkbox"/> Four adaptations to national formats were made (Italy, Malta, Portugal and Slovenia)

5.2 IO2A2

Activity 2 of Intellectual Output 2 (IO2A2) “*Competence profile for Evaluators*” ” consisted in the identification of competences needed for professionals that audit EQAVET and ISO 21001 management systems. What was initially planned, as well as any adaptations made and results obtained, is described below.

Planned	Adaptations & Results
The Consortium will identify the competences needed by evaluators and technical staff involved in conformity assessment of the EQAVET criteria implementation in educational organizations.	No adaptations were needed. The consortium identified the competences for ISO 21001-EQAVET Lead Auditors, based on similar profiles published in Europe and beyond and through the discussions held among partners to reach consensus on content to be re-used, adapted and new content to be developed.
The competences will be identified considering a tri-dimensional approach – knowledge, skills, responsibility and autonomy –	No adaptations were needed. The competences were identified with the tri-dimensional approach. The Knowledge dimension was sub-divided in Basic and Advanced.
and compiled in a “Competence Profile” document formatted to facilitate their integration not only in the national qualification catalogues (or similar databases) of the partner countries as the previous profile, but also in the internal procedures of bodies responsible for conformity assessment of the EQAVET criteria implemented in educational organizations	No adaptations were needed. A VET21001 Competence Profiles was developed for ISO 21001-EQAVET Lead Auditor. This was presented in VET21001 branded template (designed version) and also in the templates of the EQAVET Agencies of the partner countries. The way the content was structured also fits the needs of bodies responsible for conformity assessment in educational organizations.
Activity Target: NA	NA
Activity Monitoring Indicators: <ul style="list-style-type: none"> Consistency with the results of IO3A1; Number of adaptations made to national formats 	<input checked="" type="checkbox"/> The contents of the VET21001 Competence Profiles for ISO 21001-EQAVET System Manager are consistent with IO3A1. <input checked="" type="checkbox"/> Four adaptations to national formats were made (Italy, Malta, Portugal and Slovenia)

5.3 IO2A3

Activity 3 of Intellectual Output 2 (IO2A3) “*Publication of the Competence Profiles*” consisted in the Publication of the documents developed at activities 1 and 2. What was initially planned, as well as any adaptations made and results obtained, is described below.

Planned	Adaptations & Results
The consortium will publish the Competence Profiles in the project website as open resource documents for download by users.	No adaptations were needed. The consortium published the competence profiles at the project website.
Each partner will also contact, as possible and applicable: - their national agency/organization(s) responsible for managing their national qualifications catalogue and offer them the Competence Profiles, suggesting its integration in the national catalogue if existing and applicable; - their national accreditation body and offer them the Competence Profiles, suggesting its integration in the internal procedure that will rule the potential accredited certification scheme to be launched for EQAVET. The national infrastructure for development and publication varies significantly across the consortium partner countries, so each partner country will adapt the base document published, as well as the contacts described above to their national reality - the idea being to make sure the Competence Profiles developed are delivered to the organizations that have the best capacity to disseminate and exploit them and the authority to decide to do so. Due to their possible interest in these Competence Profiles, the consortium will also contact a few relevant European and International stakeholders, such as: - International Accreditation Forum (IAF) – as they determine AB assessors' and CB auditors' competences internationally; - European Accreditation (EA) - same as IAF, but with and European scope; - International Organization for Standardization (ISO) – as they publish as international standards, proactively or by request of IAF, competence profiles for AB assessors' and CB auditors' competences;	No adaptations were needed. At the time of version 1 of this report, the Competence Profile had been sent to the Portuguese National EQAVET Agency (ANQEP). Communications with other National agencies were ongoing to allow submission.
- EQAVET Network - as they centralize information about all initiatives regarding EQAVET; - ESCO Secretariat – as they publish the European Classification of Skills, Competences and Occupations; - Other EQAVET and VET stakeholders identified by the consortium as having the capacity to disseminate and exploit the Competence Profiles and the authority to do so; and offer them the Competence Profiles published, suggesting they re-publish and disseminate them through their own networks and media channels.	The contact from the consortium with these organizations was no longer needed. Its objective was to create awareness and motivate the adoption of the profiles by them, as well as for the VET21001 Protocol (Io3). However, that happened spontaneously in the beginning of the project, when this was presented at the International Workshop “Feedback on ISO 21001” (see IO3 Report for more details). At the time of version 1 of this report, ISO 21030 was already under development at ISO, a project lead internationally by representatives of the VET21001 Consortium (see IO3 Report for more details). Through this process, all these organizations will have access to the VET21001 Competence Profiles and the opportunity to validate them, further develop and exploit them.
Activity Target: 3 Publications	Communications with the EQAVET Network and ESCO are ongoing. This report will be updated as the situation progresses.
Activity Monitoring Indicators: • Availability of the Competence Profiles at the project Website; • Number of organizations to which the consortium sent the competence profiles for re-publication	None were identified so far. This report will be updated as the situation progresses.
	Target met. Two Competence Profiles were published at the project website, together with this report.
	<input checked="" type="checkbox"/> Competence Profiles are available at the project website. <input checked="" type="checkbox"/> At the time of version 1 of this report, none. But ANQEP was already analysing the possibility. This report will be updated as the situation progresses.

6 Dissemination and Exploitation

6.1 National Dissemination and Exploitation

The national infrastructure for development and publication varies significantly across the consortium partner countries, so each partner country will adapt the base document published, as well as the contacts described above to their national reality - the idea being to make sure the Competence Profiles developed are delivered to the organizations that have the best capacity to disseminate and exploit them and the authority to decide to do so.

In view of the submission of the competence profiles to competent institutions at national and international level to allow their publication within existing repertoires, adaptations were needed to meet the requirement of each agency.

After the finalization of the two international profiles, each partner worked on its adaptation to meet the national requirements and submit the request for integration into national repertoires. The competence profiles were translated into each partner language, adapted to the standard template used in each country for professional profiles.

Each partner then contacted:

- their national agency/organization(s) responsible for managing their national qualifications

catalogue and offer them the Competence Profiles, suggesting its integration in the national catalogue if existing and applicable;

- their national accreditation body and offer them the Competence Profiles, suggesting its integration in the internal procedure that will rule the potential accredited certification scheme to be launched for EQAVET.

6.1.1 Italy

6.1.1.1 National Context

The National Qualification Framework (NQF) is a tool for the description and classification of qualifications issued within the national system of competence certification referred to in the Legislative Decree of the 16th January 2013, no. 13. The NQF represents the national device for referencing the Italian qualifications to the European Qualifications Framework referred to in the Council Recommendation of 22nd May 2017, with the function of linking the Italian qualifications system with the systems of other European countries (Decree of January 8, 2018).

6.1.1.2 Adaptations needed and adoption status

This report will be updated periodically to reflect the status of adoption of the VET21001 Competence Profiles in Italy.

6.1.1.3 VET21001 Competence Profiles in Italian template

At time of this report the Italian Agency have not made available to the VET21001 Consortium the national templates for submission of the VET21001 Competence Profiles. For this reason the profiles below, although translated into Italian, are not inserted into the national templates.

Categoria	Proposta profilo competenze VET21001
Nme	Coordinatori di Sistemi di Gestione in Organizzazioni Educative basato su EQAVET e ISO21001
Attività	Diagnosticare i gap dell'organizzazione educativa per quanto riguarda la conformità ai requisiti EQAVET e ISO 21001 Pianificare l'implementazione dei requisiti EQAVET e ISO 21001 Implementare i requisiti EQAVET e ISO 21001 Definire il programma di audit e monitorarne l'efficacia Selezionare i revisori e costituire i team di audit Analizzare il sistema di gestione e promuoverne il miglioramento continuo Identificare le esigenze di formazione relative al sistema di gestione e valutare l'efficacia della formazione Valuta le prestazioni dei fornitori Valutare la soddisfazione delle parti interessate (ad es. Discenti e educatori / formatori, personale)
Competenze (per Dimension)	
Sapere (Conoscenza)	Base Inglese Matematica Statistica Tecniche di comunicazione Gestione del flusso di informazioni Management applicato alle organizzazioni di istruzione e formazione Pedagogia applicata a diversi livelli di istruzione e formazione Risorse umane ISO 19011 Avanzate Infrastrutture di qualità (standardizzazione, valutazione della conformità (certificazione e accreditamento, metrologia) Requisiti legali e regolamentari applicati al settore dell'istruzione e ai suoi settori Raccomandazione EQAVET ISO 21001 Serie ISO 100xx Strumenti di qualità (7 Basic, 7 New, LEAN, 5S, Indicatori SMART) Gestione del rischio Metodologia di implementazione delle policy Tecniche di mappatura dei processi Tecniche di problem solving Tecniche per monitorare la soddisfazione delle parti interessate (ad es. Discenti e educatori / formatori, personale) Tecniche di brainstorming Gestione dei fornitori
Saper fare (Abilità)	Implementare i requisiti EQAVET e ISO 21001 Identificare i contesti interni ed esterni dell'organizzazione Definire e implementare criteri di gestione dell'istruzione Descrivere processi

Categoria	Proposta profilo competenze VET21001
	Definire indicatori SMART Applicare un pensiero basato sul rischio Applicare strumenti di qualità Identificare le parti interessate e i relativi requisiti e monitorarne la soddisfazione Valutare le prestazioni dei fornitori
Saper essere (Atteggiamento)	Etico Attento Percettivo Versatile Tenace Decisivo Auto-sufficiente Comunicativo Pratico e obiettivo Responsabile Empatico e Facilitativo
Pre-requisiti	NA

Categoria	Proposta profilo competenze VET21001
Nme	Auditor Sistemi di Gestione in organizzazioni educative basati su ISO 21001 e EQAVET
Attività	Pianificare audit Guidare team di auditors Condurre audits Redigere report di audit
Competenze (per Dimension)	
Sapere (Conoscenza)	Base Gestione di un team Leadership Gestione di conflitti Requisiti legali e regolamentari applicati al settore educativo e relativi sotto-settori in base alla prospettiva dell'auditor Avanzata Criteri della Raccomandazione EQAVET secondo la prospettiva dell'auditor Requisiti ISO 21001 secondo la prospettiva dell'auditor Concetti, terminologia e principi dell'Audit (ISO 19011) Metodi, strumenti e buone pratiche di audit (ISO 19011)
Saper fare (Abilità)	Pianificare gli audit del sistema di gestione in base agli obiettivi, alla portata e ai criteri dell'audit Preparare la documentazione di audit Condurre riunioni di apertura dell'audit Dirigere i team di audit Raccogliere evidenze attraverso analisi di documenti, interviste al personale e osservazione delle attività Convalidare le informazioni raccolte tramite metodi di triangolazione Assicurare l'adeguatezza e la sufficienza delle evidenze di audit raccolte a supporto dei risultati e delle conclusioni dell'audit Preparare report di audit Condurre riunioni di chiusura dell'audit
Saper essere (Atteggiamento)	Onesto e libero da conflitti di interessi Consapevolezza dei propri pregiudizi Di mentalità aperta e senza pregiudizi Empatico, diplomatico e padrone delle proprie emozioni Tenace e fermo nel perseguimento di evidenze oggettive Versatile e capace di adattarsi a diverse culture organizzative Rigoroso ed equo nel riportare risultati e conclusioni Discreto, fiducioso e capace di rispettare la riservatezza delle informazioni

Categoria	Proposta profilo competenze VET21001
Pre-requisiti	Essere in possesso della qualifica di Coordinatori di Sistemi di Gestione in Organizzazioni Educative basati su EQAVET e ISO21001 2 anni di esperienza lavorativa all'interno di un'organizzazione di istruzione e formazione in un ruolo accademico o di gestione della qualità

6.1.2 Malta

6.1.2.1 National Context

The Malta Qualifications Framework (MQF) is an instrument for the development and classification of qualifications in Malta according to criteria using level descriptors applicable to specified levels of learning outcomes. The regulatory framework for the classification of Qualifications and Awards provided through formal, non-formal and informal learning, and based on the Malta Qualifications Framework level descriptors, is determined by the Subsidiary Legislation 327.431.16. This legislation specifies the level descriptors for the eight qualification levels (Levels 1-8) and examples of qualifications that exist within the national education and training sector in Malta.

The MQF is based on three pillars:

Pillar 1: Qualification Levels

8 different levels (in addition to the Introductory Levels) are identified. There is an increase in the level of knowledge, skills and competences from one level to another. These different levels are described in terms of level descriptors specifying knowledge, skills, competences, and learning outcomes.

Pillar 2: Qualification Types

The MQF caters for all types of qualifications across all levels and sectors of education in Malta. These qualifications cover those achieved as an outcome of compulsory education; within the vocational stream, as well as within Higher Education.

Pillar 3: Quality Assurance Criteria

The value of qualifications depends on the quality in the provision of education and training. Quality assurance is that mechanism on which mutual trust and recognition between countries and education and training institutions across Europe are based. National education and training providers conferring national qualifications pegged on the MQF need to fulfil the National Quality Assurance Framework.

Malta established its Malta Qualifications Framework (MQF) in 2007 and the Malta Further and Higher Education Authority (MFHEA) is the local competent authority to recognise qualifications and accredit courses against the Malta Qualifications Framework³.

³ More information regarding the Malta National Qualification Framework is available via the *Malta Referencing Report (Version 4)* (NCFHE, 2016) available at:
<https://ncfhe.gov.mt/en/Documents/Referencing%20Report/Referencing%20Report%202016.pdf>

6.1.2.2 Adaptations needed and adoption status

The Jobs Plus Malta 'Occupational Handbook' (Jobs Plus Malta, 2018) is organised by skill level according to the International Standard Classification of Occupations (ISCO-08) that defines 4 broad Skill Levels 1 to 4 (4 being the highest). This refers to the function of the complexity and range of tasks and duties to be performed in an occupation.

The relationship between Major groups and the four ISCO-08 Skill Levels is summarised in the table below (adapted from Jobs Plus Malta, 2018).

ISCO-08 Major Groups	Skill Level
0 – Armed Forces Occupations	1 - 4
1 - Managers	3 + 4
2 - Professionals	4
3 – Technicians and Associate Professionals	3
4 – Clerical Support Workers	2
5 – Service and Sales Workers	2
6 – Skilled Agricultural, Forestry and Fishery Workers	2
7 – Craft and Related Trades Workers	2
8 – Plant and Machine Operators and Assemblers	2
9 – Elementary Occupations	1

The occupational profile ISO 21001-EQAVET Lead Auditor and the ISO21001-EQAVET Systems Manager are proposed to be included as ISCO 08 Skill Level '3' since the profiles typically involve the performance of complex technical and practical tasks which require an extensive body of factual, technical and procedural knowledge in a specialised field whereby:

- Occupations at this skill level generally require a high level of literacy and numeracy and well-developed interpersonal communication skills.
- These skills may include the ability to understand complex written material, prepare factual reports and communicate with people who are distressed or require support.
- The knowledge and skills required at this skill level are usually obtained as the result of study, for a period of 1 – 3 years, at a higher educational institution following completion of secondary education.
- In some cases, extensive relevant work experience and prolonged on-the-job training may substitute for the formal education (Jobs Plus Malta, 2018).

In order to comply with the occupational standards of the National Maltese catalogue, the ISO 21001-EQAVET Lead Auditor and ISO21001-EQAVET Systems Manager need to have the following structure, including details about occupational codes, alternative titles foreseen for the qualification, if any, a description of the work environment in which the profile may work (private/public sector, self-employed, part-time/full-time), occupational data (number of employees in sector, share of foreigners, job outlook, median pay per annum) and career opportunities.

This will be report periodically to reflect the status of adoption of the VET21001 Competence Profiles in Malta.

6.1.2.3 VET21001 Competence Profiles in Maltese template

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OCCUPATIONAL STANDARD

ISO 21001-EQAVET System Manager

1 | Page

Agency: Jobs Plus, Malta

Reference Publication: Occupational Handbook

URL: https://secure.etc.gov.mt/homedir/temp/Occupational_Handbook_Softview_v2.pdf

Occupational Profile:

Occupational title	ISO 21001-EQAVET System Manager
Alternative titles	As above
Job description and duties:	<ul style="list-style-type: none"> • Diagnose the educational organization gaps regarding compliance towards EQAVET and ISO 21001 requirements • Plan the implementation of EQAVET and ISO 21001 requirements • Implement EQAVET and ISO 21001 requirements • Define the audit programme and monitor its effectiveness • Select auditors and assemble audit teams • Analyse the management system and promote its continuous improvement • Identify training needs related to the management system and evaluate training effectiveness • Evaluates suppliers' performance • Evaluates interested parties' satisfaction (learners & educators/trainers, staff and suppliers)
Work environment	Educational Institutions
Entry level education / special licences / warrants	Not applicable
Knowledge and skills	<p>Basic Knowledge: English; Mathematics; Statistics; Communication techniques; Information flow management; Management applied to education and training organizations; Pedagogy applied to different education and training levels; Human resources ISO 19011</p> <p>Advanced Knowledge: Quality Infrastructures (Standardization, Conformity Assessment (Certification and Accreditation), Metrology); Statutory and regulatory requirements applied to the education sector and its subsectors; EQAVET Recommendation; ISO 21001; ISO 100xx Series; Quality Tools (7 Basic, 7 New, LEAN, 5S, SMART Indicators); Risk Management; Policy deployment methodology; Process mapping techniques; Problem solving techniques; Techniques for monitoring interested parties' <u>satisfaction</u> (learners & educators/trainers, staff and suppliers) Brainstorming techniques Suppliers management</p> <p>Skills: Implement EQAVET and ISO 21001 requirements; Identify internal and external contexts of the organization and; Define and</p>

	deploy education management policy; Describe processes; Define SMART indicators; Apply Risk-based thinking; Apply Quality Tools; Identify interested parties and its relevant requirements and monitor its satisfaction; Evaluates Suppliers' performance
Additional qualities	Ethical; Observant; Perceptive; Versatile; Tenacious; Decisive; Self-reliant; Communicative; Practical and objective; Accountable; Emphatic and Facilitative
Related career opportunities	Quality Auditor



OCCUPATIONAL STANDARD

ISO 21001-EQAVET Lead Auditor



Agency: Jobs Plus, Malta

Reference Publication: Occupational Handbook

URL : https://secure.etc.gov.mt/homedir/temp/Occupational_Handbook_Softview_v2.pdf

Occupational Profile:

Occupational title	ISO 21001-EQAVET Lead Auditor
Alternative titles	As above
Job description and duties:	Plan audits Lead audit teams Conduct audits Report audits
Work environment	Educational institutions
Entry level education / special licences / warrants	Hold an ISO 21001-EQAVET Systems Manager Qualification 2 years work experience within an education and training organization in an academic or quality management role
Knowledge and skills	<p>Basic Knowledge : Team management; Leadership; Conflict management; Statutory and regulatory requirements applied to the education sector and its subsectors in the auditor's perspective</p> <p>Advanced Knowledge : EQAVET Recommendation criteria in the auditor perspective; ISO 21001 requirements in the auditor's perspective; Audit concepts, terminology and principles (ISO 19011); Audit methods, tools and good practices (ISO 19011)</p> <p>Skills: Plan management system audits according with audit objectives, scope and criteria; Prepare audit documentation; Conduct audit opening meetings; Lead audit teams; Collect evidences through analyses of documents, staff interviews and observation of activities; Validate the information collected through triangulation methods; Assure the adequacy and sufficiency of the audit evidences collected to support audit findings and conclusions; Prepare audit reports; Conduct audit closing meetings.</p>
Additional qualities	<ul style="list-style-type: none"> • Honest and free from conflict of interests • Self-aware of own biases • Open minded and capable of suspending judgment • Empathetic, diplomatic and in control of own emotions • Tenacious and firm in the pursue of objective evidences • Versatile and capable to adapt to different organizational cultures • Rigorous and fair while reporting findings and conclusions • Discreet, trustful and capable of respecting information confidentiality
Related career opportunities	Quality Manager

6.1.3 Portugal

6.1.3.1 National Context

The Portuguese National Qualifications Framework (NQF) is a single reference tool to classify all the qualifications produced in the national educational and training system.

The NQF comprises eight Qualification Levels, each one defined by a set of indicators that specify the learning outcomes corresponding to the qualifications at that level in terms of Knowledge, Skills and Attitudes. The NQF adopts the qualification levels and respective descriptors of the European Qualifications Framework (EQF).

The EQF makes it possible to match the different national qualifications systems to a single reference framework, acting as a translation device and comparison of qualification levels in different countries. It is in force since the publication of Portaria nº 782/2009.

6.1.3.2 Adaptations needed and adoption status

The competence profile ISO21001 – EQAVET System manager has been classified as level 4. The level 4 competences are described as:

Knowledge: Factual and theoretical knowledge in broad contexts within a field of work or study

Skills: A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study

Responsibility and autonomy: Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities

The VET21001 profile ISO21001 – EQAVET System manager was translated into Portuguese and no adaptations were made. The profile was classified as professional area 347 Área de Educação e Formação: 347 - Enquadramento na Organização/Empresa (Organisation/Company Framework) of the Portuguese Nacional Agency.

The competence profile ISO 21001-EQAVET Lead Auditor has been classified as level 5. The level 5 competences are described as:

Knowledge: Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge

Skills: A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems

Responsibility and autonomy: Exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others

The VET21001 profile ISO21001 – EQAVET Lead Auditor was translated into Portuguese and no adaptations were made. The profile was classified as professional area 347 Área de Educação e Formação: 347 - Enquadramento na Organização/Empresa (Organisation/Company Framework) of the Portuguese Nacional Agency.

Both profiles were sent to ANQEP, the Portuguese EQAVET/EQF National Agency and at the time of publication of this report were under analyses for potencia publication. This report will be updated periodically to reflect the status of adoption of the VET21001 Competence Profiles in Portugal.

6.1.3.3 VET21001 Competence Profiles in Portuguese template

The VET21001 Competence Profiles for ISO 21001-EQAVET System Manager and ISO 21001-EQAVET Lead Auditor, translated in Portuguese and inserted into the template⁴ provided by ANQEP, are shown in the next pages.

⁴ Since ANQEP provided the VET21001 Consortium with this template, it has changed. The new one is online only and for that reason it was agreed with ANQEP that the VET21001 Consortium would use, for the purpose of IO2 and this report, the previous one, although including in it the new fields of the online-only template.

PERFIL PROFISSIONAL



GESTOR DE SISTEMAS ISO 21001-EQAVET

**Publicação e
atualizações**

GESTOR DE SISTEMAS ISO 21001-EQAVET

Nível QNQ/QEQ 4

Código 347xxx

Criada em 2021-MM-DD

Data da última alteração 2021-MM-DD

Área de Educação e Formação: 347 - Enquadramento na Organização/Empresa

Pontos de Crédito: xxx,xxx

Descrição da Qualificação: Planeia, coordena, assegura e promove a implementação e melhoria contínua do Sistema de Gestão ISO 21001 - EQAVET (*European Quality Assurance Framework for Vocational Education and Training*), em conformidade com os referenciais normativos e legislação aplicável, contribuindo para a eficiência e competitividade das organizações.

O que faz?

1. Identifica as lacunas da organização educativa relativamente ao cumprimento dos requisitos EQAVET e ISO 21001
2. Planeia a implementação dos requisitos ISO21001 e EQAVET
3. Implementa os requisitos ISO21001 e EQAVET
4. Define o programa de auditoria e controla a sua eficácia
5. Seleciona as equipas auditoras
6. Analisa o sistema de gestão ISO 21001-EQAVET e promove a sua melhoria contínua
7. Identifica as necessidades de formação relacionadas com o sistema de gestão ISO 21001-EQAVET e avalia a sua eficácia
8. Avalia fornecedores
9. Avalia o grau de satisfação das partes interessadas (por exemplo alunos, educadores/formadores, pessoal)

Que competências tem?

Conhecimentos

1. Conhecimentos de:

- 1.1. Inglês
- 1.2. Matemática

- 1.3. Estatística
- 1.4. Técnicas de comunicação
- 1.5. Gestão de informação
- 1.6. Gestão de organizações de educação e formação
- 1.7. Pedagogia aplicada a diferentes níveis de educação e formação
- 1.8. Gestão de recursos humanos
- 1.9. ISO 19011

2. Conhecimentos aprofundados de:

- 2.1. Infraestruturas da qualidade [normalização, avaliação de conformidade (certificação e acreditação), metrologia]
- 2.2. Requisitos estatutários e regulamentares aplicáveis ao sector da educação e aos subsectores
- 2.3. Recomendações EQAVET
- 2.4. ISO 21001
- 2.5. Normas da série ISO100xx
- 2.6. Ferramentas de qualidade (7 Clássicas, 7 Novas, LEAN, 5S, Indicadores SMART)
- 2.7. Gestão de risco
- 2.8. Metodologia de implementação de políticas
- 2.9. Técnicas de mapeamento de processos
- 2.10. Técnicas de gestão de conflitos
- 2.11. Técnicas de monitorização do grau de satisfação das partes interessadas (por exemplo: alunos, educadores/formadores, pessoal)
- 2.12. Técnicas de *Brainstorming*
- 2.13. Gestão de fornecedores

Aptidões

1. Implementar os requisitos do EQAVET e ISO 21001
2. Identificar/definir o contexto e enquadramento interno e externo da organização de ensino
3. Definir e implementar a política de gestão da educação
4. Descrever processos
5. Definir, implementar e controlar indicadores SMART
6. Aplicar os conceitos de gestão de risco
7. Implementar ferramenta de qualidade
8. Identificar as partes interessadas e os seus requisitos e monitorizar a satisfação dos mesmos
9. Avaliar fornecedores

Atitudes

1. Ético
2. Observador
3. Perceptivo
4. Versátil
5. Perseverante
6. Determinado
7. Autoconfiante
8. Comunicativo
9. Prático e Objetivo
10. Responsável
11. Empático e Facilitador

PERFIL PROFISSIONAL



AUDITOR COORDENADOR ISO 21001-EQAVET

**Publicação e
atualizações**

AUDITOR COORDENADOR ISO 21001-EQAVET

Nível QNQ/QEQ 5

Código 347xxx

Criada em 2021-MM-DD

Data da última alteração 2021-MM-DD

Área de Educação e Formação: 347 - Enquadramento na Organização/Empresa

Pontos de Crédito: xxx,xx

Descrição da Qualificação: Coordenar a avaliação de sistemas de gestão de organizações de educação e formação baseados na ISO 21001 e no *European Quality Assurance Framework for Vocational Education and Training* (EQAVET), nomeadamente ao nível do planeamento, condução e reporte de auditorias de verificação da conformidade.

Observações: Para aceder a esta qualificação é necessário o cumprimento dos seguintes pré-requisitos:

- Qualificação de Gestor de Sistemas ISO 21001-EQAVET
- 2 anos de experiência numa organização de educação e formação numa função académica ou de gestão da qualidade

O que faz?

1. Planeia auditorias
2. Lidera equipas auditoras
3. Conduz auditorias
4. Reporta auditorias

Que competências tem?

Conhecimentos

1. Conhecimentos de:
 - 1.1 Gestão de equipas
 - 1.2 Liderança
 - 1.3 Gestão de conflitos
 - 1.4 Requisitos estatutários e regulamentares aplicáveis ao setor da Educação e aos seus subsectores, na perspetiva do auditor

2. Conhecimentos aprofundados de:

- 2.1 Critérios da recomendação EQAVET na perspectiva do auditor
- 2.2 Requisitos da norma ISO 21001 na perspectiva do auditor
- 2.3 Conceitos, terminologia e princípios de auditoria (ISO 19011)
- 2.4 Métodos, ferramentas e boas práticas de auditoria (ISO 19011)

Aptidões

- 1. Planear auditorias a sistemas de gestão de acordo com os objetivos, o âmbito e os critérios da auditoria
- 2. Preparar documentos de auditoria
- 3. Conduzir reuniões de abertura de auditoria
- 4. Liderar equipas auditoras
- 5. Recolher evidências através de análise de documentos, entrevistas ao pessoal e observação de atividades
- 6. Validar a informação recolhida, através de métodos de triangulação
- 7. Assegurar a adequabilidade e suficiência das evidências de auditoria para suportar os resultados e as conclusões
- 8. Preparar relatórios de auditoria
- 9. Conduzir reuniões de encerramento de auditoria

Atitudes

- 10. Honesto e livre de conflitos de interesse
- 11. Consciente dos seus enviesamentos
- 12. De mente aberta e capaz de suspender o julgamento
- 13. Empático, diplomático e em controlo das suas emoções
- 14. Tenaz e firme na procura de evidências objetivas
- 15. Versátil e capaz de se adaptar a diferentes culturas organizacionais
- 16. Rigoroso e justo no reporte de resultados e conclusões de auditoria
- 17. Discreto, de confiança e capaz de respeitar informação confidencial

6.1.4 Slovenia

6.1.4.1 National Context

The Slovenian Qualifications Framework (SQF) is a uniform system of qualifications in the Republic of Slovenia aimed at outlining the educational and other qualifications available in Slovenia and the mutual comparability of different qualifications. The basic function of the Slovenian and other national qualification frameworks is to clarify the horizontal and vertical relationships between different types of qualifications, certificates and degrees/diplomas. They consist of level descriptors, where each level descriptor is defined by learning outcomes.

Learning outcomes are thus the central foundation, term, concept and criterion of national qualifications framework on which depend the effectiveness and transparency of national frameworks and the implementation of the European qualifications framework in the EU member states. The purpose of the SQF is to achieve transparency and recognisability of qualifications in Slovenia and the EU, while its basic objectives are to support lifelong learning, to integrate and harmonise Slovenia's qualifications subsystems and to improve the transparency, accessibility and quality of qualifications with regard to the labour market and civil society.

The SQF thus enables the verification of the level of an individual's education or qualification in the European Qualifications Framework (EQF) or Framework for Qualifications of the European Higher Education Area (FQ-EHEA).

The SQF is a framework of communication with a limited scope for reform. Sectoral legislation and the classification system of education and training (hereinafter referred to as: KLASIUS) serve as a starting point for the classification of qualifications into the SQF.

Slovenian also has a Qualifications Framework Act which determines the Slovenian Qualification Framework (SQF), basic concepts (qualification, learning outcome, competence, etc.), the referencing of qualifications from the SQF to the European Qualifications Framework for Lifelong Learning (EQF) and the Qualifications Framework of the European Higher Education Area (FQ-EHEA), procedures and competences regarding the placement/referencing of qualifications, the establishment of a National Coordination Point for the SQF and EQF, and record keeping (SQF qualifications register).

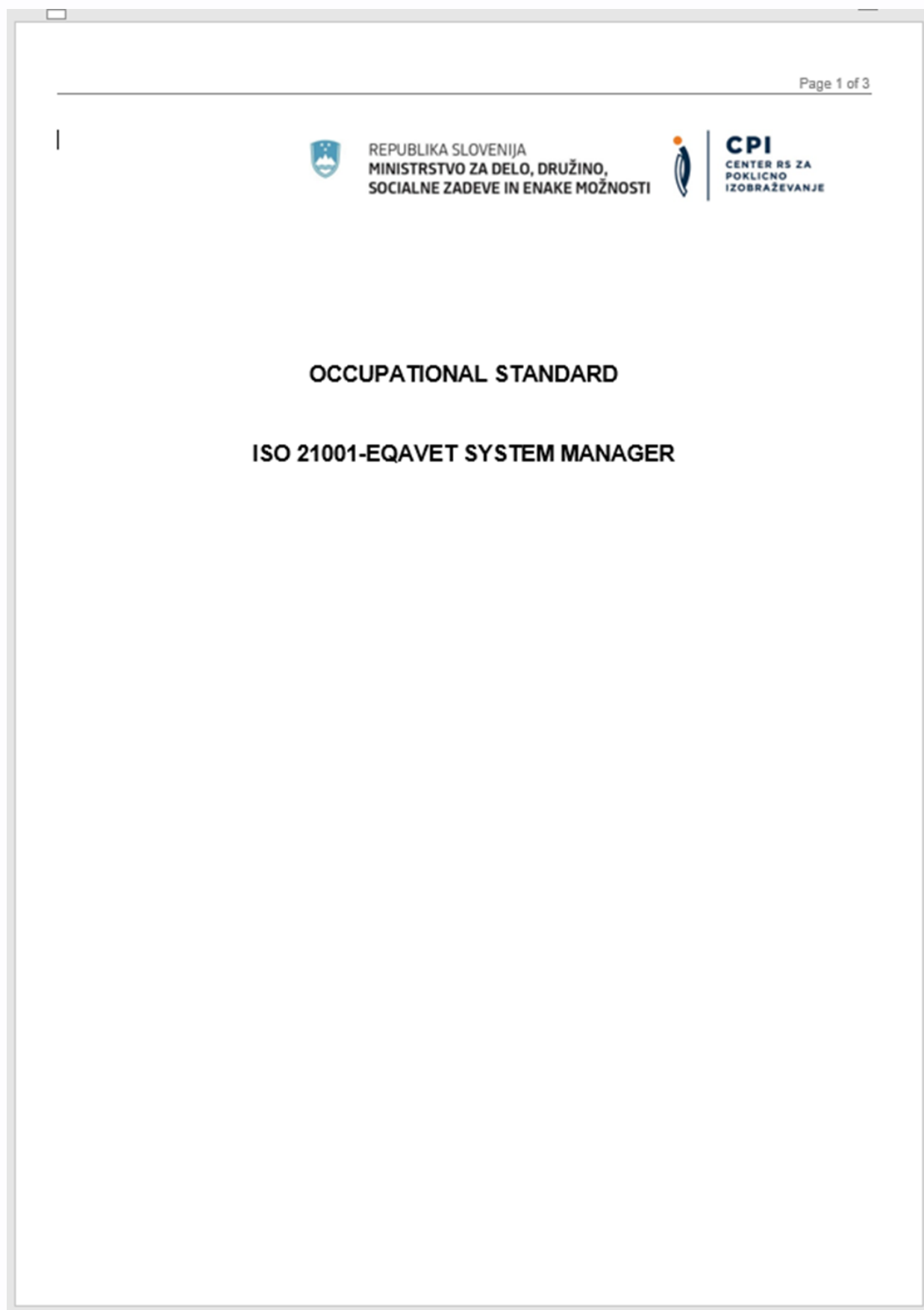
6.1.4.2 Adaptations needed and adoption status

The occupational profile ISO 21001-EQAVET System Manager is proposed to be classified in KLASIUS (Classification System of Education and Training) as Klasius-P16: Business and management, management (0410).

The occupational profile ISO 21001-EQAVET Lead Auditor is proposed to be classified in KLASIUS (Classification System of Education and Training) as Klasius-P16: Business and management, management (0410).

This report will be updated periodically to reflect the status of adoption of the VET21001 Competence Profiles in Slovenia.

6.1.4.3 VET21001 Competence Profiles in Slovenian template



1. NAME AND CODE OF THE OCCUPATIONAL STANDARD

ISO 21001-EQAVET System manager (0410.xxxx)

Klasius-P16: Business and Management (0410)

Klasius-SRV: Sublevel 6/1: Outcomes, NVQ certification system (26100)

2. NAME AND CODE OF OCCUPATION

3. DIFFICULTY LEVEL

(VI)

4. OCCUPATIONAL COMPETENCES

Candidate:

1. Diagnose the educational organization gaps regarding compliance towards EQAVET and ISO 21001 requirements
2. Plan the implementation of EQAVET and ISO 21001 requirements
3. Implement EQAVET and ISO 21001 requirements
4. Define the audit programme and monitor its effectiveness
5. Select auditors and assemble audit teams
6. Analyse the management system and promote its continuous improvement
7. Identify training needs related to the management system and evaluate training effectiveness
8. Evaluates suppliers' performance
9. Evaluates interested parties' satisfaction (e.g. learners & educators/trainers, staff)

5. DESCRIPTION OF OCCUPATIONAL STANDARD

Field of work	Key works	Skills and knowledge
Operational work	<ul style="list-style-type: none"> - Diagnose the educational organization gaps regarding compliance towards EQAVET and ISO 21001 requirements - Plan the implementation of EQAVET and ISO 21001 requirements - Implement EQAVET and ISO 21001 requirements - Define the audit programme and monitor its effectiveness - Select auditors and assemble audit teams - Analyse the management system and promote its continuous improvement - Identify training needs related to the management system and evaluate training effectiveness - Evaluates suppliers' performance - Evaluates interested parties' satisfaction (e.g. learners & educators/trainers, staff) 	KNOWLEDGE Basic <ul style="list-style-type: none"> • English • Mathematics • Statistics • Communication techniques • Information flow management • Management applied to education and training organizations • Pedagogy applied to different education and training levels • Human resources • ISO 19011 Advanced <ul style="list-style-type: none"> • Quality Infrastructures (Standardization, Conformity Assessment (Certification and Accreditation), Metrology) • Statutory and regulatory requirements applied to the education sector and its subsectors • EQAVET Recommendation • ISO 21001 • ISO 100xx Series • Quality Tools (7 Basic, 7 New, LEAN, 5S, SMART Indicators) • Risk Management • Policy deployment methodology • Process mapping techniques

		<ul style="list-style-type: none"> • Problem solving techniques • Techniques for monitoring interested parties' satisfaction (e.g. learners & educators/trainers, staff) • Brainstorming techniques • Suppliers' management <p>SKILLS</p> <ul style="list-style-type: none"> • Implement EQAVET and ISO 21001 requirements • Identify internal and external contexts of the organization • Define and deploy education management policy • Describe processes • Define SMART indicators • Apply Risk-based thinking • Apply Quality Tools • Identify interested parties and its relevant requirements and monitor its satisfaction • Evaluates Suppliers' performance <p>ATTITUDES</p> <ul style="list-style-type: none"> • Ethical • Observant • Perceptive • Versatile • Tenacious • Decisive • Self-reliant • Communicative • Practical and Objective • Accountable • Empathic and Facilitative
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6. WORKING GROUP FOR THE PREPARATION OF AN OCCUPATIONAL STANDARD



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA DELO, DRUŽINO,
SOCIALNE ZADEVE IN ENAKE MOŽNOSTI



CPI
CENTER RS ZA
POKLICNO
IZOBRAŽEVANJE

OCCUPATIONAL STANDARD

ISO 21001-EQAVET LEAD AUDITOR

1. NAME AND CODE OF THE OCCUPATIONAL STANDARD

ISO 21001-EQAVET Lead Auditor (0410. ~~xxx~~)

Klasius-P16: Business and Management (0410)

~~Klasius~~-SRV: Sublevel 6/1: Outcomes, NVQ certification system (26100)

2. NAME AND CODE OF OCCUPATION

3. DIFFICULTY LEVEL

(VI)

4. OCCUPATIONAL COMPETENCES

Candidate:

1. Plan audits
2. Lead audit teams
3. Conduct audits
4. Report audits

PRE-REQUIREMENTS

- Hold an ISO 21001-EQAVET Systems Manager Qualification
- 2 years of work experience within an education and training organization in an academic or quality management role

5. DESCRIPTION OF OCCUPATIONAL STANDARD

Field of work	Key works	Skills and knowledge
Operational work	<ul style="list-style-type: none"> - Plan audits - Lead audit teams - Conduct audits - Report audits 	<p>KNOWLEDGE</p> <p>Basic</p> <ul style="list-style-type: none"> • Team management • Leadership • Conflict management • Statutory and regulatory requirements applied to the education sector and its subsectors in the auditor's perspective <p>Advanced</p> <ul style="list-style-type: none"> • EQAVET Recommendation criteria in the auditor perspective • ISO 21001 requirements in the auditor's perspective • Audit concepts, terminology and principles (ISO 19011) • Audit methods, tools and good practices (ISO 19011) <p>SKILLS</p> <ul style="list-style-type: none"> • Plan management system audits according to audit objectives, scope and criteria • Prepare audit documentation • Conduct audit opening meetings • Lead audit teams • Collect evidences through analyses of documents, staff interviews and observation of activities • Validate the information collected through triangulation methods

		<ul style="list-style-type: none"> Assure the adequacy and sufficiency of the audit evidences collected to support audit findings and conclusions Prepare audit reports Conduct audit closing meetings <p>ATTITUDES</p> <ul style="list-style-type: none"> Honest and free from conflict of interests Self-aware of own biases Open-minded and capable of suspending judgment Empathetic, diplomatic and in control of own emotions Tenacious and firm in the pursue of objective evidences Versatile and capable to adapt to different organizational cultures Rigorous and fair while reporting findings and conclusions Discreet, trustful and capable of respecting information confidentiality
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6. WORKING GROUP FOR THE PREPARATION OF AN OCCUPATIONAL STANDARD

6.2 European Dissemination and Exploitation

Partner KIC is contacting ESCO to discuss the possible integration of the VET21001 Profiles at the ESCO Catalogue.

This report will be updated as the situation progresses.

6.3 International Dissemination and Exploitation

Partner KIC is leading two ISO work groups. These are:

- ISO CASCO/TC 232 JWG 58, which is developing ISO TS 21030 based on the VET 21030 Protocol (see IO3 Report for more details);
- ISO TC 232 WG 8 on Auditing Practices for educational organizations

Both groups have a shown interest in the VET21001 Competence Profile, particularly the VET21001 Competence Profile for ISO 21001-EQAVET Lead Auditors. This happens because the international work items under development have to identify the competences needed by auditors in the education sector.

Furthermore, partner KIC, as member of the ISO Technical Committee 232 on Education and Learning Services, is considering proposing the development of an ISO standard with the competences of ISO 21001-EQAVET System managers and Consultants, in line with what ISO did with ISO 9001 Consultants, by publishing ISO 10019.

Finally, and also at the international level, the Wikipedia page on ISO 21001 was already updated to include the VET21001 Competence Profiles. More updates on this page with more information from the VET21001 project outputs are planned for the near future.

This report will be updated as the situation progresses.

7 Conclusion

On the basis of the results of the gap analyses (IO1) and national, European and international best practices, the Consortium has identified in this intellectual output the needed competence profiles for two types of EQAVET-ISO 21001 professionals – Implementers (System Managers) and Evaluators (Lead Auditors).

The Consortium used a tri-dimensional approach – Knowledge, Skills and Attitudes - to describe the competences. This will facilitate the integration of the VET21001 Competence Profiles in qualification catalogues (or similar databases) of the partner countries, as well as in ESCO. The Knowledge dimension was sub-divided in basic and advanced to better fit the needs and accurately input curricula development based on the VET21001 Competence Profiles.

The VET21001 Competence Profiles are innovative, as they were never developed before. So far, the closest available in the market were ISO 9001 Competence Profiles. These were often used to select System Managers, Consultants and Auditors for education and training organizations, but they lacked the specifications needed to face the particularities of the sector.

The VET21001 Competence Profiles will be an additional input for the further development of the accredited certification scheme for management systems in educational organization at ISO based on the VET21001 Protocol (IO3).

The VET21001 Competence Profiles will also support the development of curricula to train System Managers, Consultants and Lead Auditors working with education and training organizations. This applies not only the Curricula that will be developed in the framework of this project, but also other curricula in Europe and beyond.

References

Cedefop (2008). *Terminology of European education and training policy – A selection of 100 key terms*. Luxembourg: Publications office.

European Commission (2019). *ERASMUS+ Programme Guide*. EU: Brussels. Retrieved from: https://ec.europa.eu/programmes/erasmus-plus/sites/erasmusplus2/files/erasmus-plus-programme-guide-2019_en_1.pdf

European Parliament and Council of the European Union (2017). *Council recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*. Retrieved from: <https://op.europa.eu/en/publication-detail/-/publication/cee970-518f-11e7-a5ca-01aa75ed71a1/language-en#document-info>

ISO (2020). *ISO 17000:2020 – Conformity assessment — Vocabulary and general principles*. Geneva: ISO.

ISO (2005). *ISO 10019:2005 - Guidelines for the selection of quality management system consultants and use of their services*. Geneva: ISO.

Jobs Plus Malta (2018). *Occupational Handbook 2018*. Retrieved From: <https://jobsplus.gov.mt/job-seekers-mt-MT-en-GB/guidance-services/occupational-handbook-2018>

Martin, J.; Elg, M.; Gremyr, I. & Wallo, A. (2021). *Towards a quality management competence framework: exploring needed competencies in quality management*. Retrieved from: <https://doi.org/10.1080/14783363.2019.1576516>

National Commission for Further and Higher Education (2016). *Malta Referencing Report, 4th Revised Edition*. Retrieved from: <https://ncfhe.gov.mt/en/Documents/Referencing%20Report/Referencing%20Report%202016.pdf>

Pór Ingason H & Ragnhildur Jónsdóttir E | Shaofeng L (Reviewing Editor) (2017). *The house of competence of the quality manager*. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/23311975.2017.1345050>

VET21001 Consortium (2019a). *EQAVET+ Project Strategy with Indicators*. Internal, non-published document.

VET21001 Consortium (2019b). *EQAVET+ Project Application*. Internal, non-published document.



About the VET21001 Project and this publication

The VET21001 project aims to develop a capacity building program, an accredited certification scheme and an implementation toolkit to motivate a wider EQAVET adoption. The VET21001 toolkit will use a standardized approach based on the recently published ISO 21001:2018, capitalizing on its already internationally consensually approved content and expecting that, by associating the ISO brand to EQAVET, all players in the market, including those of the standardization, accreditation and certification worlds, will become more curious about it, as well as willing to contribute to its dissemination and assuring its sustainability.

This document describes the development of VET21001 Intellectual Output 2, *Competence Profiles for EQAVET Professionals*, later renamed the **VET21001 Competence Profiles**.



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