

ANNEX

Implementation Manual of Quality Assurance Methodology for IVET Study Programs



“Towards an Enhanced Post Covid VET - EPOS VET”
Call: ERASMUS-EDU-2021-EQAVET-IBA
Project Nr: 101048314

AUTHOR:

Dr. Vasileios Raftopoulos, Quality Expert “EURO MEDITERRANEAN INSTITUTE for QUALITY and SAFETY in HEALTH SERVICES (EIQSH), AVEDIS DONABEDIAN AMKE” Director of Quality, Research and Education in the Hellenic National Public Health Organization, Ex Assoc. Prof. of Healthcare Quality Management at Cyprus University of Technology,

SCIENTIFIC EDITING :

Konstantinos Papaefstathiou MSc, Head of National Quality System dept, EOPPEP

Regina Kalodiki LL.M, Consultant, “QAS M. IKE BUSINESS CONSULTANTS”, on quality assurance of National and European projects

PROJECT COORDINATOR:

Antonios Glaros, Head of Communication and Development Directorate, EOPPEP

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Contents

Basic terms/Glossary.....	5
Introduction.....	6
STAGE 1: Organisation and Planning of Self Assessment (S/A).....	9
STEP 1: Establishment of a Quality Assurance Committee of I.E.K.....	9
STEP 2: Self - Assessment /Mapping of I.E.K state of play.....	10
STEP 3: Target setting of IEK.....	11
STAGE 2: Self Assessment Implementation (S/A).....	12
STEP 4. Self Assessment preparation.....	12
STEP 5. Self Assessment implementation.....	15
5.1 Presentation of the self-assessment framework and training of participants.....	15
5.2 Quality Standards and Criteria for the implementation of self assessment.....	15
5.3 IEK Quality Manual.....	23
5.4 Drafting of Self Assessment Report.....	27
STAGE 3: Change and Improvement.....	27
STAGE 4: Preparation for external evaluation/auditing.....	32
STAGE 5: External evaluation.....	33
STAGE 6: Reflection and Review.....	34

Tables and Figures

Table 1: Standard SWOT Analysis indicative template.....	10
Table 2: IEK Target setting.....	12
Table 3: Check list for Self Assessment preparation.....	13
Table 4: Quality Assurance Standards and Criteria.....	16
Figure 1: Cover page of QA Manual.....	24
Table 5: EQAVET Indicators.....	28
Table 6: Indicative proposed Key Performance Indicators (KPIs).....	30
Table 7: Stages and Steps of QA Assessment.....	35

Acronyms

IVET: Initial Vocational Education and Training

VET: Vocational Education and Training

IEK: Vocational Education and Training Institutes

EQAVET: European Quality Assurance Reference Framework for Vocational Education and Training

KPI: Key Performance Indicators

SMART: Specific, measurable, attainable, relevant and time-bound

SOP: Standard Operating Procedures

SWOT: Strengths, weaknesses, opportunities and threat

Basic terms/Glossary

“Quality Assurance” refers to the efforts made by an agency, or its stated ability to provide services in accordance with defined standards and in a manner acceptable to the users of those services. It is not evaluation but “exploitation”, as it is a systematic and dynamic process.

“Quality Assurance in Vocational Education and Training (VET)”: a set of activities, including the design, implementation, evaluation and review as well as the improvement of quality, with the aim of ensuring that education and training (content of study programs, curricula, procedures for assessing and validating learning outcomes) comply with predetermined quality requirements, which are expected by the participants to be met.

“Quality improvement”: the dynamic process through which an entity, using its quality cycles and control mechanisms, continuously improves the quality (in terms of structure, process and outcome) of the services provided.

“Quality standards”: the valuable tools for assessing the quality of education and training and an integral part of the effort to ensure it. These are valid and accepted explanatory definitions of the quality of education and training. Quality standards are considered valid, on the condition that they are described by “criteria”, which allow the evaluation of the services provided, in terms of efficiency and quality. In particular, quality standards are a general statement to be fulfilled and the criteria are the guidelines for achieving quality standards. CEDEFOP classifies standards into 3 categories:

- Competence standards
- Educational standards and
- Occupational Standard

Quality criteria refer to quality standards and should not be confused with the evaluation criteria of a Provider. The evaluation of the quality of the curriculum is part of the evaluation of the operation of IVET Institution (hereinafter referred to as “IEK”)

“Quality certification”: the process by which a legal entity (Institution, Organization,) is certified, in order to meet the requirements of a quality standard. Certification presupposes the development of a Quality System and a Quality Manual.

“Quality indicators”: measurable elements defined by an official body and used to assess and evaluate the quality of the services provided. Quality indicators may comprise structure, process and result (performance) indicators. They must be valid and reliable.

“Effectiveness indicators” or Key Performance Indicators (KPIs) are defined as the quantitative indicators that evaluate the degree of achievement of a goal over time.

“Safety”: according to the World Health Organization, is the absence of harm to the recipient of the service, which is prevented and the reduction of the risk of harm associated with the provision of services to an acceptable level. The acceptable level is determined by the current knowledge and available resources as well as the general context of service provision.

“EQAVET”: the European network for Quality Assurance in VET, set up following the 2009 Council and European Parliament Recommendation on the establishment of a European Quality Assurance Reference Framework for VET. EQAVET is based on the quality assurance and improvement cycle (design, implementation, evaluation and review) and the selection of descriptors for quality management, both at systemic and VET providers level.

“Quality Assurance System”: system designed to support the collection, processing and presentation of data necessary to ensure and improve quality.

“Stakeholders”: all entities and individuals affected by the activities of an organisation/provider.

“Procedure”: a clear statement, whether written or oral, which determines how a service is provided or a product is produced.

“Quality audit”: the process of a systematic and independent review of an Organization’s quality system, carried out by an internal and/or external quality inspector or inspection team.

“Quality inspector”: a professional who has the appropriate knowledge, skills and training to carry out the inspection of the quality system of an Organisation.

Introduction

The approved proposal 101048314 “Towards an Enhanced Post Covid VET- EPOS VET”, ERASMUS-EDU-2021-EQAVET-IBA, is submitted and implemented by EOPPEP as the National Reference Point (law 4415/2013) of EQAVET network. Through this approved proposal, EOPPEP aims at the development of an integrated **Quality Assurance Methodology of Initial Vocational Training (IVET) Study Programs** and the pilot application of this Methodology in two new / innovative programs, in coherence with the 2020 Recommendation of the European Council on vocational education and training, sustainable competitiveness, social justice and resilience.

The two specialties, which initially were chosen for the piloting of the proposed Quality Assurance Methodology are the following: (a) *Air Transport Services Specialist*, which is implemented by the Experimental Public IEK of Glyfada and (b) *Communication and Information Technologies in the Travel Industry (V.I.C.T. Travel)*, which is implemented by the Thematic (STEAM) Public IEK of Egaleo.

Subsequently, following working meetings with the Directors of the two (2) IEK, a third specialty, (c) *Digital Marketing Executive in E-Commerce*, was added for the pilot implementation of the above Methodology.

The process of developing and implementing a Quality Assurance System of IEK is a key mechanism for improving the conditions and results of the quality of the VET services provided. In an environment with limited resources available, with an urgent need to improve services, focusing on just a few dimensions of provision of education and training cannot be effective. The answer to the question: “*why do we need to focus on Quality Assurance of IEK?*” is self-evident: because it is a commitment of the state and because it adds “value” to stakeholders and is an important factor for VET sustainability in general.

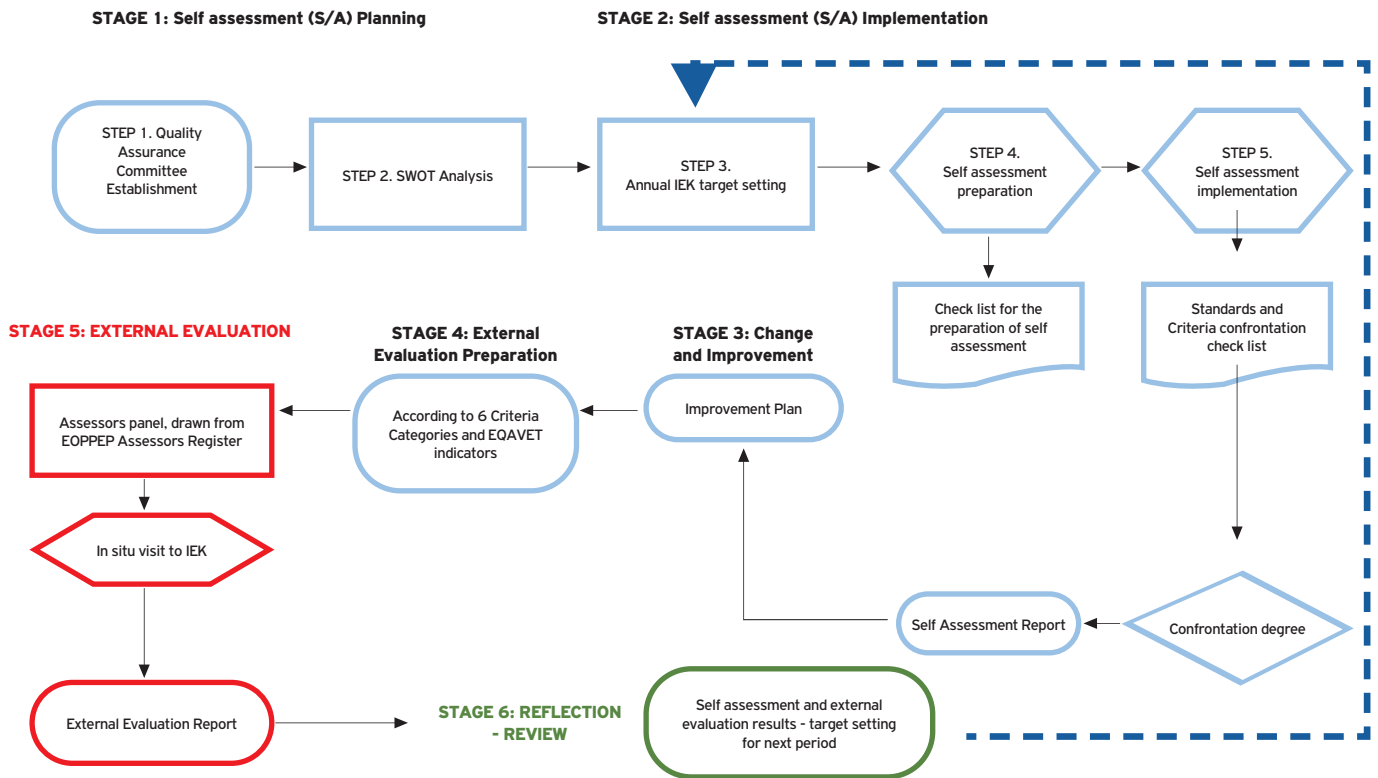
In No. K5/160259 relatively recent Regulation of Operation of the Vocational Training Institutes (IEK) that fall under the General Secretariat for Vocational Education, Training, Lifelong Learning and the Youth (G.G.E.E.K.D.B.M.&N.) of the Ministry of Education and Religious Affairs (Government Gazette B ' 5837 / 15-12-21) and in particular in articles 22, 23 and 24 are defined the quality assurance policy and the quality framework in IEK, on the basis of the European Framework for Quality, including six (6) quality assurance categories for the evaluation of the services provided by IEK, which, subsequently, are specified in the respective quality indicators.

Quality Assurance Categories comprise of:

1. Leadership-Planning and Organisation
2. IVET services provision
3. Infrastructure-equipment-resources
4. Innovation-extroversion
5. Results-outcomes
6. Labour market placement

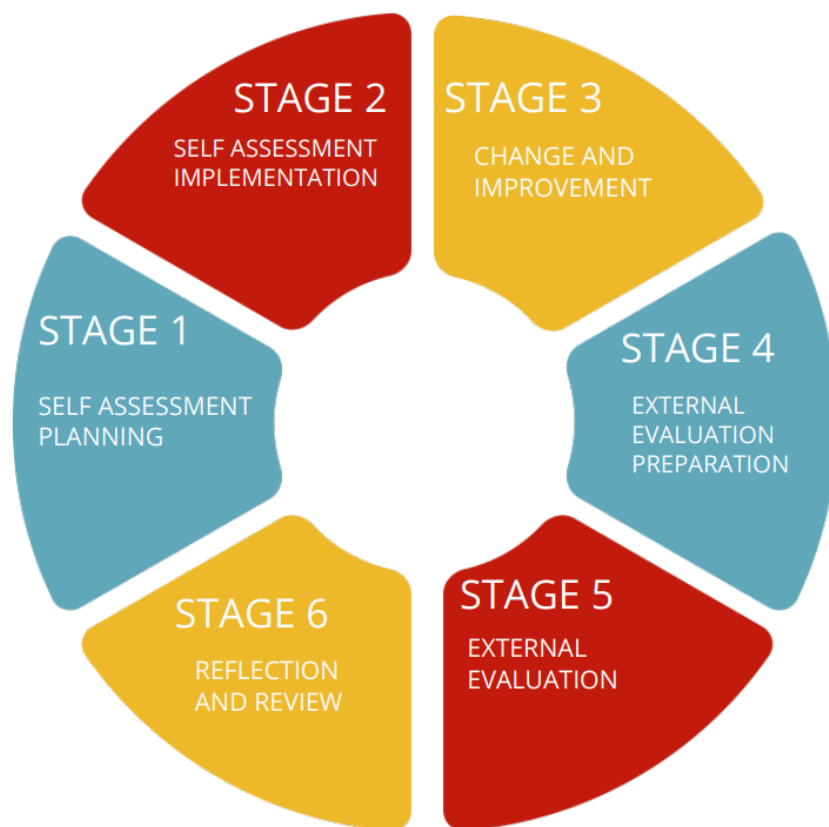
The purpose of this Manual is to support, first of all, the specific IEK that will participate in the piloting, but also in general IEK that fall within the scope of the above Regulatory Framework, to effectively implement the process of ensuring the quality of their services, taking into account the provisions thereof.

The diagram that follows depicts graphically the whole process for the development of the quality assurance system of IEK, comprising internal and external assessment and inspection. The proposed Methodology is being deployed in six (6) stages:



«The results of the external evaluation are recorded by the team of evaluators in a standardized evaluation report, which includes the Strengths and Points for Improvement identified by the team of evaluators and attributes a specific score»

These stages follow a circular logic of continuous improvement approach according to the EQAVET Cycle, as illustrated in the figure below.



Quality Assurance circle of IVET Study Programs

STAGE 1: Organisation and Planning of Self Assessment (S/A)

Stage 1 is completed in three (3) consecutive steps:

STEP 1: Establishment of a Quality Assurance Committee of IEK

This committee is defined as “Quality Assurance Committee”. It is responsible for the coordination of activities that include self-assessment, communication with stakeholders, data collection for the drafting of the final report and in general activities related to the Quality Assurance framework, as described in Government Gazette 5837/15-12-2021.

Next, the framework and timetable for the completion of the self-assessment and the frequency of committee meetings are defined.

The number of the members of the Committee is decided on a case-by-case basis - and depending on the capacity of the IEK. The Committee is chaired by the Director of IEK and

is attended by the Deputy Director. Where applicable, it is proposed to involve permanent and contracted teachers, as well as a representative of students, from the local civil society and the labour market, if possible. A member shall also be appointed as secretary of the Commission. Minutes shall be kept of each meeting of the Committee and an agenda shall be set. It is recommended that the Quality Assurance Committee should not be identical, in terms of its composition, with the Self-Assessment Committee, which is formed below in Step 4 of the Methodology.

STEP 2: Self - Assessment /Mapping of I.E.K state of play

Self-assessment includes two elements: one is the **mapping of the current situation** (see below, **Table 1**) and the other is **the assessment of compliance with the standards and quality criteria**, according to **Table 4**.

The Self Assessment Committee in collaboration with stakeholders (teachers and trainers, trainees, graduates, employers) will consult, in order to draft a SWOT analysis indicating:

1. Strengths (internal)
2. Weaknesses (internal)
3. Opportunities (external)
4. Threats (external)

TABLE 1: Standard SWOT Analysis indicative template

Strengths (internal)	<ul style="list-style-type: none"> • • • • •
Weaknesses (internal)	<ul style="list-style-type: none"> • • • • •
Threats (external)	<ul style="list-style-type: none"> • • • • •
Opportunities (external)	<ul style="list-style-type: none"> • • • • •

Analysis may include data for:

1. Available equipment and human resources (e.g. equipment, teaching staff)
2. Facilities
3. Training Guides and Curricula
4. Employment prospects of trainees
5. Educational material
6. Laboratory utilization or other practical training process
7. Expectations and experience of students and teachers/trainers (e.g. usefulness of knowledge and skills acquired, skills, abilities and learning outcomes)

In order to ensure the optimum information collection, I.E.K can, alternatively, facilitate the process conducting:

- Focus groups with the involved parties
- Individual interviews
- Research, via structured valid and reliable questionnaires to the parties involved (educators, students, graduates, employers)¹

Initial analysis of the views of the parties involved, from which the draft of the SWOT analysis will emerge, is proposed to be discussed, if possible, to be finalized. Stakeholders (educators, permanent and contract staff, students, graduates, local civil society and representatives of the labor market) might participate in the consultation. All this process will be accompanied by a short record drawn up by the Quality Assurance Committee and will date and version number. Any additions and revisions to the original analysis will be accompanied by the corresponding document number.

After mapping the current situation, which is part of the self-assessment, IEK staff proceeds to the next stages, which include the following as described hereinafter.

STEP 3: Target setting of IEK

The Quality Assurance Committee sets the objectives of the IEK for each year. According to the Government Gazette 5837 / 15-12-21, IEK must present, in a structured and clear way, the objectives and basic principles of their operation as well as the procedures and criteria they follow for quality assurance. Clear, measurable and achievable objectives (S.M.A.R.T.) are set in terms of procedures, tasks and human resources. To facilitate sufficiently its work It is recommended that the target setting refers to the following six (6) Criteria Categories, as specified in the relevant Regulatory Framework:

1. Leadership-Planning and Organisation
2. IVET services provision
3. Infrastructure-equipment-resources

¹For relevant questionnaires, see CEDEFOP (2015) Handbook for VET providers Supporting internal quality management and quality culture, ANNEX 1 Toolbox supporting implementation of internal quality management based on the PDCA/ quality cycle (https://www.cedefop.europa.eu/files/3068_en.pdf)

4. Innovation-extroversion
5. Results-outcomes
6. Labour market placement

In **Table 2** below, it is proposed that the target setting corresponds to the evaluation criteria set by the Government Gazette 5837 / 15-12-21 and in addition to set indicators for evaluating the achievement of the objectives. Regarding these indicators, those defined in the Government Gazette as well as the EQAVET indicators can be used, as mentioned in **Table 5** as well as further indicators that may be defined by the Quality Assurance Committee of IEK.

TABLE 2: IEK Target setting

Category	Target/s	Target achievement indicator
Leadership-Planning and Organisation		
IVET services provision		
Infrastructure-equipment-resources		
Innovation-extroversion		
Results-outcomes		
Labour market placement		

STAGE 2: Self Assessment Implementation (S/A)

STEP 4. Self Assessment preparation

In this initial phase it is important to plan the first meeting and communicate the launching of the self-assessment to all parties involved. The activities of the Committee are communicated to the interested parties through a corresponding plan and schedule, which includes the content as well as the communication channels, while taking into account the needs of the individuals. It is important to motivate and involve staff in the self-assessment process, fostering a positive supportive climate and environment that builds trust and motivates individuals to actively participate. Defining roles and responsibilities is essential at this stage. Representatives of interested parties are appointed respectively.

It is recommended that before initiating the self-assessment the Committee uses the checklist of **Table 3** (see next page) as a tool to assess the readiness and adequacy of resources and data for the self-assessment. Collection and processing of personal data is implemented in accordance with the provisions of Law 4624/2019 (codified by Law 5043/2023) and having regard to the legal provisions, as in force. In any case, it is recommended that the synthesis of Self-Evaluation Committee should not be identical with the Quality Assurance Committee.

TABLE 3: Check list for Self Assessment preparation

This checklist concerns a time scale: from: _____ to: _____
Date *Date*

This checklist has been completed by: _____ Date: _____
Name and signature of authorised person

Self Assessment		YES	NO	Action	
				Who	When
Aim	The aim of self-assessment is clear, pre-agreed and understood by staff and stakeholders				
	It has been communicated to the parties involved				
	There is a commitment so that self-assessment is the trigger for improvement and not just for recording				
	Quality cycle included				
	The aim integrates existing legislation and EQAVET texts				
Preparation	Self-evaluation framework is agreed (data collection, analysis, performance indicators)				
	A self-evaluation committee has been set up with representatives from the parties involved				
	It is pre-agreed on how the results report will be written and to whom it will be sent				
	Quality assurance principles and performance indicators have been taken into account				
	It has been agreed which person(s) will be involved in each phase of the self-assessment				
	The needs of interested parties have been taken into account				

Check list for Self Assessment preparation

Self Assessment		YES	NO	ACTION	
				Who	When
Responsibilities	Management actively engages and participates in the self-assessment process				
	Teams are formed and prepared for all areas to be evaluated				
	Team leaders are appointed to design and manage the self-assessment process				
	Relevant authorization has been assigned to those responsible for the coordination of the process				
	Staff are properly trained in self-assessment methods and procedures				
	Staff have reasonable time and resources to carry out the process				
	Trainees actively participate in the process				
	Involve employers and other stakeholders in the self-assessment process				
Time line	The annual self-evaluation cycle has been defined and communicated to the staff				
	Sufficient time has been given to undertake the process				
Performance tracking	Performance data is available for all areas of provision / service learning / management and all groups of trainees				
	Performance is measured against agreed targets				
	Trends in measured performance are recorded (e.g. annual improvement)				
	Performance is compared with the performance of other providers and with national data				
	Data is easily accessible				

STEP 5. Self Assessment implementation

5.1 Presentation of the self-assessment framework and training of participants

In order to be able to complete the self-assessment, it is suggested to develop an Application Guide and to conduct training of the self-assessment team members in the content of Official Gazette 5837/15-12-21. The application guide may include the process, members, timeline and roles of parties involved.

5.2 Quality Standards and Criteria for the implementation of self assessment

The self-assessment exercise entails internal assessment of the compliance of I.E.K with the standards and criteria of **Table 4**. The following tips are recommended:

1. Self-assessment is evidence based on reliable and valid data per thematic field of the respective framework and according to the pre-agreed standards and quality criteria.
2. The Committee utilizes a combination of tools to gather data (questionnaires, interviews, file review, etc.)
3. The Committee will draw up the checklist and questions to assess the compliance with quality standards and criteria
4. The degree of compliance or deviation from the standards is evaluated and recorded, as well as the potential reasoning for deviation.
5. At the end of the process the Committee will propose an *Improvement Plan* to foster the degree of compliance, through consultation with the parties involved.

For the needs of the piloting and for the assessment of IEK compliance with the current legislation and what the international literature describes as 'dimensions of quality' of Initial Vocational Training, **Table 4** proposes the *Quality Standards and Criteria*, which include all six (6) Criteria Categories of the Official Gazette B' 5837/15-12-21.

TABLE 4: Quality Assurance Standards and Criteria

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
<p>1. LEADERSHIP, ORGANISATION AND PLANNING</p>	<p>Standard 1.1 The I.E.K that provides training ensures the quality training, which is consistent with the quality policy of IVET</p>	<p>1.1.1. I.E.K has a Quality Manual, which includes a written policy and procedures for quality assurance</p>
		<p>1.1.2 The Management of I.E.K is actively involved in the development, implementation and improvement of the quality management system</p>
		<p>1.1.3 I.E.K has appointed a Quality Committee, with terms of reference, responsibilities, accountability and code of good practice</p>
		<p>1.1.4 The Administration of I.E.K carries out a self-evaluation, the results of which are communicated</p>
	<p>Standard 1.2 The Management of I.E.K has a strategic and operational action plan which includes the objectives for quality</p>	<p>1.2.1 There is an updated Action Plan that describes the values, mission, vision, policies and strategic goals of IEK</p>
		<p>1.2.2 The Management of I.E.K clearly describes the quality policy and the procedures that ensure that the content of the action plan is implemented, reviewed and produces results</p>
		<p>1.2.3 The Management of IEK ensures the participation of the parties involved in the formulation of the strategy and the action</p>
		<p>1.2.4 The Administration of I.E.K develops a mechanism and procedures for the evaluation of efficiency indicators (EQAVET and Institutional framework)</p>
		<p>1.2.5 Effective partnerships and networking with external entities are in place and reviewed periodically</p>
		<p>1.2.6 The I.E.K has a data management and processing system for the action plan and the quality management system</p>
		<p>1.2.7 The action plan includes core actions for the ongoing development of staff and the assessment of their educational needs</p>

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
<p>2. TRAINING PROVISION</p> <p>2.1 STUDY PROGRAM</p>	<p>Standard 2.1.1 The curriculum of the specialty supports and ensures the achievement of learning outcomes, the development of students' skills and abilities on the basis of national legislation</p>	<p>2.1.1.1 The description of the courses includes precisely the learning objectives, the associated expected learning outcomes, the skills and abilities which are communicated to the students at the beginning of each semester</p>
		<p>2.1.1.2 Course and instructor evaluation questionnaires are completed by students at the end of the semester and include at least one question regarding the achievement of these learning objectives</p>
		<p>2.1.1.3 An effort is made to create and use a portfolio with all the skills and abilities acquired by the trainee</p>
		<p>2.1.1.4 The curriculum has been designed based on a conceptual framework and the lessons have a proven application to the subject of the program</p>
	<p>Standard 2.1.2 Particular attention is paid to curriculum design, revision and content</p>	<p>2.1.2.1 The curriculum is reviewed by an expert committee (every 3-4 years) to ensure integrity, completeness and incorporation of current developments in the science relevant to the specialty</p>
		<p>2.1.2.2 Students, employers, professional associations, Civil Society, special groups of the population, graduates, external lecturers (e.g. visitors) are consulted for the planning and revision of the curricula, for improvements in the planning of the courses based on labor market needs</p>
		<p>2.1.2.3 The content of the curriculum is evaluated, e.g. comparison of subject matter and course content to avoid excessive overlap between courses</p>
		<p>2.1.2.4 The curriculum includes general knowledge courses that strengthen the cognitive and professional profile of the specialty</p>
		<p>2.1.2.5 The curriculum and especially the content of the courses are consistent with the values of the science/field of specialization</p>

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
2. TRAINING PROVISION 2.1 STUDY PROGRAM	Standard 2.1.2 Particular attention is paid to curriculum design, revision and content	2.1.2.6 The curriculum and especially the content of the courses highlight issues of interculturality, social, economic, gender and other discrimination at local, national and global level
		2.1.2.7 The curriculum promotes interdisciplinary collaboration, research and the principles of evidence-based practice
		2.1.2.8 The curriculum, courses and their content are comparable to those of other corresponding majors abroad
		2.1.2.9 There is a mechanism to prevent and deal with the phenomenon of overloading the students' schedule. In the event that a course has workshops or a professional exercise, their duration and distribution is decided in collaboration with the students
		2.1.2.10 The curriculum provides a balance of theory and practice to help the trainee assimilate the acquired knowledge
		2.1.2.11 A procedure is provided for adapting the study programs to distance learning data and e-courses for the training of trainees 2.1.2.12 The curriculum promotes, among other things, the acquisition of skills related to the green and digital economy
		2.1.2.12 The curriculum promotes, among other things, the acquisition of skills related to the green and digital economy
2.2 TEACHERS AND TRAINERS	Standard 2.2.1 Teachers and trainers have through knowledge and understanding of the subject(s) they teach	2.2.1.1 I.E.K has a procedure for how to select the teacher with the greatest relevance for each thematic teaching unit
		2.2.1.2 The teaching staff and in general the educational staff are supported with all available resources by the I.E.K, in order to cope with their tasks
3. INFRASTRUCTURE - EQUIPEMENT - RESOURCES	Standard 3.1 Appropriate resources are available to ensure the learning process and the corresponding learning outcomes	3.1.1. The I.E.K has the necessary spaces: laboratories, computers, rooms configured for group work, a library
		3.1.2 The I.E.K has a procedure for the continuous upgrading and maintenance of laboratories and their equipment and for unhindered access of students to these areas
		3.1.3 Safety, suitability and efficient use of equipment is ensured, monitored and assessed
		3.1.4 There is a crisis and emergency management plan which is communicated, updated periodically and available to all parties involved

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
3. INFRASTRUCTURE - EQUIPEMENT - RESOURCES	Standard 3.2 Learning resources and other support mechanisms are readily accessible to students	3.2.1 There is an integrated system for evaluating the availability, accessibility, effectiveness, adequacy and efficiency of the use of learning resources
		3.2.2 The workshops of the specialty are accessible (also by people with mobility or other difficulties) to students who want to practice basic and advanced skills
		3.2.3 Access to the course bibliography is ensured
	Standard 3.3 Learning resources are designed to serve the needs of learners and teachers/trainers	3.3.1 There is a process or mechanism that identifies the needs of the trainees as well as their non-learning needs (economic, mental, social, humanitarian) in order to manage them
		3.3.2 There is a procedure to support trainees with mobility disabilities, learning or other difficulties
		3.3.3 The classrooms are satisfactory in number and dimensions, have the appropriate technological and material equipment and are friendly to the trainees and the teachers
		3.3.4 All services provided and learning resources are evaluated by students and staff and feedback is provided
		3.3.5 There is a mechanism to identify the cases of trainees with low performance, to support them
	Standard 3.4 I.E.K has procedures for the participation of trainees and teachers/trainers in quality assurance	3.4.1 I.E.K has an internal Quality Assurance Committee in which both trainees and teachers/trainers participate
		3.4.2 The results of the analysis of the course and teacher/trainer evaluation questionnaire completed by the trainees are used in a specific way, with the aim of improving the learning process and available resources
		3.4.3 There is a mechanism to capture the views of final students and graduates of the program on the effectiveness of the program (e.g. interviews, focus groups, questionnaires).

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
3. INFRASTRUCTURE - EQUIPEMENT - RESOURCES	Standard 3.5 I.E.K has procedures for the safety of the parties involved	3.5.1 I.E.K has procedures that document its compliance and that of the collaborating entities, with all the provisions of the law on health and safety at work and with other requirements arising from the nature and content of the study programs
		3.5.2 I.E.K has procedures for the continuous improvement of health and safety in the premises of the provider and collaborating entities
		3.5.3 I.E.K has and provides the necessary resources for the implementation and continuous improvement of the health and safety management system
		3.5.4 I.E.K has a written safety policy, rules and regulations for the purposes of ensuring the health and safety of the parties involved
		3.5.5 I.E.K has procedures and methodology for the identification, planning and conducting of training, for the identification of needs and for the training and education of the parties involved 3
		3.5.6 I.E.K has procedures for the continuous information of the interested parties on all matters that concern them and especially those related to safe conditions and the working environment
		3.5.7 There is a documented procedure for managing and responding to emergencies and emergencies
4. ASSESSMENT AND LABOUR MARKET INTEGRATION	Standard 4.1 The assessment procedures of theoretical, laboratory courses and practical training are designed in such a way as to document that the learning outcomes are achieved	4.1.1 I.E.K evaluates the application of EQAVET's provisions and specifically the triptych: learning objectives (skills, abilities), teaching methods and assessment methods
		4.1.2 The evaluation is based on objective criteria, depending on the course
		4.1.3 Continuous assessment implies continuous feedback of the student. Each form of assessment is specified in detail and precision
		4.1.4 The choice and purpose of each form of assessment is explicitly documented in the curriculum and ensures the fulfillment of the learning outcomes and the acquisition of the corresponding skills and abilities

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
4. ASSESSMENT AND LABOUR MARKET INTEGRATION	Standard 4.1 The assessment procedures of theoretical, laboratory courses and practical training are designed in such a way as to document that the learning outcomes are achieved	4.1.5 There is provision for the possibility of examining students with learning difficulties in other ways
		4.1.6 Student assessment is based on a variety of methods and strategies
		4.1.7 The curriculum ensures the equal evaluation of all students without limitations (geographical, social, economic, cultural)
		4.1.8 A documented positive relationship is ensured between overall student performance in courses and success in certification examinations
		4.1.9 The pass rate for certification exams for students competing for the first time immediately after graduation is set at a minimum of 80%
	Standard 4.2 A mechanism is in place to monitor student progress and achievement	4.2.1 I.E.K implements and upgrades the institution of student progress supervision and strengthens the periodic general discussion on their performance and progress, so that targeted interventions can be made
		4.2.2 The institution of the student's «mentor» is created or, if it exists, strengthened, who also acts as their advisor on issues related to the educational process
		4.2.3 The institution develops or, if it exists, strengthens the process for creating a link of its alumni (alumni group)
		4.2.4 There is a process of sustainable recording of the professional development of its graduates (on an organized and systematic basis). Data collection from employers and students can be done through anonymous, self-completed, reliable and valid questionnaires or interviews
		4.2.5 There is a process for the on going tracking of vocational evolution of graduates (on a regular and constructed basis. Data retrieve by employers and graduates may include anonymous reliable and valid questionnaires and interviews.
	Standard 4.3 There are student assessment rules with clear, defined and published criteria as well as examination rules	4.3.1 There are explicitly formulated and published course assessment criteria that take into account the desired learning outcomes
		4.3.2 There is a mechanism (e.g. competency and skills checklist) to assess students in laboratory courses and practical training
		4.3.3 Relevant regulations and procedures are reviewed periodically.

CRITERIA CATEGORIES	STANDARDS	QUALITY CRITERIA
5.EFFECTIVENESS, OUTCOMES AND QUALITY IMPROVEMENT	Standard 5.1 I.E.K develops and uses a process to evaluate the effectiveness of the curriculum	5.1.1 The IEC develops effectiveness indicators for curriculum implementation, learning outcomes, workshops and internships
		5.1.2 There is a process and mechanism to ensure a 'learning culture'
		5.1.3 There is a process for determining the percentage of graduates who pass the certification exams
		5.1.4 There is a process to determine the percentage of graduates who are employed in their subject
		5.1.5 There is a process for evaluating the satisfaction of students, teachers and employers
		5.1.6 Acquired skills utilization at the workplace
	Standard 5.2 I.E.K develops and uses a process for the continuous improvement of the quality of the curriculum	5.2.1 Feedback from quality and effectiveness indicators are used to continuously improve the quality of the curriculum
	6. INNOVATION-EXTROVERSION-ICT UTILISATION	Standard 6.1 I.E.K supports innovation and extroversion
6.1.2 IEK in its annual target setting has included goals for its innovation and extroversion 6.1.3 The IEK implements distance/e-learning programs, which are conducted using new information technology (IT)		
6.1.3 IEK implements e-learning/distance learning courses, via ICT		
6.1.4 IEK encourages and promotes participation in EU mobility programs (e.g. ERASMUS+)		

The standards and quality criteria of **Table 4** have been obtained through a systematic research of the relevant literature that also includes quality standards of other countries (evidence based). The standards and more specifically the criteria are based on current legislation, while allowing at the same time IEK to further develop the corresponding procedures. These procedures are called *Standard Operating Procedures (SOPs)*.

The way these procedures are described should be standardized and therefore accompanied by instructions about their review and assessment of implementation. In general, the following features are recommended for each procedure:

1. title, purpose and objectives of the process
2. name and position of person(s) related to the process
3. activities covered by the procedure
4. steps of the process: starting point, intermediates and final outcome/output
5. outcomes produced at each step
6. staff responsible for executing the project at each step
7. indicators and tools for the assessment of outcomes produced at each step

In any case, the procedures are linked to the corresponding documentation (texts). Process development facilitates the calculation of quality indicators and efficiency indicators (Key Performance Indicators, KPIs).

5.3 IEK Quality Manual

The development of a *Quality Manual* by IEK is not obligatory but is highly *recommended*.

A Quality Manual includes:

1. The aims of the Quality Management System, according to the requirements of a standard
2. The description of the processes and procedures of the Quality Management System and the interplay between them
3. Responsibilities of Administration
4. Management of resources (people, infrastructure, working environment, learning environment)
5. Implementation of training
6. Supervision, measurement, analysis and improvement of the services provided

Although the content of a *Quality Manual* is consistent with the requirements of a specific standard, the suggested common points of reference are the following:

a) Cover page:

The cover page of the manual includes the logo of the provider, the serial number of the edition of the manual, as well as the signature of the Head of Administration. An example is shown in **figure 1** below. On the next page is the versions history, which includes the numbering of the updated version of the manual

Figure 1: Cover page of QA Manual

Quality Assurance Manual (ΕΔΠ-Ο1)

VERSION: 1ⁿ

DATE OF ISSUANCE: 00/00/0000

Approved by: _____

Signature:

VERSIONS HISTORY

<u>Rev.</u>	<u>Chapter</u>	<u>Description of revised edition</u>	<u>Approval</u>	<u>Date</u>
0				00/00/0000

β) Content of the Manual:

The proposed content of the Manual is indicative, as, as mentioned above and it depends on the standard used. In general, the following are recommended:

- ba) Presentation of the Provider: general information about the I.E.K is recorded, which may also include references to the legal form, the headquarters, the specialties it provides, the available resources (infrastructure and human), etc.
- bb) Terms and definitions: which are included in the Manual
- bc) IEK vision and mission
- bd) Main aims: of the Provider, according to its statute and the Operating Regulations and the decisions of the Board
- be) Quality Policy: of the Provider, which states its commitment to guarantying and improving the quality of services provided
- bf) Quality Assurance Management System: which is proposed to be based on the EQAVET conceptual framework, taking into account legislation and international guidelines. The existence of a quality management system in the provider, in the

context of previous quality certification, is acceptable and may need to be adapted.

bg) Documentation of the Quality Management System of I.E.K: which includes:

1. The declared quality policy,
2. Quality Management System manual,
3. Service manuals: documents that define the purpose and scope of the activities of a service and describe in detail how they are implemented and implemented correctly, who is responsible and when an activity is carried out, the resources and equipment used, the required documentation used, control required (monitoring and measurement) and the recording, in accordance with the policy and objectives set out in the Quality Management Manual
4. Internal Regulations/Work Instructions: are issued by the I.E.K managers and aim to guide the staff in the execution of specific tasks. They can be issued in various forms such as instructions for use, warnings, maintenance instructions, good practices, etc.
5. External Documents (Standards, Legislation, Regulations, Codes and Guides of Good Practice): all external documents required by the IEK, in order to ensure the effective design, operation and control of the processes. Such documents may be, among others, laws, regulations, standards, international conventions, codes of good practice, etc.
6. Other documentation: various other documents needed by the provider to ensure effective design, operation and control of processes such as job descriptions
7. Archives: there must be a standard process for
 - Keep track and control of documents
 - Updating and checking files

bh) Administration responsibility: it is very important to document how the provider's Management is committed to the development and implementation of the management system and to the continuous improvement of its effectiveness. It is also useful to state the following:

1. Focus on the beneficiary
2. Responsibilities, of the staff
3. Representation of Administration in the Quality Management System
4. Internal Security committee
5. Internal communication process
6. Review by Management: The Director reviews the management system at scheduled intervals to ensure its appropriateness, adequacy and effectiveness. The review also includes the assessment of opportunities for improvement and the need for changes in the system, including quality policy and objectives for quality and employer safety.

bi) Resources management: which includes

1. Allocation of resources
2. Human resources
3. Infrastructure
4. Work and learning environment

bj) Training courses implementation: which includes

1. Planning and implementation of IVET programs provided
2. The processes related to internal and external stakeholders (students, instructors, trainees, E.O.P.E.P.E.P., Ministry of Education, businesses, Organizations). This includes legal and regulatory requirements relating to the provider's curricula and operation, any other requirements identified by the Public Authority supervising the provider
3. Design and development of the provider's services
4. Monitoring and measurement required to provide evidence of the equipment's compliance with specified requirements

bk) Performance measurement, analysis and improvement: IVET provider designs and implements the monitoring, measurement, analysis and improvement processes required to

- prove the conformity of the services it provides
- ensure the compliance of the management system and
- constantly improve the efficiency of the management system

Monitoring and measurement entails:

1. Trainees and the staff satisfaction rate
2. Internal inspection
3. Monitoring and measurement of the processes
4. Monitoring and measurement of the services provided
5. Control of the non-compliant service, in the sense that any deviation from the pre defined standard is prevented and corrective measures are taken, depending on the results of the inspection
6. Data analysis: appropriate data is determined, collected and analyzed in order for the provider to demonstrate the suitability and effectiveness of the management system and to assess where continuous improvement of the system's effectiveness can be made. This will include data generated as a result of monitoring and measurement, as well as data from other relevant sources.
7. Continuous improvement: preventive and corrective actions, notification of actions and withdrawal of services that do not comply with the specifications of the quality management system.

5.4 Drafting of Self Assessment Report

The *Committee's Self-Assessment Report* includes the findings, highlights the areas for improvement, the non-compliant points, is framed by the corresponding documentation and provides ideas and proposals for improving compliance. The report is shared with Management and stakeholders for feedback.

STAGE 3: Change and Improvement



The ultimate aim of self-assessment is the improvement, through the analysis of strengths that need reinforcement of their sustainability and weaknesses that need immediate intervention to overcome. Therefore, the proposed framework of changes includes the immediate actions, the proposed structural changes of the system and the prioritization of the allocation of resources (material and human) for areas for improvement that have been highlighted by the self-assessment report.

The improvement process is defined by the *Improvement Plan*, which is communicated. Informing all stakeholders through the appropriate channels about the Improvement Plan is important, as it addresses the corresponding timeline, terms, accountabilities, KPIs, potential resistance to change and staff support. All proposed improvements are reflected in the provider's development strategy.

In order to complete the self-assessment and draw up the Improvement Plan, KPIs are also taken into account, which in order to be measured, require the development of processes, as mentioned in a previous point. Some of the standards require from the IEK to develop specific procedures that facilitate the measurement of indicators.

It is proposed that the quality assurance Committee of the IEK, at the meeting for the assessment of compliance with the standards also decides also defines the indicators it will measure and assess.

In the next pages (**Table 6**) there is a potential pool of indicators, deriving both from B' 5837/15-12-2021 Decision and from EQAVET framework.

Performance/quality indicators

In order to achieve the implementation of the provisions set out in Official Gazette B' 5837/15-12-2021 of the IEK, it is proposed, as a minimum, the adoption of the criteria categories and quality indicators included therein, as mentioned already:

1. Leadership-Planning and Organisation
2. IVET services provision
3. Infrastructure-equipment-resources
4. Innovation-extroversion
5. Results-outcomes
6. Labour market placement

In addition to the above indicators, each I.E.K has the flexibility to define, through the Quality Assurance Committee, other KPI indicators which are related to its target setting. In **Table 5** below, EQAVET's proposed indicators are included, alternatively.

TABLE 5: EQAVET Indicators

Indicators
<p>Relevance of quality assurance systems for VET providers:</p> <p>a) share of VET providers applying internal quality assurance systems defined by law/at own initiative</p> <p>b) share of accredited VET providers</p> <p>Investment in training of teachers and trainers:</p> <p>a) share of teachers and trainers participating in further training</p> <p>b) amount of funds invested</p>

Participation rate in VET programs:

Number of participants in VET programs, according to the type of programme and the individual criteria

Completion rate in VET programs:

Number of persons having successfully completed/abandoned VET programs, according to the type of programme and the individual criteria

Placement rate in VET programs:

- a) destination of VET learners at a designated point in time after completion of training, according to the type of programme and the individual criteria
- b) share of employed learners at a designated point in time after completion of training, according to the type of programme and the individual criteria

Utilisation of skills at the workplace:

- a) information on occupation obtained by individuals after completion of training, according to type of training and individual criteria
- b) satisfaction rate of individuals and employers with acquired skills/competences

Unemployment rate according to individual criteria**Prevalence of vulnerable groups:**

- (a) percentage of participants in VET classified as disadvantaged groups (in a defined region or catchment area) according to age and gender
- (b) success rate of disadvantaged groups according to age and gender

Mechanisms to identify training needs in the labour market:

- (a) information on mechanisms set up to identify changing demands at different levels
- (b) evidence of their effectiveness

Schemes used to promote better access to VET

- (a) information on existing schemes at different levels
- (b) evidence of their effectiveness

Finally, in **Table 6** below, a set of indicative key performance indicators (KPIs) is proposed in relation to six (6) Criteria Categories of the Governmental Gazette B' 5837/15 - 12 -2021

TABLE 6: Indicative proposed Key Performance Indicators (KPIs)

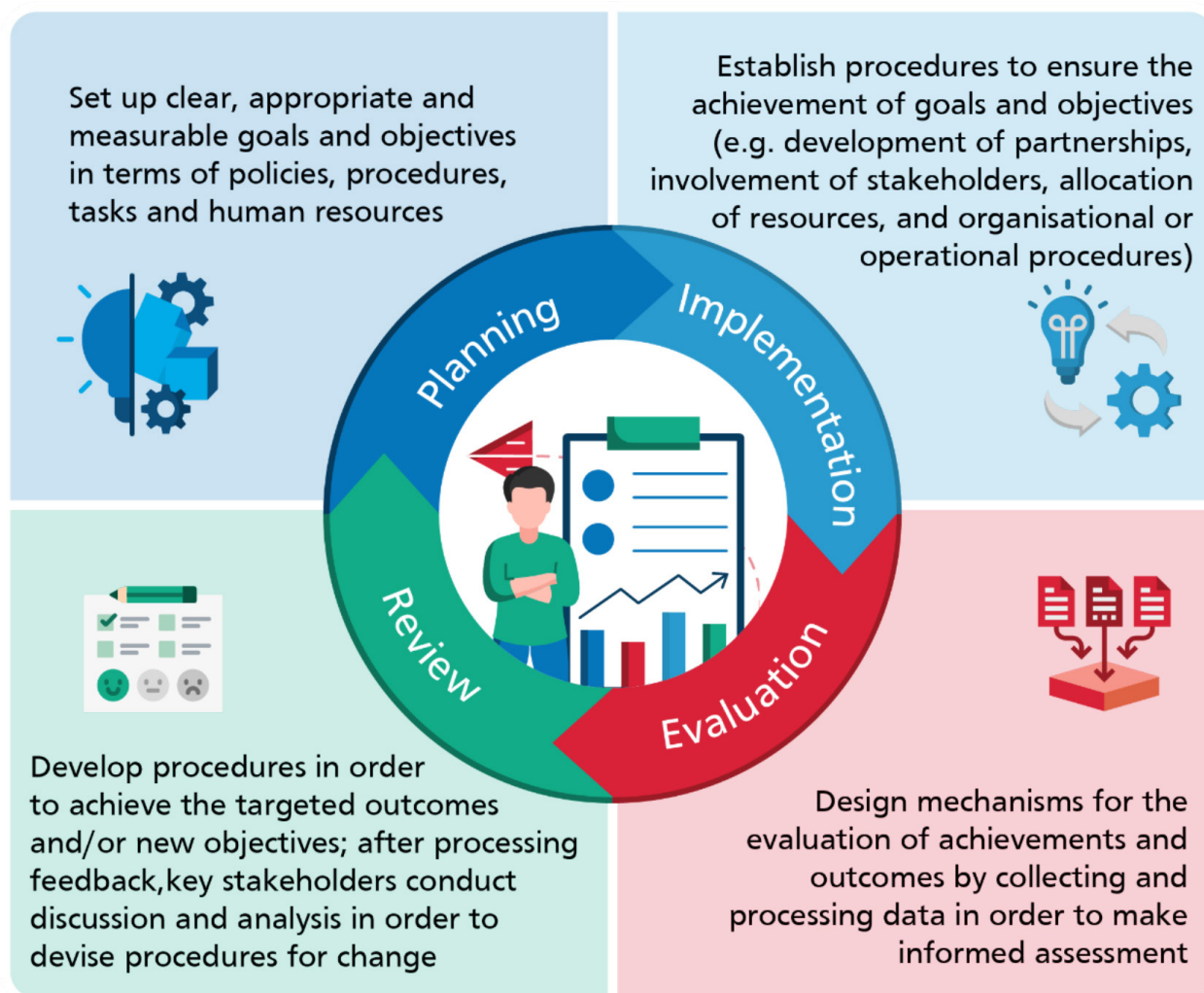
Indicative Key Performance Indicators (KPIs) – against the (6) Criteria Categories and Standards		
CRITERIA CATEGORY	STANDARDS	KEY PERFORMANCE INDICATORS (KPIs)
1. LEADERSHIP – ORGANISATION - PLANNING	Standard 1.2 The Management of IEK has a strategic and operational action plan that includes the objectives for quality	Students' satisfaction rate regarding IEK services
		Trainers' cooperation rate with IEK Management Team
2. VET SERVICES PROVISION 2.1 STUDY PROGRAM	Standard 2.1.1 The study program of the specialty supports and ensures the achievement of learning outcomes, the development of students' skills and competences on the basis of national legislation	Student satisfaction rate with the subject of theoretical teaching and practical training
		Student satisfaction rate with educational materials
		Response rate of the educational material to the intended learning outcomes, as included in the respective Study Guide
	Standard 2.1.2 Special attention is paid to the design, revision and content of study program	Share of VET participants classified as disadvantaged groups
2.2 TEACHING STAFF	Standard 2.2.1 Teachers have full knowledge and understanding of the course(s) they teach	Trainers' consistency rate with teaching tasks
		Trainers' consistency rate with regard to their administrative tasks
		Percentage of effective communication between trainers and students
		Satisfaction rate of IEK Management regarding teachers and trainers.
3. INFRASTRUCTURE- EQUIPMENT - RESOURCES	Standard 3.5 IEK has processes for the safety of the parties involved	Student satisfaction rate with health and safety regulations

CRITERIA CATEGORY	STANDARDS	KEY PERFORMANCE INDICATORS (KPIs)
4. ASSESSMENT AND LABOUR MARKET PLACEMENT	Standard 4.2 There is a mechanism in place to monitor students' progress and achievements	Trainers' satisfaction rate with student performance
		Participation rate of IEK students in the Professional Development and Career Bureaus (GEAS)
	Standard 4.3 There are student assessment rules with clear, defined and published criteria as well as exam rules.	Percentage of graduates employed after graduation
		Percentage of graduates employed in their specialty
	Standard 4.1 The assessment procedures for theoretical, laboratory and practical training courses are designed to document that learning outcomes are achieved	Student satisfaction rate regarding IEK Management
Standard 4.2 There is a mechanism in place to monitor students' progress and learning outcomes	Satisfaction rate of IEK Management regarding the progress and learning outcomes of students	
5. EFFECTIVENESS, OUTCOMES AND QUALITY IMPROVEMENT	Standard 5.1 IEK develops and utilizes a process for the evaluation of the effectiveness of study program	Percentage of students who successfully passed the exams of each semester in each specialty
		Student satisfaction rate regarding the acquisition of skills in each specialty
6. INNOVATION - EXTROVERSION - ICT UTILIZATION	Standard 6.1 IEK supports innovation and extroversion	Number of external entities cooperating with IEK
		Student participation rate in European mobility programmes
		Participation rate of students in distance / e-learning programs, implemented via new information and communication technologies (ICT)

STAGE 4: Preparation for external evaluation/auditing



The Quality Assurance Cycle



IEK in Stage 4 is called upon to improve its processes based on the findings of the self-assessment, standards and quality criteria, and to activate a process and strategy for continuous improvement of the quality of its services provided. All this must be reflected in a special meeting of the Quality Assurance Committee in the form of an *internal self assessment report*, which will also include the proposed changes and improvement plan. Stage 4 also *epitomizes the effort to improve the quality* of a provider, as it also prepares it for *external auditing*. At the same time, it contributes to the on going cultivation of a *culture of quality*.

STAGE 5: External evaluation

Until the institutional finalization of the external evaluation process (or more tentatively “*third-party auditing*” or “*external auditing*”) based on international experience and relevant literature, we set out the general framework of the evaluation process. At the end of the self-assessment, I.E.K submits a memorandum with the results of the internal self assessment, regarding the degree of achievement of the standards, criteria and quality indicators.

Next follows the assessment by a panel of auditors/assessors which may consist of assessors/experts included in the Register of Assessors, supervisors, auditors, inspectors and experts of EOPPEP, subject to the necessary adjustments of the relevant Regulatory Framework. This process is defined as “external quality auditing”.

A “quality audit” is defined as the process of a systematic and independent review of an Organization’s quality system, which is carried out by an internal and/or external quality auditor or inspection team. Inspections can be planned or unplanned and aim to evaluate the quality system in terms of the degree of fulfillment of the requirements for compliance with a specific *quality standard* or *a set of quality assurance specifications*. For a meaningful and effective quality inspection it is important to have in place an inspection framework that includes, among other things, the inspection process and standards. A “quality auditor” is defined the professional who acquires the appropriate knowledge and skills and training to carry out the quality auditing of an Organization.

The panel of auditors reviews the documents and procedures of the quality system and evaluates the compliance with quality standards and criteria as: “*full*”, “*partial*”, or “*non-conformance*”. This non numerical characterization of compliance is standard practice at international level. After the end of the visit, they inform the I.E.K of their main findings and draft a detailed report.

In the Official Gazette B’ 5837/2021, art. 24, par. 1, subsection e), it is defined that the auditor assigns a specific score at the end of the external evaluation. Nevertheless, It is underlined that recording the conclusion of the external auditing/evaluation on a numerical rating scale is not a common practice in the field of quality inspection. For this reason, and in the context of the piloting of the proposed methodology, the outcome of the above assessment is proposed to be qualitative and descriptive. The focal point should be, in any case, on which criteria and more specific indicators “partial” or “non-compliance” is audited, so that the respective improvement plan can be directed accordingly.

STAGE 6: Reflection and Review

The results deriving from the Improvement Plan, as a combination of the results of the self-assessment and the external evaluation, are brought to the attention of the Management of each IEK. Subsequently, comments, observations and recommendations are processed and data is discussed and analyzed with the aim of reviewing the internal procedures, where required.

Utilizing and taking into account the above conclusions and the feedback loops, the Management of IEK proceeds with the planning of the objectives for the next year, with the ultimate goal of continuous improvement of the provision of vocational education and training services.

Ultimately, it is highly recommended to cultivate an organizational culture of quality, which will reflect the way IEK acts, regarding the usefulness of the quality assurance process and will be supported by all parties involved (administration, trainers, and students). The above quality culture can be supported and developed through the establishment, inter alia, of networks of Peers between IEKs for the exchange, dissemination and exploitation of best practices.

TABLE 7. Stages and Steps of QA Assessment

		STEPS/PROCESS								
		STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	STEP 9
STAGES										
STAGE 1. ORGANISATION AND PLANNING OF S/A		QA COMMITTEE SET UP	IE.K. TARGETING	MAPPING OF STATE OF THE ART						
STAGE 2. IMPLEMENTATION OF S/A					PREPARATION FOR S/A	IMPLEMENTATION OF S/A				
STAGE 3. CHANGE AND IMPROVEMENT							IMPROVEMENT PLAN			
STAGE 4. PREPARATION FOR EXTERNAL AUDITING								INTERNAL ASSESSMENT REPORT		
STAGE 5. EXTERNAL AUDITING									EXTERNAL AUDITORS REVIEW	
STAGE 6. REFLECTION AND REVIEW										IEK MANAGEMENT TEAM



“Towards an Enhanced Post Covid VET-EPOS VET”

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