



Quality Management System  
for Continuing Vocational  
Training  
in Training Centers and  
Enterprises

**Transfer document**

**2009**

## **Introduction**

The transfer document is methodical informative guide devoted to managers and educators of continuous vocational education and training institutions and to all those interested in quality issues in VET. It will be helpful for all who are seeking to start implementing quality management systems and for those who have already started this process.

The transfer document is one of the results of the project QVETIS-“Training in Quality: VET and Enterprises”. The main aim of this project is to develop, implement, test and validate a Quality Management System for Continuing Training providers via online software tool in order to enhance their performance under the European Common Framework for Quality Control. The transfer document is reconciled with other project products. Most of its content is based on the experience gained during the project activities.

### **1. Why is quality important**

Quality Management has been accepted by a great number of national and international organizations as an approach for accurate and reliable identification and satisfaction of diverse clients’ requirements.

Educational institutions are expected to provide professional services of high level and quality, which guarantee successful integration of the youth and elderly people into societal and economic life, enhancing social and economic growth of the country and school competitiveness. Continuous vocational training and education institutions face a challenge not only to facilitate ongoing staff qualification upgrading, but also to provide labour market with newly retrained employees. It is obvious that such aims can be achieved only by strong and well-managed institutions which have a clear developmental perspective that reflects the undergoing processes and regularities. Therefore, the issue of education institutions activity quality becomes of utmost importance. Aiming at sustainability of competitiveness and demonstration of high

quality of the provided services, education institutions have to ensure qualitative performance. This shows the importance of the quality management issue.

Managing quality is directed towards ensuring and increasing quality, efficiency and effectiveness and providing framework for planning, envisaging certain circumstances and undertaking measures, team building and motivation. ISO 9001 defines the term Quality management as: “Coordinated actions for management and control of an organization concerning Quality“. The main functions of quality management policy are parallel to the functions of management in general: planning, decision-making, organization and coordination, motivation, personnel management and control. At the same time the transition to a knowledge-based economy requires modernisation and continuous improvement of education and training systems. The facilitation of this process lies in effective quality management. Organizations are increasingly conscious of the need for a competitive and quality oriented image.

## **2. Goals and Principles of Quality Management System in Continuous Vocational Education and Training**

Training institutions have to choose an appropriate approach to quality, ground their activity on this approach and demonstrate publicly the possibilities to provide services of high quality. Four factors can be singled out which exert impact upon the decision of education institutions to pursue quality:

<i>Moral factor</i>	Related to consumers. It is grounded in the idea that consumers of training services are worth receiving training services of the best quality. This is an indisputable moral objective of training and education; representatives of this area should first be concerned with creating the best possible learning conditions.
<i>Mastership factor</i>	Related to the activity of specialists as professionals in the educational area. This factor correlates with the moral factor as it emphasises the obligation of all who provide training services to guarantee teaching of high quality. Specialists of education as professionals must improve teaching quality and this is a great challenge for pedagogical and administrative staff if they pursue the highest standards.
<i>Competitiveness factor</i>	Related with achievement of rivals. Competition becomes the daily routine in the area of training and education. The

	decrease in the number of student enrolment reduces the number of the teaching staff, thus causing the danger for the institution to be liquidated. Training market requires competition; therefore, it is necessary to ensure the growth of teaching quality, to create and sustain the strategy of competition. This is the most common factor which promotes the beginning of the process of quality assurance in institutions.
<i>Accountability factor</i>	Related to political/national groups. Institutions of vocational education should meet political and state requirements set for them and prove that the services they provide fit the highest standards.

The QMS of VET must satisfy two essential requirements. First, because of rapid change in knowledge and technologies, it must be open to innovations and encourage ongoing updating of the training content. Second, training must be organized so as to meet, in the best possible way, the needs of key customers of the VET system, i.e. **individuals** wishing to acquire a profession or to upgrade it, **employers** waiting for a skilled labour force and the **society** seeking to improve their living conditions.

With regard to this, the goal of the QMS in CVET is *ensuring the ongoing VET quality improvement by reconciling the needs of the world of work, the individual and the society.*

The organization quality management system should be based on *the eight basic quality management principles*. These principles can form a basis for performance improvement and organizational excellence. There are many different ways of applying these quality management principles. The nature of the organization and the specific challenges it faces determine how to implement them. Many organizations could find it beneficial to set up quality management systems based on these guiding principles of QMS.

### **Principle 1: Customer focus**

*Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.*

#### **Key benefits:**

- Increased revenue and market share obtained through flexible and fast responses to market opportunities.
- Increased effectiveness in the use of the organization's resources to enhance customer satisfaction.
- Improved customer loyalty leading to repeat business.

#### **Applying the principle of customer focus typically leads to:**

- Researching and understanding customer needs and expectations.
- Ensuring that the objectives of the organization are linked to customer needs and expectations.
- Communicating customer needs and expectations throughout the organization.
- Measuring customer satisfaction and acting on the results.
- Systematically managing customer relationships.
- Ensuring a balanced approach between satisfying customers and other interested parties (such as owners, employees, suppliers, financiers, local communities and society as a whole).

### **Principle 2: Leadership**

*Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.*

#### **Key benefits:**

- People will understand and be motivated towards the organization's goals and objectives.
- Activities are evaluated, aligned and implemented in a unified way.
- Miscommunication between levels of an organization will be minimized.

**Applying the principle of leadership typically leads to:**

- Considering the needs of all interested parties including customers, owners, employees, suppliers, financiers, local communities and society as a whole.
- Establishing a clear vision of the organization's future.
- Setting challenging goals and targets.
- Creating and sustaining shared values, fairness and ethical role models at all levels of the organization.
- Establishing trust and eliminating fear.
- Providing people with the required resources, training and freedom to act with responsibility and accountability.
- Inspiring, encouraging and recognizing people's contributions.

**Principle 3: Involvement of people**

*People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.*

**Key benefits:**

- Motivated, committed and involved people within the organization.
- Innovation and creativity in furthering the organization's objectives.
- People being accountable for their own performance.
- People eager to participate in and contribute to continual improvement.

**Applying the principle of involvement of people typically leads to:**

- People understanding the importance of their contribution and role in the organization.
- People identifying constraints to their performance.
- People accepting ownership of problems and their responsibility for solving them.
- People evaluating their performance against their personal goals and objectives.
- People actively seeking opportunities to enhance their competence, knowledge and experience.
- People freely sharing knowledge and experience.
- People openly discussing problems and issues.

#### **Principle 4: Process approach**

*A desired result is achieved more efficiently when activities and related resources are managed as a process.*

##### **Key benefits:**

- Lower costs and shorter cycle times through effective use of resources.
- Improved, consistent and predictable results.
- Focused and prioritized improvement opportunities.

##### **Applying the principle of process approach typically leads to:**

- Systematically defining the activities necessary to obtain a desired result.
- Establishing clear responsibility and accountability for managing key activities.
- Analyzing and measuring of the capability of key activities.
- Identifying the interfaces of key activities within and between the functions of the organization.
- Focusing on the factors such as resources, methods, and materials that will improve key activities of the organization.
- Evaluating risks, consequences and impacts of activities on customers, suppliers and other interested parties.

#### **Principle 5: System approach to management**

*Identifying, understanding and managing interrelated processes as a system, contributes to the organization's effectiveness and efficiency in achieving its objectives.*

##### **Key benefits:**

- Integration and alignment of the processes that will best achieve the desired results.
- Ability to focus effort on the key processes.
- Providing confidence to interested parties as to the consistency, effectiveness and efficiency of the organization.

##### **Applying the principle of system approach to management typically leads to:**

- Structuring a system to achieve the organization's objectives in the most effective and efficient way.
- Understanding the interdependencies between the processes of the system.
- Structured approaches that harmonize and integrate processes.

- Providing a better understanding of the roles and responsibilities necessary for achieving common objectives and thereby reducing cross-functional barriers.
- Understanding organizational capabilities and establishing resource constraints prior to action.
- Targeting and defining how specific activities within a system should operate.
- Continually improving the system through measurement and evaluation.

### **Principle 6: Continual improvement**

*Continual improvement of the organization's overall performance should be a permanent objective of the organization.*

#### **Key benefits:**

- Performance advantage through improved organizational capabilities.
- Alignment of improvement activities at all levels to an organization's strategic intent.
- Flexibility to react quickly to opportunities.

#### **Applying the principle of continual improvement typically leads to:**

- Employing a consistent organization-wide approach to continual improvement of the organization's performance.
- Providing people with training in the methods and tools of continual improvement.
- Making continual improvement of products, processes and systems an objective for every individual in the organization.
- Establishing goals to guide, and measures to track, continual improvement.
- Recognizing and acknowledging improvements.

### **Principle 7: Factual approach to decision making**

*Effective decisions are based on the analysis of data and information*

#### **Key benefits:**

- Informed decisions.
- An increased ability to demonstrate the effectiveness of past decisions through reference to factual records.
- Increased ability to review, challenge and change opinions and decisions.

**Applying the principle of factual approach to decision making typically leads to:**

- Ensuring that data and information are sufficiently accurate and reliable.
- Making data accessible to those who need it.
- Analyzing data and information using valid methods.
- Making decisions and taking action based on factual analysis, balanced with experience and intuition.
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**Principle 8: Mutually beneficial supplier relationships**

*An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value*

**Key benefits:**

- Increased ability to create value for both parties.
- Flexibility and speed of joint responses to changing market or customer needs and expectations.
- Optimization of costs and resources.

**Applying the principles of mutually beneficial supplier relationships typically leads to:**

- Establishing relationships that balance short-term gains with long-term considerations.
- Pooling of expertise and resources with partners.
- Identifying and selecting key suppliers.
- Clear and open communication.
- Sharing information and future plans.
- Establishing joint development and improvement activities.
- Inspiring, encouraging and recognizing improvements and achievements by suppliers.

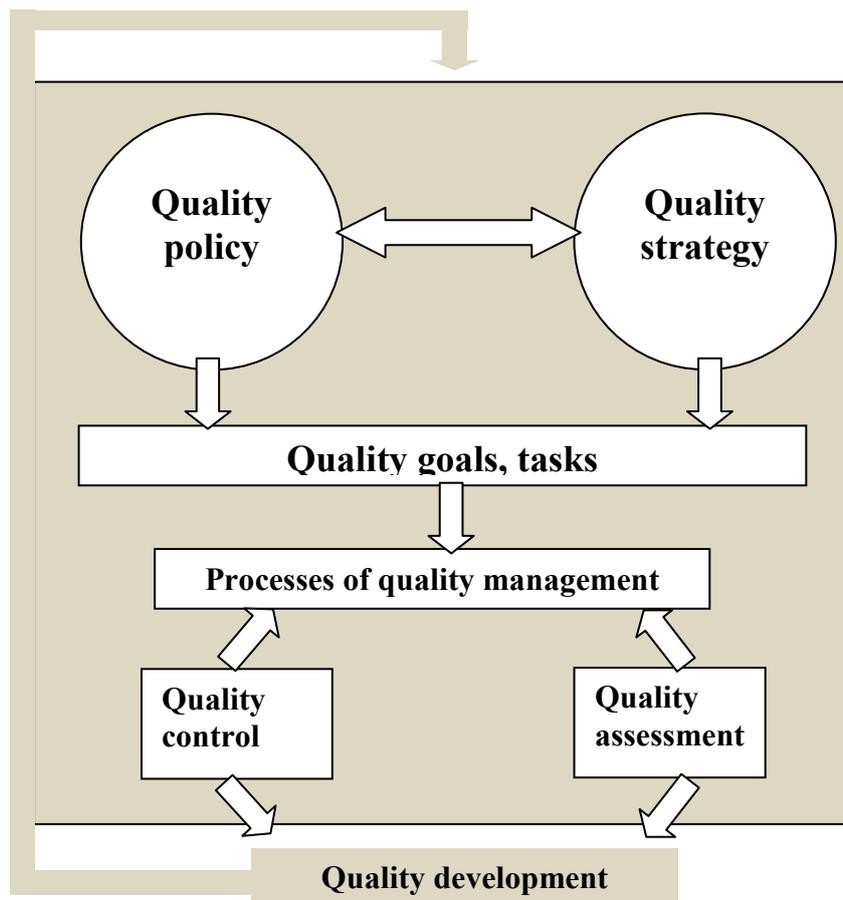
**2. Quality Management System**

**2.1. Quality Assurance Model**

Quality management system is a mechanism which coordinates and sustains activities necessary to ensure the adequacy of product, process or service features to certain requirements. It is a systematic, organised and constant attention to quality sustainability and improvement. The major philosophy of quality management is to

create awareness for prevention of potential problems in such a way that these problems are predicted and eliminated before they evolve.

Quality management encompasses continuous development that is directed towards the clear perception of the mission and setting of the goals. As a general concept, quality management covers all organization activities in order to ensure thorough performance of the quality policy, goals and commitments. In fact, it not only must cover the over-all in-process quality of the institution, but should also consider the quality systems of its suppliers and subcontractors, as well as those of the customers. Quality management system is a sum of interrelated elements for policy and goals setting as well as achievement of these goals, devoted to manage organization activity related to quality (Fig.1).



**Fig. 1.** Quality management

The goal of the QMS stresses the continuing improvement of quality. Most of the EU member States use the *Quality Assurance Model* for ongoing quality improvement as presented in the *Common Quality Assurance Framework (CQAF)* of Europe. The classical Deming Quality Improvement Cycle is adapted for VET in particular. The common framework (*CQAF*) has been developed in the implementation of the Copenhagen Process initiatives intended to improve VET quality on the pan-European level and to develop a common understanding of quality, thus facilitating the involvement of all stakeholders into quality assurance activities and good practice sharing.

The Model is applicable to both the national VET system and an individual training provider. The Model identifies 5 elements: *planning, implementation, assessment and evaluation, review and methodology*, underlying all phases of the quality cycle (Fig. 2). Quality criteria have been formulated on the system level and the provider level for each of the mentioned elements of the Model. Special emphasis is placed on the importance of stakeholder involvement.



**Fig. 2.**Quality Assurance Model (CQAF)

*Planning* relates to setting clear and measurable **goals, actions** for achieving these goals and **indicators** for determining the goal attainment level. Further, to allow the efficient implementation of quality management activities, respective input and output and outcome standards must be defined for the goals set.

*Implementation* covers a wide range of activities. Namely in this phase the planned output is created. On the provider level, implementation is directly related to training. This includes rational allocation of received financial resources; use of effective training methods, enabling and maximising a reduced drop-out rate; staff qualification upgrading, etc.

The *evaluation* phase involves the determination of the extent to which goals of a CVET programme or of a CVET institution have been achieved, identifying what the output and outcomes are on an individual level and on the system level. In general, the evaluation phase consists of two stages: the first one deals with data collection and discussion, followed by a decision on the state of quality, made on the basis of these data. It is this phase in particular that involves the identification of performance strengths and weaknesses, which later serve as guidelines for quality improvement.

*Review* completes the quality cycle. Its key purpose is to ensure that conclusions obtained in the evaluation phase are appropriately reflected in the follow-up process that will give a start to a new quality cycle. This is achieved by the wide discussion of evaluation results with all stakeholders.

## **2.2. The benefits of QMS**

The Quality Management System is considered as:

- a methodology for execution of control over the activities of an organization, on which Quality accomplishment depends and thus, on which satisfaction of clients' requirements depends.
- a certain method for controlling all organizational factors, which influence Quality.

A fully documented QMS will ensure that two important requirements are met:

- The customers' requirements – confidence in the ability of the organisation to deliver the desired product and service consistently meeting their needs and expectations. Customers play a significant role in defining requirements as inputs, and monitoring of customer satisfaction is

necessary to evaluate and validate whether customer requirements have been met.

- The organization's requirements – both internally and externally, and at an optimum cost with efficient use of the available resources – materials, human, technology and information.

These requirements can only be truly met if objective evidence is provided, in the form of information and data, to support the system activities, from the ultimate supplier to the ultimate customer. A QMS enables an organization to achieve the goals and objectives set out in its policy and strategy. It provides consistency and satisfaction in terms of methods, materials, equipment, etc, and interacts with all activities of the organization, beginning with the identification of customer requirements and ending with their satisfaction, at every transaction interface.

Organizations that have implemented and certified a quality management system maintain open relations with their customers. Considering the field of education and training, the importance of managing quality takes into consideration a complex of issues:

- managing quality proves the engagement for meeting requirements and expectations of partners, clients and beneficiaries and demonstrates attentiveness to customers' needs;
- managing quality provides a framework for constant improvement of the efficiency and objectives of educational systems;
- quality management systems make available to organizations toolkits for planning, coordination and management;
- quality management ensures clear and documented processes which saves time and money;
- effective functioning of quality management systems increases labour productivity and facilitates human resources development;
- implementation and functioning of quality management systems increases attractiveness and provides a better image of the organization in its relations with partners and clients, and strengthens its competitiveness on the market of educational and training services;

- certification of quality management systems provides organizations with national and international recognition and generates more credibility and reliability with regard to institutional services;
- quality management systems provide for efficiency signals for the functioning of the organization both for entrepreneurs and workers;
- quality management systems guarantee that educational and training organizations develop relevant, efficient and effective training processes;
- quality-managed institutions represent a social guarantee to the efficiency of the public expenditure in training.

Ensuring effective quality management in education and training contributes to modernizing education and training systems, improving the effectiveness of training, improving the interrelationship of education, training and employment, building bridges between formal, non-formal and informal learning and expanding the awarding of qualifications on the basis of experience acquired. Positive results are efficiency, transparency and confidence in education and training. Furthermore quality management allows the measurement of success and the identification of areas for improvement in respect of the implementation of the work programme of the framework network.

### 2.3. Variety of Quality Management Systems

There are various systems of quality management: some of them have the characteristics of strict bureaucratic structure, others are liberal and rely on social organisation, autonomy, individual freedom, and responsibility.

Some quality management systems most often used in the system of education are presented in the table below.

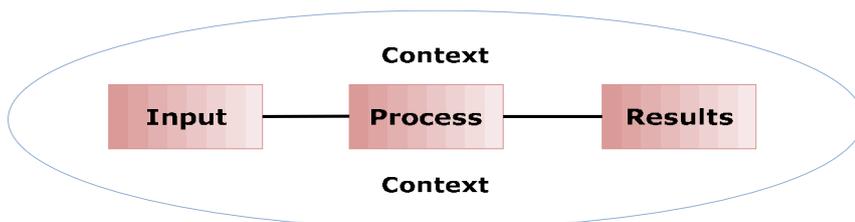
<i>TQM (Total Quality Management)</i>	Emphasises commitment of all staff members to constantly improve quality and its standards and satisfy customers. Improvement is based on assessment outcomes and depends on the customer's understanding of quality.
<i>ISO-9000</i>	It is a method, based on documentation and quality assessment, with regard to customer satisfaction. In other words, products and services are created according to the set

	standards which correspond to customer needs and requirements.
<i>EQMF (European Quality Management Fund)</i>	Systematic and regular review of organization’s activities and outcomes. It is a very simple principle which consists of systematic assessment, followed by correction procedures.

There doesn’t exist an unique QMS that would be helpful for all organizations. There are no identical VET institutions, thus requirements of QMS should be applied to a particular situation. CVET providers are free to decide how the quality management procedures will be planned, developed and improved. Organization may develop its own QMS or adapt and use the developed one or integrate some of these systems. It is important for CVET institution to have a QMS that could satisfy needs of organization and these of the customers and the society at the highest possible degree.

**2.4. Constituents of Quality Management**

In the applied quality management models (EFQM, ISO, etc.), it is accepted that in assessing quality the *input* data, *process* parameters and achieved *results* need to be taken into consideration. While some of these constituents may be given either more or less attention, quality depends on all three in any case. This results in a complexity of quality assurance. In the case of continuous vocational education and training, it is even more complex. This is where the needs of the economy, the individual and the society come together. These needs are related to the context. Therefore, CVET quality management must take into consideration the context, because it may affect both the input, the process and the results (Fig. 3).



**Fig. 3.** Quality management constituents

It is difficult to give an unambiguous definition to *the context constituent* because it is closely related to the environment that manifests itself in a variety of ways. In training quality assessment, this constituent must be taken into consideration separately in each specific case. For example, analogous data may have to be assessed differently when examining both the popular and not so popular, but important to the economy, programmes, regular programmes and programmes for the disabled, etc. Moreover, people coming to learn may have a different level of preparation, their teaching may have to be organised in a different way, the same level of effort put by the provider may result in different learning achievements and employment indicators. Other important contextual factors also include the legal status of a provider – whether it is State-owned or a non-state owned institution; its training designation – whether it provides training to young people or adults; training/learning location – whether training is provided in a major city or in the periphery; diversity of programmes offered - whether specialised programmes or a wide range of programmes are offered, etc. The context is determined not only by local or national initiatives, but also by EU initiatives (e.g., increased labour mobility).

*The input constituent* is more related to goal setting, training development strategy and planning. It covers the identification of training needs and qualification selection, identification of competencies, training content selection; supply with material and human resources; and allocation of financial resources. The management of continuous vocational education and training offered, including the use of social dialogue for dealing with continuous vocational education and training problems, should also be included here.

*The process constituent* is related to actions aimed at efficient achievement of the goals set. The actions to be mentioned first are the following: learner support; application of teaching/learning methods in class; staff qualification upgrading; training process quality assurance and stakeholder involvement into this process, etc.

*The results' constituent* reflects the implementation of goals, the match of achieved outputs and outcomes to the planned ones. Attention is paid to satisfying stakeholder expectations: the proportion of learners with awarded qualification, their

feedback about learning and success in further career progression; employer feedback about the competencies of graduates; the all-round impact of the training on the community and the environment; positive emotions of the provider's staff and motivation to continue with their work, etc.

### 3. Implementation of QMS

#### 3.1. Stages of Implementation of QMS

In spite of which QMS will be selected, the stages of its implementation are very similar. To have successfully functioning QMS it is essential to pass the following stages:

		<b>Implementation</b>
	<b>Documentation</b>	
<b>Planning</b>		

#### 1. Quality System Planning

Quality system planning is the first stage in setting up a quality management system within the institution. One of the first and most important steps in development of QMS is the setting of organization quality policy and goals. Quality goals should be clearly formulated and comprehensible to all organization community. Otherwise, development of QMS will become a formal, helpless and even forced process. Quality system planning also pertains to the identification and acquisition of resources, and manpower needed to define and achieve the required quality of the institution. If the organization is to be certified to ISO 9000, then quality planning should ensure that the organization's quality system will eventually conform to all the requirements of the ISO9000 elements.

Quality planning should also include compatibility among the various aspects of the organization's operations from start to finish. It should also include definition of product or service and process specifications. Identification of the necessary monitors as well as inspection/verification stations at suitable points along the production process

should also be addressed as early as quality planning. Measurement capability requirements must likewise be defined during quality planning.

## **II. Quality System Documentation**

Once the quality system plan of the organization has been completed, the quality system must undergo full documentation that comprehends the complexity of the production process, the personnel skills required for production, and the training requirements to achieve these skills. Quality system documentation (Quality manual, quality plans, procedures) allows determine the responsibilities, authorization, tasks, etc. The main goals of quality system documentation are the following:

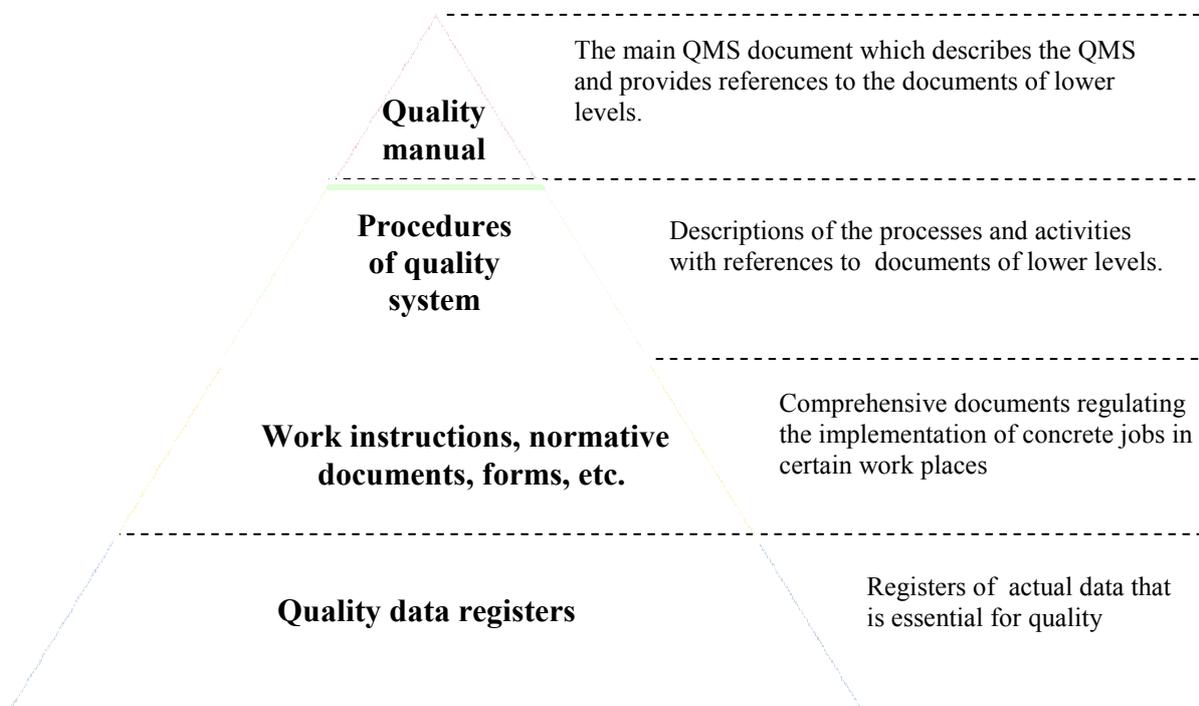
- To describe the QMS of CVET institution;
- To allot duties and responsibility;
- To ensure planning of processes;
- To develop bases for continuous improvement of QMS;
- To provide bases for evaluation of QMS.

The most important QMS documents include (Fig.4):

- Quality policy and goals documents in which the strategy of QMS is reflected.
- Quality manual. It is the main document of QMS in which the concise description of QMS is provided.
- Written procedures, qualification requirements, technical instructions and/or other documents setting requirements and providing information on how to carry out certain activity or particular procedures. Documented procedures answer the questions: what is being done, how it is being done, who is responsible for what, who is responsible for control.
- External documents (legislation, standards, acts, decrees, etc.).
- Recommendations – the documents in which the suggestions (ex. audit conclusions) for improvement of QMS are reported.

- Quality registers. These documents report factual data about quality system running.

There are no requirements or needs to develop all the mentioned documents. Good practice is to use documents that CVET institution already has (ex. strategy, activity plans, qualification requirements, etc.). At the minimum, quality system documentation should include the quality manual in which the functioning QMS is clearly and comprehensibly described. It is essential to determine and present publicly the quality goals so that external as well as internal users could see them.



**Fig. 4.** Hierarchical pyramid of Quality system documentation

### III. Quality System Implementation

The last stage of setting up a quality system is, well, its implementation. By the time this stage is reached, the over-all quality system should have been defined and documented, and supported by product- or process-specific quality plans. Implementation should involve everybody in the institution - the management for enforcing, reviewing, and continuously improving the quality system, and the personnel

to comply with the quality system to achieve the organization quality objectives. *Quality audits* must be conducted regularly to ensure that the actual implementation of the quality system is in full conformance with the quality system documentation.

#### 4. Practical recommendations for CVET providers for implementation QMS

The adoption of a QMS needs to be a strategic decision of an organization, and is influenced by varying needs, objectives, the products/services provided, the processes employed and the size and structure of the organization. A QMS must ensure that the products/services conform to customer needs and expectations, and the objectives of the organization. Issues to be considered when setting up a QMS include:

<p><b>Design</b>  <b>Build</b>  <b>Control</b>  <b>Deployment</b>  <b>Measurement</b>  <b>Review</b>  <b>Improvement</b></p>
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**Design** and **build** includes the structure of the quality management system, the process and its implementation. Its design must be led by senior managers to suit the needs of the organization, and this is ideally done using a framework to lead the thinking. Design of the QMS should come from determining the organization's core processes and well-defined goals and strategies, and be linked to the needs of one or more stakeholders.

The process for designing and building the QMS must also be clear, with the quality function playing a key role, but involvement and buy-in to the system must also come from all other functions.

**Deployment** and implementation is best achieved using process packages, where each core process is broken down into sub-processes, and described by a combination of documentation, education, training, tools, systems and metrics. Electronic deployment via Intranets is increasingly being used.

**Control** of the QMS will depend on the size and complexity of the organisation. ISO is a site-based system, and local audits and reviews are essential even if these are supplemented by central reviews. Local control, where possible, is effective, and good practice is found where key stakeholders are documented within the process and where the process owner is allowed to control all of the process. Ideally, process owners/operators are involved in writing procedures.

**Measurement** is carried out to determine the effectiveness and efficiency of each process towards attaining its objectives. It should include the contribution of the QMS to the organization's goals; this could be achieved by measuring the following:

- Policy definition completeness
- Reflection of policies
- Deployment
- Usage
- Whether staff find the QMS helpful in their work
- Other...

A form of scorecard deployed through the organization down to individual objective level can be employed, and the setting of targets at all levels is vital.

**Review** of the effectiveness, efficiency and capability of a QMS is vital, and the outcome of these reviews should be communicated to all employees. Reviewing and monitoring should be conducted whether or not improvement activities have achieved their expected outcomes.

**Improvement** should follow as a result of the review process, with the aim of seeking internal best practice. It is part of the overall improvement activities and an integral part of managing change within the organization.

### ***Practical steps for QMS implementation***

#### ***Step 1a***

Management Commitment (Responsibility - Top Management.)

The top manager (general director, rector, president, etc.) shall provide a written statement as evidence of his/her commitment to the development and implementation of the quality management systems program, and to the continual improvement and effectiveness of the system. The commitment should include:

- (a) communicating to the organization the importance of meeting customer, statutory and regulatory requirements,
- (b) establishing a quality policy,
- (c) ensuring that quality objectives are established,
- (d) conducting management reviews, and
- (e) ensuring the availability of resources.

### *Step 1b*

#### Appoint a Quality Manager

The general director, rector, president, etc.. may opt to delegate the general management of all quality related activities to a quality manager (who will keep the general director, rector, president, etc.. continually up-to-date on all activities affecting the quality system), or he/she may choose to maintain the quality management position his/herself. Either way, the general director, rector, president, etc.. is ultimately responsible for the quality management systems program.

### *Step 2*

#### Organizational Structure (Responsibility by Quality Manager.)

Ensure that a suitable organizational Structure (Chain-of-Command) is in place. This is essential for an efficient and effective Quality Management Systems Program to function.

Note: In arranging the organizational structure, it is important for management to recognize and reward employees for their dedication, hard work, work experience and education.

### *Step 3*

#### Awareness Training (Overseen by the Quality Manager)

The quality manager, or his/her qualified representative shall conduct awareness training/seminars with all personnel/employees to provide them with general knowledge of what is required for a quality system.

#### *Step 4*

Internal Quality Assessment (Conducted by qualified company personnel.)

Conduct an initial quality assessment to establish a baseline. The internal audit is a form of self assessment.

#### *Step 5*

Develop a Quality Manual (Involving input from key personnel.).

Develop a Quality Manual that identifies the management and the representative responsible for all applicable activities. The Quality Manual and related Procedures should include:

- (a) Quality Procedures,
- (b) Control Plans, and
- (c) Work Instructions.

#### *Step 6*

Special Processes (Involving input from key personnel.).

Prepare the organization to meet any unique process control requirements (Special Processes).

Note: A special process relates to any type of activity that cannot be checked/inspected for deficiencies after that particular manufacturing stage has been completed.

#### *Step 7*

Quality Management Systems Training In-depth (Overseen by the Quality Manager)

Ensure adequate and specific training of personnel regarding:

- (a) Quality Manual,
- (b) Procedures,
- (c) Work Instructions,
- (d) Special Processes,
- (e) Control Plans.

*Step 8*

Ongoing Quality Surveillance (Conduct by qualified company personnel.).

Ongoing Surveillance of the quality program should be conducted to ensure compliance with contractual and regulatory requirements.

*Step 9*

Internal Quality Audit In-depth (Conduct by qualified company personnel.)

An Internal audit of the Quality Program shall ensure compliance of the new/current implemented Quality Program.

Note: The internal audit should be handed (if possible) by personnel that do have direct involvement with the activity being audited.

*Step 10*

Corrective Action (Conducted by the internal quality auditor.)

Resolve Corrective Action findings resulting from the internal audit.

*Step 11*

Conduct the Complete/General Audit (Conducted by a non-company/independent Quality Auditor)

Have a third party with the appropriate qualifications Audit your Quality System to ensure the effectiveness and suitability of the Quality Management Systems Program.

The Audit :

- (a) conduct audit interviews.
- (b) evaluate objective evidence (using an audit checklist).
- (c) write and communicate QMS audit report/findings.
- (d) indicate corrective action (if required).
- (e) continual actions.

*Step 12*

Improve the Program:

Review the effectiveness and suitability of the Quality Management Systems Program in order to promote the principles of continual improvement.

All managers, not just the staff in the "quality department", need to be fully committed to operating an effective quality management system for all the people within the organization. The system must be planned to be effective and achieve its objectives in an uncomplicated way. It should also not be static, but be flexible, to enable constant seeking of improvements.

## **5. Encouraging quality development – recommendations for policy-makers**

A system should be created for promoting high quality training and innovations intended for training improvement.

Firstly, CVET institutions should be encouraged by providing financial support for the implementation of quality assurance mechanisms. Public authorities should also widely disseminate existing financial opportunities for vocational education and training institutions for the implementation of QMS.

Secondly, institutions that implement quality mechanisms should be given priority in awarding state orders for training. This will raise the competition among education and training institutions and will consequently improve the quality of service.

Thirdly, every year the Ministry of Education and Science or other responsible institution could announce which innovations intended for the development of CVET quality are going to be given priority and provide funding to support the implementation of innovations. Thus quality will be raised and further promoted as a topical issue of great significance.

Fourthly, support should be provided to other initiatives that influence CVET quality, for example, skill competitions.

Fifthly, all stakeholders should be encouraged to get involved into quality management processes. On the one hand, public institutions could organise public seminars on quality. On the other hand, the most powerful way to promote the issue of quality is to identify existing networks of education and training organisations and

disseminate the topic among those. This would enhance the transparency and publicity of the quality assurance processes.

Sixthly, representatives of all stakeholders (employers, CVET providers, learners, etc.) could form an Advisory Body which could analyse data about the state of CVET quality, make and discuss proposals regarding activities for CVET quality improvement, advice the CVET providers regarding activities in the area of CVET quality assurance.

Finally, public institutions and VET providers could use QVETIS product as implementation and monitoring tool for quality assurance. The product is indeed a suitable online platform since it offers a training tool, self-evaluation possibilities, general procedures to develop further a QMS, monitoring opportunity and vast information on quality issues. The platform has all the advantages of an e-learning tool, which makes it even more attractive to users.