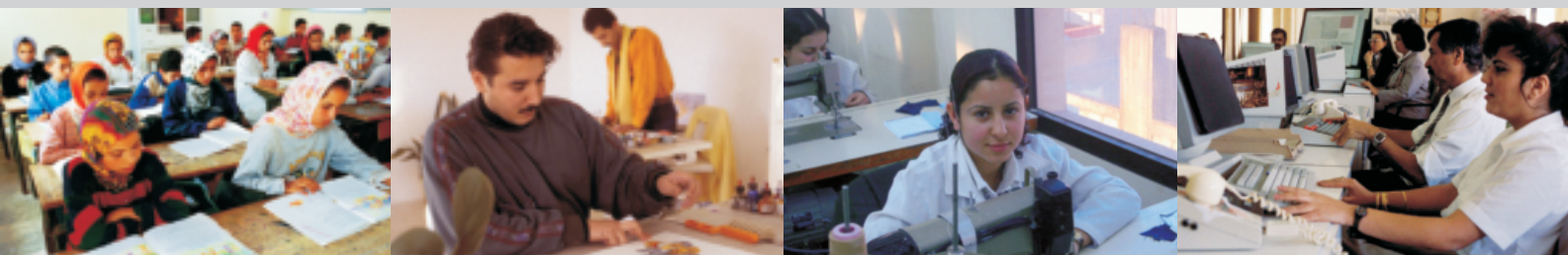# MEDA-ETE
regional project

Thematic Studies

Quality and quality assurance in technical and vocational education and training

EDUCATION AND TRAINING FOR EMPLOYMENT (ETE) IS AN EU FUNDED INITIATIVE IMPLEMENTED BY THE EUROPEAN TRAINING FOUNDATION (ETF). ITS OBJECTIVE IS TO SUPPORT THE MEDITERRANEAN PARTNERS IN THE DESIGN AND IMPLEMENTATION OF RELEVANT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) POLICIES THAT CAN CONTRIBUTE TO THE PROMOTION OF EMPLOYMENT THROUGH A REGIONAL APPROACH.

Thematic Studies

Quality and quality assurance in technical and vocational education and training

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PREFACE

In many countries in both the Mediterranean region[1] and the European Union (EU), interest in the quality of, and improvements to, technical and vocational education and training (TVET) systems has increased progressively in recent years. The main reason underlying this interest is a growing awareness of the key role played by education and training in economic competitiveness and social inclusion. Broad-based education systems, workforces that are upskilled on a continuing basis and lifelong learning are in great demand as a consequence of the dynamics of globalisation.

In EU countries, quality assurance plays a decisive role in modernising education and training systems and in improving their performance and attractiveness; these same overall policy objectives are widely shared by the Mediterranean countries. In both regions, education and training systems are being modernised and transformed in terms of more effective management systems, and quality and quality assurance are the means for steering this transformation process.

There is no general definition of quality in technical and vocational education and training (TVET), as the concept of quality both depends on context and only becomes meaningful in relation to the achievement of pre-defined objectives. Quality assurance is a technical toolbox that can help define quality objectives, criteria and standards, and which, furthermore, can verify that progress is being made in the right direction. Thus, quality and quality assurance can only be part of a general framework for TVET reform.

This report, written by Prof. Erwin Seyfried, has two main sections providing a general overview of the political objectives for TVET reform. The first part describes achievements in the European Union, whereas the second part analyses the current state of reform in the Mediterranean countries. Nevertheless, the main focus of this report is quality and quality assurance in TVET; in other words, the intention is not to provide a systematic analytical overview of TVET systems in EU member states and Mediterranean countries. The systems view is limited to the more urgent challenges and main features associated with quality and quality assurance in TVET, with the main aim of the report ultimately being to examine common challenges and potential synergies for common actions in TVET, by the Mediterranean countries themselves and between the Mediterranean region and the European Union.

We would like to thank all those who have contributed their time and efforts in providing the necessary information for this report. In particular we are grateful for the overwhelming hospitality of all the people we met during study visits to countries in the Mediterranean region.

Jean-Raymond Masson and Mounir Baati, ETF

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1 In the context of this publication, the term 'Mediterranean' refers to the 10 Mediterranean Partners – Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia, Turkey, and the West Bank and Gaza Strip – that are part of the Euro-Mediterranean Partnership.

CONTENTS

1. OVERVIEW OF EU POLICY AND GOALS

1.1 Introduction

Given overall challenges in regard to economic competitiveness, social inclusion and the need for lifelong learning, the Lisbon Strategy (March 2000) formulated a goal of transforming Europe into a knowledge-based society. A key role was assigned to vocational education and training (VET), particularly in terms of improving quality, broadening access and opening up European education and training systems to the wider world. The Barcelona European Council (2002) set the goal of making Europe's education and training systems a world quality reference by 2010, thereby placing the quality issue at the heart of the European policy agenda for education and training, along with political priorities aimed at enhancing the employability of the workforce, improving the match between training supply and demand and improving access to education and training.

From a practical point of view, the Council Resolution (Council of the European Union, 2003) adopted in Copenhagen and the Declaration of the European Ministers of Vocational Education and Training on the Promotion of Enhanced European Cooperation in VET (Copenhagen Declaration, November 2002) were fundamental steps forward. These decisions, which identified quality in VET as a priority topic for European cooperation, provided the initial impetus for the Copenhagen Process, a strategy that aims to improve the performance, quality and attractiveness of VET by promoting the development of a single framework for the transparency of qualifications and competences and a system for VET credit transfers, and – last but not least – raising the subject of quality assurance. Overall, the priorities of the Copenhagen process aim at promoting mutual trust in training provision and transparency and recognition of competences and qualifications, and so establish a basis for increasing mobility of both workers and trainees in the European Union.

Quality assurance plays a decisive role with regard to the objective of modernising European VET systems and improving their performance and attractiveness. In order to achieve better value for money, VET systems need to be more responsive to changing labour market demands, as this would enhance the effectiveness of VET outcomes in terms of improving the match between demand and supply of education and training. There is also a need to achieve better levels of employability for the workforce and to improve access to training, especially for vulnerable groups in the labour market.

These political priorities were the guiding principles for work implemented in the last few years at European level, starting with a European Quality Forum and leading to the creation of a technical working group, which was set up to implement the Copenhagen Process. Both groups consisted of representatives from EU member states and other European countries, with social partners and the European Commission working together on a voluntary basis in a spirit of partnership.

In accordance with the general aims mentioned above, European VET systems are undergoing a process of modernisation and transformation aimed at ensuring a more effective management system. This transformation is characterised by a change in management, both at the systems and provider level, away from input steering and control and towards output orientation and recognition of achievements.

The political objectives for the development of VET systems have been met in many member states and other countries through devolution policies designed to achieve greater involvement of regional and local actors in policy delivery. This has resulted in a new area of work: the setting up of frameworks for quality assurance at the national level that can guide and direct VET providers. A parallel need also arises in terms of encouraging bottom-up processes by VET providers; in order for VET systems to be able to change and improve quality, the ownership of the process must belong to the local actors themselves and to the local and regional networks of stakeholders of which they are part. In fact, it can be observed that, all over Europe, there is increased recognition of the demands of VET customers (trainees and employers) and a continuous trend towards the involvement of all relevant stakeholders in the development of VET systems.

1.2 The European approach to VET quality assurance

In May 2004, the heads of national governments in the European Union (the European Council) adopted the Conclusions on Quality Assurance in Vocational Education and Training (Council of the European Union, 2004), which were an outcome of cooperative work between the European Commission, member states, social partners, the European Economic Area-European Free Trade Association and the candidate countries for EU accession. It was recommended that priority be given to the definition of a common quality assurance framework in the context of the implementation of the Copenhagen Process. According to the Council's conclusions, this common framework should include the following four integrated elements:

- an appropriate model aimed at facilitating planning, evaluation and review of systems at the relevant levels in the member states;
- an appropriate methodology for the review of systems (e.g. self-assessment) to enable member states at the appropriate level to be self-critical and to strive for continued improvements;
- monitoring as appropriate at the national or regional level, possibly combined with voluntary peer review;
- measurement tools at the national or regional level to enable member states and VET providers to monitor and evaluate their own systems and organisations.

This common framework was intended to contribute to increasing transparency and consistency between member state policy initiatives in the field of VET, while fully respecting their responsibility for the development of their own systems.

Although common and convergent developmental trends exist all over Europe, the existing landscape in VET is nevertheless very diverse. There is still a need to distinguish between initial vocational training and continuing and adult training, as different pre-conditions exist in these two areas, and despite the fact that, from a lifelong learning perspective, there is a need to bring both sectors of VET closer together. There are both public and private providers in the initial and continuing vocational training sectors, and,

depending on the difference in size between member states, there are also hundreds or thousands of VET providers ranging in size from small to large. Finally, there are also thousands of different VET programmes based on different standards and leading to a broad variety of qualifications.

This diversity of VET systems in Europe is both a rich foundation on which to build and a challenge when it comes to defining common elements for a European framework for quality assurance. The need for a flexible framework, which can be applied under different pre-conditions, is particularly important in supporting lifelong learning in favour of the learner and thus increasing permeability between different VET sectors.

Against this background and guided by such principles, the agenda of the Copenhagen Process is being implemented by a technical working group made up of representatives of EU member states and other countries, social partners and the European Commission. Further support for this working group has been provided by the European Centre for the Development of Vocational Training (Cedefop) and the European Training Foundation (ETF).

1.2.1 Three pillars

Based on clear and continuously shaped political objectives, pushed by various resources from the relevant European institutions and driven by voluntary cooperation between European countries and social partners, the main achievements of the European approach to quality in VET nowadays consists of three complementary pillars, described below.

A systematic framework for quality assurance

Within the context of EU cooperation, the fundamentals of the Common Quality Assurance Framework, constituting a systematic approach to quality assurance that supports practitioners and policymakers in improving the quality of training provision, were devised by stocktaking from existing experience and good practice examples in the participating countries (Annex 2). As part of this framework, a reference set of quality indicators was developed that reflected the policy objectives for EU VET systems (Annex 3). To support the implementation of the Common Quality Assurance Framework, a number of additional tools were created, such as a guide for self-assessment by VET providers. This paper will mainly provide details about the Common Quality Assurance Framework.

A European network for sustainable cooperation

In October 2005 the European Commission launched a European Network for Quality Assurance in VET (ENQA-VET) to enable sustainable cooperation in the field of quality assurance across member states and to ensure effective progress towards achieving the Lisbon objectives and the targets set by the Barcelona Council. The network aims to provide a cooperative platform for the structured exchange of information and experience, debate, mutual learning, consensus building and maximising output and results of EU cooperation, including from a range of European policy programmes in the field of VET (e.g. the Leonardo da Vinci programme). The network also serves as a bridge for linking to higher education, for which a similar quality assurance network was set up in the context of the Bologna Process. The European network is anchored in national quality assurance reference points, established to ensure follow-up to EU initiatives and

dissemination of information. The designation of national reference points is voluntary and the arrangements vary according to national contexts: in some countries a wide-ranging network of various stakeholders has been created whereas in other countries this role has been taken over by VET agencies with close links to the ministries.

A virtual community

By creating a virtual community for quality assurance in VET, Cedefop has made an important contribution to ensuring the transparency of the process and the results of cooperation at the EU level. The virtual community, which can be accessed by everyone, has not only promoted communication within the technical working group, but has, above all, connected with a broader public audience to which it has communicated the results achieved[2]. Additionally, the virtual community functions as a platform for collecting and disseminating national and sectoral experiences with quality assurance in VET, and also acts as a dissemination and storage point for ENQA-VET information.

1.2.2   Recent developments

To further boost European VET quality endeavours, the European Commission recently submitted a draft working paper to launch a consultation process in regard to a recommendation of the European Parliament and the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training (European Commission, 2007).The recommendation is to encourage member states to make use of the common framework, its principles, quality criteria and reference indicators as a tool to further improve, reform and develop national VET systems. Other plans are to motivate member states to participate in the ENQA-VET and to enhance the role of this network in contributing to VET policy development through concrete proposals and initiatives, mainly in terms of further developing common principles, guidelines and tools.

In order to further implement the Lisbon Programme, additional initiatives have been undertaken by the European Commission in various policy fields. Thus, a recommendation of the European Parliament and of the Council of the European Union on the establishment of a European Qualifications Framework for Lifelong Learning has been made by the Commission (European Commission, 2006). In order to link the different developments with each other, this recommendation takes into account the common principles for quality assurance in education and training (Annex 1) adopted by a joint VET and higher education conference (held in Graz, Austria, in 2006) and aimed at linking quality developments in both areas.

In the two years since it was launched, the ENQA-VET has gained ground both in terms of broadening membership and profiling its activities, with 23 EU countries, representatives from European social partner organisations, the European Commission, Cedefop and the ETF participating in the network. Based on commonly agreed priority areas for further action, three thematic groups have been established by the network to fulfil its mandate. One group is on instruments to ensure and develop the quality of VET training provision, the second group aims to operationalise the existing reference set of quality indicators, and the third group will strengthen links to other developments at the European level, particularly in higher education and in regard to the European

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2   A description of the starting points, objectives and achievements of European cooperation on quality assurance in VET is available on the Cedefop Quality Assurance in VET website: http://communities.trainingvillage.gr/quality

Qualifications Framework and the European Credit System for Vocational Education and Training.

Further activities of the network have centred on the organisation of Cedefop-supported peer-learning visits to several countries, aimed at addressing topics such as:

- the role of social partners in matching demand and supply in France;
- the use of self-assessment in VET in England;
- the role of accreditation in Italy;
- the use of the Common Quality Assurance Framework at the VET system level in Denmark;
- the quality of training in enterprises and the links between training in schools and in enterprises in Norway;
- the use of indicators to improve the quality of VET both at the systems and provider levels in Finland;
- the quality of training in enterprises and the quality of cooperation between VET schools and enterprises in Germany.

1.3 European achievements and national approaches to quality assurance in VET

In this section the progress that has been made with the implementation of a European approach to quality assurance will be described, along with the four elements of the Common Quality Assurance Framework which have been mentioned above, namely, the model, methodology, monitoring and measurement.

This section will also refer to relevant progress made at member state level, although merely by way of illustration, as it will not go into detail on national models. It will, however, refer to some typical elements and processes in national approaches towards quality assurance.

1.3.1 The Common Quality Assurance Framework model

European achievements

At the European level, the Common Quality Assurance Framework model was developed that took into consideration relevant experiences and practices in the member states as well as key elements from existing quality assurance models (such as International Organisation for Standardisation (ISO) models or the European Foundation for Quality Management (EFQM) model. Development of the Common Quality Assurance Framework was based on information provided by national representatives about different approaches used at the national level to improve the quality of VET systems, and, building on this information, good practice examples were identified. A transversal analysis of this information and subsequent debate at the European level enabled common key elements underpinning quality assurance and improvement at the country level to be identified, despite the variety of approaches. As a result of this process a model was developed which will ensure and improve quality, regardless of the context, system or type of provider.

In order to avoid the risk of creating an overly complex model, the existing models were reduced to their common denominator. The analysis thus resulted in a model that can be used as a strategic management tool not only in the VET field but in many other fields, too, where adaptation to change and improvement are a permanent challenge. Because of its general character this model can be applied both at the level of the VET system and the VET providers – and not merely as a mechanical tool but as an inspiration for stakeholders at both levels in their own ambitions towards quality.

What does this model look like? It is a circular model that comprises both the measurement of results according to pre-defined goals and which shows the resulting change in management (Figure 1).

The Common Quality Assurance Framework model consists of the following steps:

- planning,
- implementation,
- assessment/evaluation,
- change procedures.

Figure 1: The Common Quality Assurance Framework
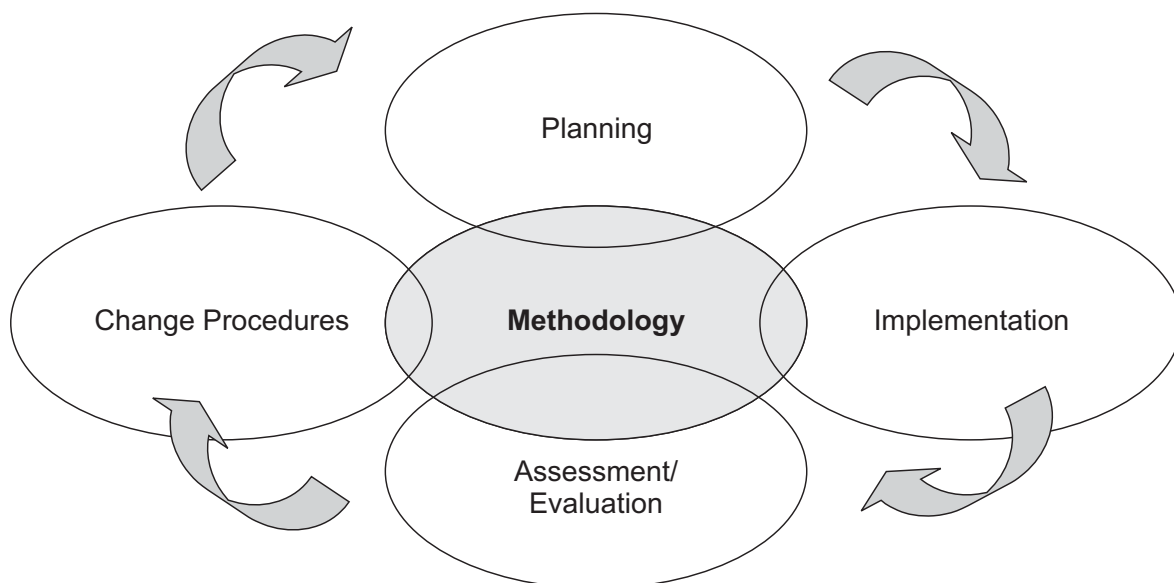
Those methodological aspects that are used in the individual steps are regarded as overarching elements covering all of them. For example, transparency of processes and results and the inclusion of stakeholders in relevant discussions and decision-making processes are regarded as general principles to be taken into consideration at each step.

Quality is always linked to specific policy, institutional or individual objectives to be achieved. Therefore, the first step in the model – planning – refers to setting clear and measurable objectives for the policies, procedures and tasks to be fulfilled. Objectives should be formulated in clearly understandable terms and, as far as possible, be combined with definitions of measurable indicators, as this allows for the achievement of the planned objectives to be checked at later stages.

Implementation relates to the rules within which the formulated goals are to be achieved. This can happen in various ways: via the creation of national common guidelines for VET providers, setting appropriate rules, criteria and standards corresponding to the objectives, and setting the corresponding financial incentives.

Assessment/evaluation refers to the collection and evaluation of data on processes and outputs at both the learner and organisational levels. It is important for this data to correspond to both the pre-defined objectives and the indicators for these objectives and so allow the degree of achievement to be measured. The more this relationship is taken into consideration, the more the collation of data will be focused on the information needed to assess the quality of training provision. Assessment is the activity which is undertaken to measure performance and status. If it is carried out periodically to assess progress towards objectives, then it becomes an evaluation, as the results are 'valued' by relating them to the objectives.

The last step in the quality circle consists of comparing the results achieved with the original objectives, analysing the strengths and weaknesses of the system, identifying the lessons to be learned and drawing the necessary conclusions for a revision of planning and other quality assurance steps.

A major challenge in this process consists of making the results of the quality assessment available to the public and also engaging the relevant stakeholders in an open discussion about the factors that have led to specific results and aimed at identifying the potential for future improvements[3].

Developments in European countries

In recent years, many European countries have developed a national framework for quality assurance, and the Common Quality Assurance Framework model developed at the European level has often served as a guide when developing national approaches to the modernisation of the VET systems. Thus, Denmark, Finland, Norway and Romania explicitly refer to the European framework in their own national quality assurance systems. In other countries, e.g. Austria, the European framework had added value by contributing to a common understanding of quality at the national level. In Finland a recently conducted survey on the implementation of quality approaches in the country showed that 80% of VET providers were aware of the principles of the European Quality Assurance Framework. However, although no explicit references to the Common Quality Assurance Framework are made in other countries, e.g. the United Kingdom or Ireland, the national model still agrees in many respects with the most important principles of the European framework. Italy, too, has approved a quality charter for initial vocational training that takes the principles of the Common Quality Assurance Framework into account.

From a European perspective, great importance is attached to questions such as the following: To what extent are the political priorities for the achievement of the Lisbon goals represented in national quality assurance systems? What role is given to the attempt to intensify relations between VET systems and the labour market, to improve the

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3   Further information on the debate on the Common Quality Assurance Framework is available on the Cedefop Quality Assurance in VET website:
     http://communities.trainingvillage.gr/quality

match between supply and demand, to increase the employability of the workforce and to improve access to vocational training, in particular for vulnerable groups?

Further quality criteria and indicative descriptors for developing and implementing the Common Quality Assurance Framework at different levels are described in Annex 2. It should be noted, however, that the criteria and descriptors listed are merely examples of how to work with the Common Quality Assurance Framework. Before use, they need to be contextualised and operationalised according to national and/or institutional pre-conditions.

1.3.2 The Common Quality Assurance Framework methodology

European achievements

The Common Quality Assurance Framework methodology first contains a transversal dimension that is present in all the elements of the model. It includes decisions on mechanisms for the participation of stakeholders, indicators, methods and tools for data collection and measurement as well as for planning, implementation and the management of change.

At the European level, self-assessment is seen as the most effective methodological tool for quality assurance at the VET provider level. Self-assessment is particularly useful in supporting bottom-up processes that improve the quality of training provision. Based on experiences with self-assessment in member states, a European guide for self-assessment was developed and made available in several languages via the virtual community on quality assurance in VET operated by Cedefop (Ravnmark, 2003).

Like the Common Quality Assurance Framework, the self-assessment guide takes stock of core elements in self-assessment approaches in different countries and also takes into consideration the basic elements of systems for quality assurance as depicted in ISO standards or in Total Quality Management (TQM) criteria. This background is clearly reflected in the main criteria for self-assessment proposed by the guide:

- leadership,
- visions, aims and values,
- strategy and planning,
- process management,
- performance and results,
- actions for improvement.

The European self-assessment guide, primarily targeted at VET providers across Europe, is not a prescriptive instrument. It aims instead at assisting providers to better manage the quality of their training provision. It contains detailed quality criteria and explanatory statements illustrated by examples from different national VET systems, and it gives an overview of existing self-assessment frameworks used in different settings.

From a European and more general perspective, a secondary purpose of this guide is to facilitate dialogue about the way self-assessment is conducted across the various VET systems in Europe and to support convergent developments between national quality assurance systems.

Developments in European countries

A number of countries have used the European self-assessment guide to stimulate developments in national quality assurance: Bulgaria and Romania have translated the European guide into their own languages; Slovenia and Hungary have made specific references to the European guide; Italy has adapted the guide to the national context and conducted experiments with a sample of VET providers in 2005; and Romania has also launched a pilot initiative with the European self-assessment guide involving a number of VET providers from different parts of the country.

Two main approaches to self-assessment can be distinguished. In several countries there is no obligation for VET providers to make use of self-assessment or to implement an internal quality assurance system and so the use of self-assessment is purely voluntary and not a pre-condition for official approval of providers. In other countries, such as Ireland, Denmark, Finland, the Netherlands, Sweden and the United Kingdom, it is stipulated by law that VET providers must have an internal quality assurance system in place and this sometimes is understood to be 'self-assessment' or 'self-evaluation'. In these contexts, providers are free to choose their own approach to quality assurance and in this case, self-assessment encompasses a broad variety of approaches to quality assurance. Depending on their size and financial potential, some providers might favour an accreditation according to the ISO 9000 standards, whereas other providers might choose to apply a less rigorous quality system or even their own self-assessment approach.

In a growing number of countries, independent but officially recognised bodies have been or are being created at the national level in order to provide orientation and guidance to VET providers with regard to how to make use of self-assessment and how to implement an internal quality system. A major task of these bodies is to provide national guidelines for VET providers to support the implementation of a quality system. Although these national guidelines do not usually prescribe how to carry out quality assurance, the existing national frameworks usually define a number of priority areas for quality assurance that must be taken into consideration by the VET provider. Experience has proven that the provision of guidelines to support the implementation of self-assessment is highly desirable at the national level, as this contributes to building up relevant capacities in local vocational training institutions.

In any case, self-assessment is carried out under the responsibility of the VET provider itself, and this represents the main difference between this method and the approval and inspection approaches, where an external body with decision-making powers is involved.

When reflecting on practical experiences with self-assessment, this methodology has proven itself to be a useful and effective instrument for creating internal dynamics within VET organisations in terms of quality assurance. Self-assessment is suitable for all types of VET organisations. Compared to accreditation according to ISO standards, it is an inexpensive tool and so can also be applied by small VET providers. The involvement of senior management and the active participation of all members of the organisation is a pre-condition for success. Self-assessment develops its full potential when it becomes an integral part of the management standards and the organisational structure of the provider.

Under no circumstances should self-assessment become an end in itself. Self-assessment becomes all the more powerful when results are transformed into a development plan. The plan should identify areas and problems requiring change and new solutions, as also the objectives, procedures, resources and people personally responsible for the change process. The relationship between these two elements can be stated in the following terms: self-assessment is aimed at measurement, whereas the development plan is aimed at quality improvement.

Transparency of processes and results is not automatically assured for external clients and customers, which is why self-assessment needs to be supplemented by an active publication and communications strategy. Hence it has become standard in several European countries for VET providers to publish self-assessment results on their organisation's website. However, an official obligation to make self-assessment results available to customers only exists in relatively few cases.

To sum up, self-assessment alone is no guarantee of quality. However, when it forms an inherent part of a quality approach at the VET system level, it can become a powerful tool for quality, by providing guidance for VET providers on how to apply self-assessment in a coherent way and ensure the transparency of their results. Finally, self-assessment should also be counter-balanced by a view from outside.

Therefore, in many countries, self-assessment is combined with external verification and self-assessment reports by VET providers are often taken as the basis for the monitoring activities of external bodies, as is the case of Ireland, Denmark, the Netherlands and the United Kingdom.

1.3.3　Common Quality Assurance Framework monitoring

Various measures are subsumed under the term monitoring, designed to ensure from an external point of view that VET provider quality assurance systems are effective in maintaining and improving the quality of their training. Depending on the context, traditional practices and practical procedures related to implementing the monitoring process, individual measures in member states are termed approval/licensing, inspection/evaluation or accreditation/labelling. A trend in many European countries nowadays is for these tasks to no longer be carried out by the ministries responsible for VET but by external bodies acting in cooperation with the ministries or with independent or at least semi-independent status.

European achievements

At the European level no guidelines or criteria for monitoring have been set up as yet. Monitoring systems, mechanisms and procedures are part of national regulations and so will be equally as diverse as national systems and VET institutions; nonetheless, monitoring approaches have much more in common than would appear at first sight.

Developments in European countries

Strictly speaking, we should differentiate between internal and external monitoring. Providers may be obliged to have an internal monitoring system that regularly measures the effectiveness of their VET provision. In this context, self-assessment is not only a methodological instrument for quality assurance but is also a monitoring instrument.

Through external monitoring, the quality of the internally applied system is examined by an external body at regular intervals and following previously established procedures. Thus, internal monitoring refers to the activities undertaken by the providers themselves to ensure and develop quality, whilst external monitoring measures the effectiveness of provider activities.

Approval/licensing

Most countries have their own approval or licensing procedures for providers, at least with regard to initial vocational training and when public funding for training is involved. The procedures are based on national laws and regulations, which define certain framework standards to be fulfilled by the providers.

Approval and licensing usually require a one-off initial application, which, if successful, will result in the VET provider being officially registered; this, in turn, opens up the way to public funding. Approval and licensing are normally implemented together with other measures for external monitoring implemented at a later stage, leading to renewal of the provider's licence provided the external verification results are positive.

As a general rule, approval is granted once certain compulsory minimum requirements have been fulfilled. These requirements normally consist of certain input standards (qualification of personnel, availability of standard equipment, etc.) and/or process standards (curricular demands, levels of competences to be achieved, examination standards, etc.). National standards may have been drawn up by the relevant ministry or an intermediary body; in some cases they are defined autonomously by social partners or in cooperation between social partners and the national government. Normally these standards apply to all programmes leading to publicly recognised qualifications.

In addition to the qualitative initial approval, there is frequently a regularly renewed quantitative approval – mostly the case when public money is involved. Before public financing is finally approved, an additional comparison is made with existing needs in the labour market, i.e. a check is made whether and to what (quantitative) extent the relevant qualifications or training programmes are actually needed. In this case the amount of funding will depend on a forecast of relevant demands. In Germany, for example, each year the number of participants in publicly financed continuing training programmes is determined by employment agencies according to employment prospects for the relevant qualification profiles. This ensures that public money is put to efficient use and that supply and demand are adequately matched; it also avoids the development of skills that cannot be absorbed by the labour market.

To sum up, approval or licensing is a traditional approach, used nearly everywhere as a starting point whenever public funding is involved. The main focus is on input and process criteria. Successful approval is not an explicit sign of the effectiveness of training provision but rather serves as a guarantee that certain minimum requirements have been fulfilled – representing a main difference from other measures for monitoring by external bodies. The overall tendency in Europe is towards greater inclusion of regional stakeholders, fewer standards relating to input and curricula, and more flexible national frameworks offering options for VET providers to adapt training programmes to local needs and demands.

QUALITY AND QUALITY ASSURANCE IN TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

Inspection/evaluation

In a number of countries, and after initial approval has been granted, inspection or evaluation activities are carried out as external monitoring measures to complement self-assessment in publicly supported VET systems. These usually take place in an on-going cycle with an average time-span of around five years. In the Netherlands and the United Kingdom, inspection is compulsory; it is based on national inspection frameworks with extensive criteria and indicators that are communicated in guidelines for VET providers on how to draft the relevant self-assessment reports. The inspection framework and the self-assessment reports thus share a common structure, with the reports of the providers used as starting points for the external verification procedure.

In the case of non-compliance with quality standards, inspections resulting in the withdrawal of licences are rare. This development is due to the changing role of inspection and evaluation, which, in procedural terms, is less and less about control but more carried out as part of a dialogue with the VET providers that aims to support efforts to improve quality. In Ireland, the Further Education and Training Awards Council (FETAC) gives timely feedback on each provider's self-assessment report and programme improvement plan; external examiner reports are also made available to providers. Therefore most providers find the inspection process valuable as it helps them to continuously improve the quality of their work. Development plans are often discussed by inspectors and providers together. Inspectors find that providers that are performing well also tend to undertake self-assessment well, whereas poor providers often do not have the skills to accurately evaluate their own performance.

Policies in relation to transparency and the publication of results of inspections vary. In Ireland, the FETAC publishes a report on the findings resulting from the evaluation of programmes and makes this report publicly available. In the United Kingdom, inspection reports are published on the website of the Adult Learning Inspectorate, whereas in other countries it is the VET provider who can decide whether to allow any or all of the results of the assessment of the quality assurance system to be published.

Accreditation/labelling

In higher education, accreditation is a widely accepted approach to external monitoring that has been implemented in recent years as part of the Bologna Process. Accreditation in the VET sector is not very widespread as yet. It is used in some member states to ensure and harmonise standards across a wide variety of VET providers. In this case, accreditation is used as a substitute for inspection. In other member states, such as Italy, accreditation is used instead of approval, and successful accreditation is a pre-condition for VET providers to be able to participate in the public tendering process by which publicly funding for training programmes is allocated.

Like inspection, accreditation is carried out in an on-going cycle with an average time-span of around five years. It is quite an extensive procedure and typically refers to the organisation as a whole rather than just its VET programmes. In some cases, it is this characteristic which marks the difference between accreditation and inspection or evaluation, but, apart from this aspect, common traits tend to predominate.

Accreditation often results in a recognised quality seal or quality label which can be used in communication processes with customers, thus supporting orientation and

transparency for the VET customer. These labelling processes increasingly take place at the sectoral level (in quality circles of VET providers active in the same branch) or in certain parts of the VET system – for example, among publicly funded VET institutions in France, which receive a national quality seal after having successfully passed the accreditation procedure.

In the field of vocational training for people with disabilities, a European Quality in Rehabilitation Mark has been created by the European Disability Forum, the International Labour Organisation and the Council of Europe. This mark is granted to rehabilitation centres applying an internal quality assurance system – for example, in Ireland, Portugal, Romania and the United Kingdom[4].

There is an interesting and challenging development taking place in the continuing training sector, where accreditation and labelling are increasingly organised by VET institutions themselves. In several sectors and branches, VET providers have collaborated to build their own umbrella organisations, which then function as accreditation bodies for providers active in the relevant sectors and branches; some of these networks of VET providers are even active at the European level. They have developed their own accreditation systems and accreditation procedures, and are creating their own quality labels without the involvement of public bodies. As welcome as these self-initiated efforts by VET providers are in terms of achieving quality and visibility for their customers, the resulting plethora of quality labels may itself prove problematic and ultimately become an obstacle in terms of guiding VET customers.

1.3.4   Common Quality Assurance Framework measurement

Set against the background of the greater focus on output orientation mentioned at the start of this paper, it may come as no surprise that there is a general trend in Europe towards measurement of the goal achievements of VET providers and systems.

Measuring quality and its elements is a major challenge in all VET systems. The improvement of quality is supposed to be oriented as far as possible to objective criteria rather than subjective opinions. In order to be able to measure qualitative progress, suitable criteria or indicators are needed. First of all, indicators function as spotlights that draw attention to aspects of the training process considered to be important. Secondly, defining indicators is a means to link commonly agreed objectives for VET policies and VET provision and thus to apply the Common Quality Assurance Framework model. Finally, determining quality means measuring and assessing an activity both before and after it is carried out, for which a number of indicators are needed.

In general, an indicator is a characteristic or attribute that is measured in order to assess the outcome of a certain action. An indicator may measure a pre-established objective, a resource mobilised, an effect obtained, or a quality or context variable. Indicators should do the following:

- describe the baseline for initiatives to improve the quality of VET before they are launched;
- quantify (as much as possible) the quality objectives that have been set;
- provide continuous information on the extent to which these objectives have been met;

4   Further information available on: www.epr.eu/

- provide an idea of the factors that could have contributed to the achievement of certain results.

In operational terms, indicators produce information that not only help the relevant actors in VET to assess the extent to which their pre-defined objectives have been met, but also help communicate results, negotiate the effects, discuss influential factors and adopt the consequent decisions. Although indicators in the long run may require valid information and measurement, their basic function is to create sensitivity to the most relevant dimensions of quality and thus help define crucial areas where quality should be ensured or improved. It is through this function for reflection that indicators support the understanding of relevant quality criteria and contribute to continuing learning.

European achievements

This aspect is also particularly relevant for European cooperation, where the use of indicators allows stakeholders to arrive at commonly shared understandings of good practices, structure the exchange of experiences and identify the strengths and weaknesses of VET quality systems at European, national, regional and sectoral levels.

Since an indicator is not a value in itself, indicator definition and selection presupposes the clarification of objectives to be attained in order to improve quality. In European VET systems there is a general tendency to shift the focus from control and inspection to self-guided management of change and continuous improvement of training provision. Quality indicators are one of the most important tools for measuring progress. Emphasis in the past was on the input and process dimensions of VET policies; nowadays, however, the focus is much more on outputs and outcomes. In a knowledge-based economy it is the use of competences and skills in the labour market that counts. Therefore, the outcome dimension and relationship between VET and employment systems, and the economy have come very much to the forefront in recent years.

Indicators cannot stand in isolation; they have to be related to certain objectives and they have to be related to one another. The use of isolated indicators runs the risk of provoking negative side effects. Indicators should thus be organised in a coherent system of indicators. To make the quality dynamics in a VET system more comprehensible, there should be a coherent chain of indicators that reflect the objectives, inputs, processes and results of an action – thus covering the entire cycle of an intervention. Striking a balance between the different factors influencing training provision is a pre-condition for avoiding the production of positive effects in a certain area at the cost of negative or counter-effects in another area.

Following up on the process of cooperation on quality assurance which has taken place at European level as a result of the Copenhagen Process, a coherent set of quality indicators has been adopted and structured that allows the entire cycle of VET activities to be covered. Indicator selection builds on both an analysis of a map of the indicators used in European countries to measure quality assurance in VET and data collection of specific indicators regularly published by Eurostat, Cedefop, the Eurydice Information Network on Education in Europe, the OECD, UNESCO and other international organisations. Altogether, over 200 indicators have been identified and analysed.

The rationale behind the guiding principles for the selection of indicators was, firstly, to support the application of quality assurance systems at both VET provider and VET system levels, and to link activities for better quality to widely agreed, broader European objectives for VET systems.

While giving emphasis to VET outcomes and learning and the relationship between VET systems, the labour market, employment and the economy, the set of indicators is organised as a coherent chain which reflects the objectives, inputs, processes, and training outcomes. The set (described below) consists of two general indicators (numbers 1 and 2), followed by a chain of four indicators which build on each other (numbers 3 to 6) delivering information on training outputs and outcomes compared to policy priorities. The set of indicators is further complemented by four other indicators: two context indicators (numbers 7 and 8) providing for relevant context information to enable the assessment of achievements, and two indicators of a descriptive nature (numbers 9 and 10) providing additional qualitative information on factors determining VET quality. The reference set of indicators and further information on the rationale for their inclusion and their implementation are described in Annex 3.

Reference set of quality indicators:

1. share of VET providers applying effective internal systems for quality assurance;
2. investment in VET trainers and teachers;
3. participation rates in VET programmes, according to type of VET courses and individual student criteria (gender, age, and other social criteria like early school leaver, highest educational qualification attained, migrant, ethnic minority, handicapped, etc.);
4. successful completion and dropout rates, according to type of VET courses and individual student criteria (gender, age, and other social criteria like early school leaver, highest educational qualification attained, migrant, ethnic minority, handicapped, etc.);
5. placement rates, referring to the destination of VET students 6, 12 and 36 months after completing the training programme, according to type of VET courses and individual student criteria (gender, age, and other social criteria like early school leaver, highest educational qualification attained, migrant, ethnic minority, handicapped, etc.);
6. satisfaction rates, referring to the utilisation of acquired skills in the workplace from the perspective of both former students and employers;
7. context in terms of unemployment rates according to gender, age, and social criteria such as young unemployed, long-term unemployed, people over 55 years, migrants, ethnic minorities, people with disabilities, etc.;
8. context in terms of prevalence of vulnerable groups with social disadvantages, including early school leavers, migrants, ethnic minorities, people with disabilities, etc.;
9. descriptor of mechanisms to adapt VET to changing demands in the labour market;
10. descriptor of schemes to promote better VET access, including orientation, guidance and support schemes.

Altogether, this set of indicators reflects and supports European policy priorities as established for VET systems, namely to improve the employability of VET students, improve the match between training supply and demand and broaden access to VET.

The descriptors are qualitative, but all the other indicators are based on quantified data. Different to the descriptors, they can be measured and when they are continuously monitored, they can support the achievement of clearly defined objectives. They can be applied to initial and continuing training as well as to VET systems and VET providers. Application is voluntary and the set itself is open to adaptation and extension according to national or regional objectives and the needs of the VET providers themselves[5].

Developments in European countries

The use of indicators

In many European countries it is a general policy to make use of commonly agreed indicators to measure quality in VET. There are also a number of member states (Finland, Denmark, Norway and the Netherlands), which either have an implicit orientation to the set of indicators developed at the European level in their own national quality frameworks (the Netherlands) or which have adapted the set to their own national context. In the Netherlands the European priorities for the improvement of quality in VET are reflected in objectives set at the national level and VET institutions are asked to formulate their plans to achieve the European objectives; measurement of achievements is left to the VET institutions themselves.

By contrast, in Denmark, Finland and Norway the data for most of the European indicators are collated by the national statistical offices (Finland and Norway) or by a national evaluation institute (Denmark).

In the Finnish quality assurance system the highest importance is attributed to the employment effects of training programmes; thus, the most important indicator is the destination rate, which indicates the placement of training programme graduates in jobs. At the end of the year the national statistical office calculates, for each VET provider, the number of former trainees who have been successfully placed in employment as a proportion of the total number of trainees who have graduated from their programmes.

Given that these data, along with data for the other indicators, are available for all the publicly funded VET providers in the country, the performance of VET providers can be compared by means of a benchmarking process. A Finnish performance-based financing system introduced to complement regular public funding is based on unit prices and even rewards the best performing VET institutions with extra public funding, thereby creating additional incentives for quality improvement.

Benchmarking

In many European countries benchmarking processes are used to improve the quality of training provision. Benchmarking is strongly focused on the measurement of the performance of trainees and providers. It is a process in which the performances of different VET organisations are compared, or benchmarked, against each other.

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5   Further information on this set of indicators can be found on the Cedefop Quality Assurance in VET website: http://communities.trainingvillage.gr/quality

The purpose of benchmarking is to find ways of improving the quality of training provision in the direction of the results that have been achieved by the best performing organisations. It is thus a matter of stimulating competition. In order for benchmarking processes and comparisons to be of use, the organisations involved must provide data that is capable of being compared, which entails prior agreement on the definition of common indicators. Benchmarking processes develop their full potential when, in addition to comparing performance data, the participating organisations also engage in an exchange of information regarding the factors that have led to good performance. Successful benchmarking processes thus also include a way for organisations to learn from each other through an exchange of good practice examples.

In most European countries, participation to date in benchmarking exercises is mainly voluntary for VET providers. Benchmarking processes are often organised by providers themselves, who have to reach agreement amongst themselves on the definition of common indicators.

In Finland, where a nationwide benchmarking process is implemented among publicly funded VET providers, a common set of indicators and a common method for data collation have been agreed at national level in cooperation with VET providers and other stakeholders. An agreement of this kind, involving all the relevant actors, represents a necessary pre-condition for the successful implementation of benchmarking processes. This is a relatively complex affair. Not only do achievements need to be measured but also the comparability of the achievements of participating institutions has to be ensured. On the other hand, the measurement of achievements permits a clear identification of progress made. As the Finnish example shows, benchmarking processes can also even be used to reward positive developments and good practices by means of appropriate incentives. Benchmarking processes can stimulate quality competition among VET providers and contribute to their learning from each other.

In principle it may well be possible at some time in the distant future for all VET quality systems in European countries to be benchmarked against each other. This has been demonstrated, for example, by the PISA study, which is carried out on behalf of the OECD to make a worldwide comparison of the quality of school education[6].

However, we should also be clear about the fact that European VET systems are far more complex and disparate than national school systems. In this regard, the VET sector needs to place greater emphasis on the acceptance of diversity and the exchange of experiences, before contemplating ambitious and complex comparisons.

1.4 Conclusions and future challenges

Given the need for economic competitiveness and increased social inclusion due to advancing globalisation, quality and quality assurance in education and training are high priority topics at European, national and institutional levels. In order to set the necessary activities in motion, considerable efforts have been undertaken by EU institutions and most European countries. As a result of these common endeavours a comprehensive European approach to quality and quality assurance in VET has been developed,

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6   Further information available on: www.pisa.oecd.org

consisting of several elements that complement each other. The European approach to quality assurance in VET consists of:

- political leadership and guidance in terms of clearly defined objectives, mandates and targets to be achieved;
- an institutional network for action, namely ENQA-VET, equipped with the resources necessary to undertake shared activities and to develop further common principles, guidelines and tools for quality improvement in VET;
- a common quality assurance framework representing a cross-reading instrument that promotes common understanding and a culture of mutual learning in Europe;
- a virtual community as a modern platform for communications, which includes a wide range of stakeholders in new developments and which is aimed at supporting the dissemination of information and world-wide discussions.

The Common Quality Assurance Framework is a common instrument for quality assurance that has been developed at the European level. It is a common denominator of the different approaches to quality that are in use in member states. For a number of European countries that have developed a national framework for quality assurance, the Common Quality Assurance Framework has even served as a guiding instrument and model for quality assurance across all European VET systems, and a reference framework for better understanding different approaches to quality in VET.

Compared to a fully developed TQM model, the Common Quality Assurance Framework is lighter and particularly suited to motivating people and organisations in terms of ensuring and improving the quality of their services. It can be assumed that any VET provider that intends to go further will select one of the more detailed models for quality assurance like the ISO 9000f or the EFQM. The Common Quality Assurance Framework has the advantage of being compatible with these models and can therefore be considered a first step towards entering the quality cycle.

In this respect, the Common Quality Assurance Framework constitutes a general blueprint for quality assurance and quality improvement. It is a representation of the most basic aspects that must necessarily be present in order for a quality process to produce satisfactory results. Using the Common Quality Assurance Framework provides policymakers and practitioners in VET with a framework for initiating a process of continuous improvement.

With reference to these experiences, the Common Quality Assurance Framework has already demonstrated its overall feasibility and its supporting role for mutual understanding. When applied together with its complementary tools, i.e. the self-assessment guide and a coherent set of quality indicators, the Common Quality Assurance Framework has also been demonstrated to function as an instrument for developing common actions towards improving consistency among the different European approaches to quality in VET.

Nevertheless, in regard to the VET systems and the provision of training itself, there is a continuous need for improvement of the models, mechanisms and guidelines for quality assurance. In order to make full use of the potential of the Common Quality Assurance Framework model, future adaptations and improvements will have to be made in the light of quality assurance experiences and developments in European countries and beyond. In order to fulfil this task, continuous monitoring of actions undertaken is crucial,

as well as a critical assessment of the processes which have taken place and the results which have been achieved. It goes without saying that periodical critical reviews should also include the Common Quality Assurance Framework and its elements.

Additionally, there is the challenge of strengthening the existing common framework for quality assurance by combining it with additional elements, guidelines and instruments.

Therefore, one of the main objectives of European cooperation in the coming years is to complement the Common Quality Assurance Framework with a toolbox consisting of a number of additional instruments that would support practical implementation. To achieve this goal and to convert European VET systems into a world reference, it is crucial to combine use of the Common Quality Assurance Framework with additional quality tools on different subjects, some of which are listed and described below.

Guidelines for setting up development plans

As a result of European cooperation, it has become obvious that monitoring and assessment are the most widely used elements of quality assurance, whereas the management of change and quality improvement is still comparably weak. Given this situation, one of the major challenges is to collect good practice examples on setting up development plans from VET providers operating in different national contexts. Based on these examples, guidelines for change management and for quality improvements to training provision should be drafted as a component of the toolbox complementing the Common Quality Assurance Framework.

Relationship between internal ownership and external quality assurance verification systems

We have seen that in all VET systems, self-assessment and external verification are combined with each other, with clear signs that external verification measures have shifted in recent years from a mere controlling function to a dialogue with, and support for, the VET provider. Nevertheless, a clear separation of functions is still required, and this may be seen as a challenge facing all national VET systems. The key question here is to distribute responsibilities in such a way that the roles are distinct and yet complement each other. There is a need to uncover what is necessary in order to maintain the balance between internal ownership and external verification and to subsequently draft guidelines for combining self-assessment of VET providers with external assessment or accreditation of VET provision.

Development in this area could be facilitated by exchanging detailed information about how the allocation of roles between internal and external actors is organised and which activities have proven to be appropriate and productive in aiding successful negotiations between VET providers and external monitoring bodies.

Inclusion of external stakeholders

Greater inclusion of stakeholders in all the quality development phases can also be seen as another common challenge facing all the European countries. Considerable differences of opinion exist between the different member states regarding the question of which social groups, apart from the providers themselves, can justifiably be regarded as

relevant stakeholders. Experiences regarding the best way of effectively organising the inclusion of stakeholders are probably also equally diverse. Connecting the internal quality development process with a quality dialogue with external stakeholders can also be regarded as a general problem. What are the characteristics that identify successful cooperation and partnership between VET providers and their stakeholders? A transnational exchange of relevant experiences could make a contribution towards tackling the challenges that currently exist with regard to the inclusion of external stakeholders.

Transparency of quality for VET customers

We have seen that the publication of the results of quality assurance processes is handled quite differently in different European countries. In some cases, external monitoring agencies publish their evaluations of VET programmes and VET providers. In other countries, VET providers can decide for themselves which results they wish to publish and whether to publish at all. Few binding standards exist as yet that ensure public transparency for VET customers regarding the quality of VET provision. General information on the quality of VET provision should be communicated widely and should be accessible to all stakeholders interested in VET. Therefore, the implementation of quality assurance systems needs to be complemented with an active publication and communication strategy for dealing with the relevant processes and results. For the future, this is another area of work for the ENQA-VET, namely the elaboration of a publication policy for quality assurance in VET with guidelines on how to ensure transparency for the customers.

2. TVET QUALITY AND QUALITY ASSURANCE POLICIES IN THE MEDITERRANEAN REGION

2.1 Introduction

Whereas the first part of this report provided an overview of EU policies on quality and quality assurance in VET, this second part covers TVET quality policies in the Mediterranean region[7], and also examines common challenges and potential synergies for common actions by the Mediterranean countries themselves and between the Mediterranean region and the European Union.

The main sources for information about the Mediterranean region were the following:

- the start-up workshop for the MEDA-ETE (Education and Training for Employment) regional project on quality and quality assurance in TVET, held in Turin on 16-17 July 2007, where representatives from six Mediterranean countries (Algeria, Egypt, Israel, Jordan, Morocco and Turkey) presented the challenges they face in reforming their TVET systems and described their specific needs for improving the quality of their systems;
- more detailed national inventory reports from the governments of Algeria, Jordan and Morocco that endeavoured to identify suitable starting points and potential options for a quality approach in their TVET systems;
- information that was given in a number of bilateral interviews and discussions with country representatives including responses to a short questionnaire distributed and answered during a study visit to Italy, 26-30 November 2007;
- more detailed information gained during study visits to Algeria (9-13 November 2007), Morocco (19-23 November 2007) and Egypt (9-13 December 2007), in meetings with government officials, national experts, representatives of TVET institutions, social partner organisations and in numerous conversations with local TVET providers, TVET teachers, and TVET students met during visits to these countries.

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7   In the Mediterranean region, we will consider the wider technical and vocational education and training (TVET) sector and 'TVET' will cover all vocational streams, including technical education which belongs to general education in some partner countries.

2.2 TVET in the Mediterranean region

Although they depart from quite different starting points, both the countries in the Mediterranean region and the EU member states have increasing the attractiveness of their TVET systems as a priority. TVET can be viewed as being a vital component in supporting economic growth and social cohesion, and also as playing a key role in fostering workforce mobility and adaptability and facilitating access to lifelong learning.

The first part of this report has shown that, in Europe, several initiatives have been undertaken to raise the profile of VET in terms of improving education and training quality, to facilitate access for all and to map out appropriate pathways between the different sectors of the education system. VET is increasingly being offered at all education levels and parity in terms of status and links between VET and general and higher education can be fostered by innovative strategies and instruments. In this respect, several countries in Europe have initiated measures to promote lifelong learning. Frequently, however, coherent structures are lacking, and many fundamental quality elements such as strengthening the status and roles of trainers and creating reliable information and quality assurance systems have not as yet been implemented on a large scale.

Nonetheless, in European countries as a whole, more than half of all upper secondary education takes place in vocational streams. In countries such as Austria, Belgium, Germany and the Netherlands, the proportion of young people participating in vocational programmes is even higher (Tessaring and Wannan, 2004). Since many VET programmes have built-in career paths, vocational routes are fairly widely accepted; furthermore, the strategy for lifelong learning initiated at the European level gives even more strength to vocational streams.

Lacking in the Mediterranean countries is a coherent strategy for lifelong learning that includes TVET as an integrated part of the education system. Although technical streams are obtaining greater recognition in some countries, the VET part is, in many countries, largely a synonym for academic failure and often regarded as a last resort for dropouts from the general education system. A large proportion of children receive basic education but suffer from high repetition and dropout rates; they thus enter the labour force and traditional apprenticeship schemes with low basic skills, and this also fuels informal employment in the region. Those who stay on at school are filtered out of the general education system into low quality vocational streams. Thus, VET is all too often seen as last-resort education, because of an overall lack of quality and attractiveness.

Due to the absence of pathways linking up with the rest of the education system, vocational streams effectively become dead-end streets. In addition, continuing training for employees with a background in vocational education seems to be considered of minor importance in most Mediterranean countries. Apart from private sector initiatives (see Section 2.3.6 below), strong national initiatives in this direction have not been identified in the inquiries that have been undertaken for this report. Given the absence of a lifelong learning strategy, the negligible importance attached to lifelong learning in continuing training for employees and the condescending social attitude towards graduates holding vocational qualifications, the challenge to strengthen the attractiveness of the TVET system must be seen as a very broad and overall objective.

Many vocational streams are of low quality and unemployment rates are high among graduates from TVET institutions, due to the gap between practical skills and the

competences needed in the workplace. Other key indicators of weakness are high rates
of repetition and dropouts from education programmes.

Figure 2 depicts a recent estimate of the rate of participation in vocational education
at the upper secondary level in Mediterranean countries. In Egypt more than half of all
upper secondary students participate in a vocational programme, and in Turkey this figure
is around 45%. At the other extreme, in Tunisia and the West Bank and Gaza Strip only
around one young person in 20 participates in a vocational training programme (Sultana
and Watts, 2007).

Figure 2: Participation in VET at the upper secondary level (%)
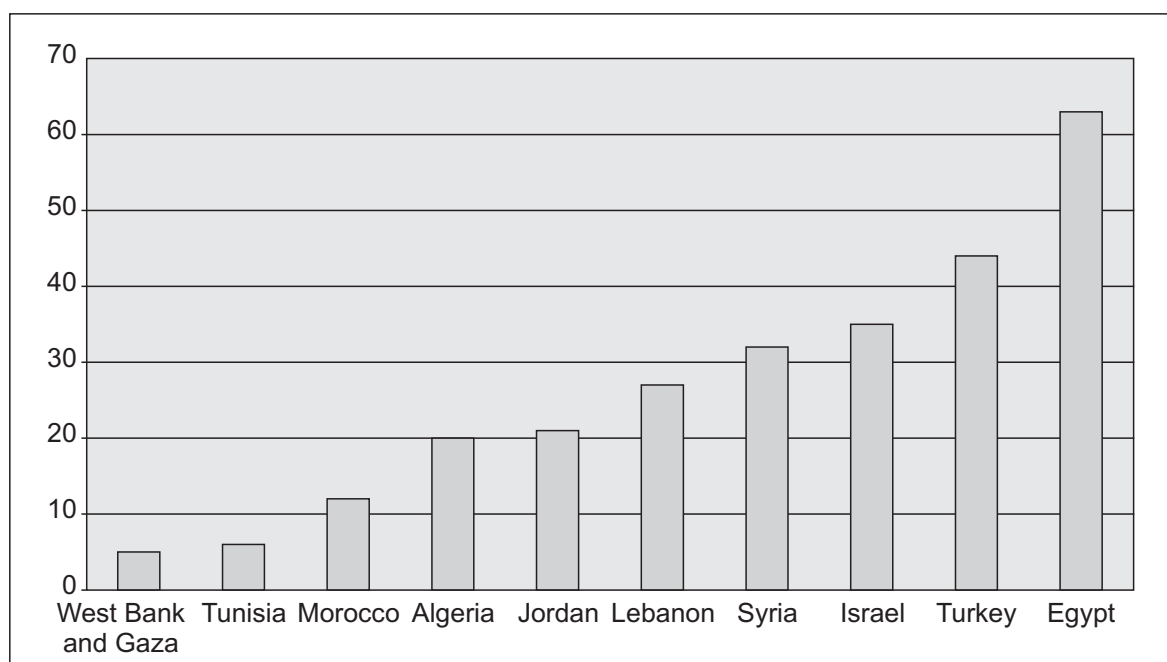
Percentage of all upper secondary students participating in a VET programme.
Source: Sultana and Watts, 2007.

Nevertheless, many economies in the region have a shortage of technicians holding
TVET qualifications and possessing appropriate skills in modern technologies. In the
transition to more open, market-oriented economies and faced with the correlated need to
integrate and successfully compete in world markets, TVET is becoming increasingly
regarded as an effective tool for combating poverty, unemployment and skills shortages in
developing economies.

In most Mediterranean countries the state plays a predominant role in the provision
of TVET, although participation by social partners in system governance has been put on
agendas everywhere. Steering committees with government and social partner
representatives have been established at national level, but all too often they have proven
not to be as effective as planned.

Although strongly government-driven, responsibilities for the TVET system are
highly fragmented at government level. In Egypt, TVET is the responsibility of 14 different
ministries according to business sectors, with the Ministry of Education having some
horizontal tasks and responsibilities.

Another key characteristic of the TVET systems in the region is the strong
segmentation between public and private training provision, with public TVET institutions
suffering from a lack of administrative autonomy. They are limited in terms of decision
making on many key issues such as staff recruitment or adaptation of curricula to local
and regional demands. Thus, schools are not encouraged to seriously take into
consideration the demands of the labour market and are not ready to develop and adapt
the profiles of their education programmes in close cooperation with the companies in
their environment.

A report submitted by the Ministry of Labour of the Hashemite Kingdom of Jordan to
the ETF (El-Saies, 2007) provides a condensed overview of the main features of the
TVET system in Jordan (Box 1) that is quite representative of the situation of TVET in the
other countries of the region.

Box 1: Quality assurance features in the Jordanian TVET system

- The academic model is pervasive; that is, more attention is given to theoretical
  over practical learning.
- More value is placed on high academic achievement rather than on skills and
  competences.
- Examinations are the main means of assessing achievement.
- Teachers are hired on the basis of their academic qualifications rather than on
  their workplace-related skills.
- Industry linkages are weak: industry does not participate to any significant degree
  in education, either in its planning, delivery or funding.
- Education is centrally controlled by government: most schools, colleges and
  vocational training centres have only limited authority to manage their own
  finances; set their own administrative policies; hire and manage staff according to
  their own needs; enter into contracts with industry; and raise (and keep) money
  from external sources.
- Colleges are run on a traditional model (more like schools than businesses) and
  lack many of the systems and mechanisms to operate as a business (financial
  autonomy, a complex infrastructure that enables them to do other work,
  competitive processes, incentives, performance-based funding).
- There is often a lack of coordination of education at the highest level, resulting in
  overlapping mandates, little coordination among the parts of the education
  system, and insufficiently clear and transparent processes for articulation and
  transfer between systems.
- Government is the main source of funding for education.
- There is no strong incentive system in place for innovation and performance.

Due to growing numbers of young people and the continuously rising number of
admissions to public TVET institutions, quantitative expansion of training provision has
been a major objective in recent years. Thus, in Morocco the number of candidates
applying for access to the TVET system has doubled in the last six years. Whereas in
1999/2000 there had been 152 000 candidates for a place in a public training institution,
in 2006/07 the number of candidates had increased to 309 387, which meant three
candidates per place (Moroccan Ministry of Employment and Vocational Training, 2007).

As a result of this quantity problem, many training organisations operate on the basis of input data only, without monitoring their results and achievements, with the provision of TVET in the region based only rarely on performance or outcomes. A demographic change is now underway; in the next decade, primary and secondary school age populations will decline in absolute terms, providing opportunities to focus on quality improvements (ETF-World Bank, 2006).

2.3 Quality in TVET and approaches to reform

This chapter will address major issues for TVET reform in the Mediterranean region and determine the framework conditions for applying a quality approach. The structure of the following section reflects the main elements of such an approach in its description of the availability of clearly defined policy objectives and the existence of a governance model with a decentralised management system that allows a certain degree of autonomy to TVET organisations and fosters their cooperation with local businesses and other stakeholders. Other important pre-conditions for a quality approach, closer to the delivery of training itself, will also be addressed, among them, reform of curricula based on the definition of national qualification frameworks, identification of competences and skills more relevant to labour market demands and improvements to the qualifications of teachers and trainers active in the TVET system.

Finally, private sector participation in TVET reform and TVET delivery in the Mediterranean region will be discussed in terms of the major challenges for socio-economic development, namely, the involvement of the private sector in overall governance processes and in providing training and, in particular, in the provision of continuing training for employees.

2.3.1   Starting points for TVET reform

TVET is, metaphorically speaking, a construction site in the Mediterranean region, with reforms underway in all Mediterranean countries that are tackling a wide range of issues. Although initiatives are departing from different angles, overall there seems to be a common objective, which is to develop national frameworks for quality-based TVET systems in line with economic development and labour market needs in the region.

In parallel to EU priority objectives articulated in the Lisbon Strategy and the Copenhagen Process, major endeavours are being made by the Mediterranean countries to strengthen links between TVET and the employment system, to increase the responsiveness of education and training to real labour market demands and to upgrade the competences and skills of students and so increase their employability.

Illustrating the current situation and the starting point for reforms striving towards better quality in training and education, Box 2 contains a quote from a document that was recently published in Egypt.

> ***Box 2: Education quality issues in Egypt***
>
> Many employers express dissatisfaction at the lack of technical experience of
> vocational school graduates. They are not able to start working directly without
> having further training to acquire working skills; this is clearly highlighted by private
> business employers especially those who have international links. On the other
> hand, teachers are not allowed to modify technical training programmes – when
> required – and they have to use training syllabi and training aids that have remained
> unchanged for a long time, and some have even become obsolete (Moussa, 2007).

On the other hand, it can be observed in many Mediterranean countries that TVET is seen as strategic for the economic and social development of the nation and that quality of education and training is becoming a major issue in public services. In Algeria, for example, major political efforts are being undertaken to ensure better access to the education system and increased responsiveness to the demands of the national economy, so as to ensure better employability of students and improvements to continuing training for teachers and trainers. In order to reform its VET system, the country launched an apprenticeship training scheme as early as 1981 (Law 81-07, 1981) which was further fine-tuned and continuously adapted to new demands (Law 90-34, 1990 and Law 2001-01, 2000).

In 2002 a major reform of the Algerian education system was launched, aimed at improving training quality and covering five major topics. In order to increase the attractiveness of the VET sector, an element of the reform process was aimed at increasing permeability in the education system so as to create new horizontal and vertical pathways for learners, in particular between VET and higher education.

In Morocco at present, there are three major policy objectives for TVET reform on the agenda, covering both initial and continuing training: fulfil the competence needs of enterprises, promote employment for young people and improve the employability of employees.

To support continuing training for employees, two mechanisms have been implemented since 1996/97. The first one, called inter-professional aid and advisory groups (groupements interprofessionnels d'aide au conseil, or GIAC) supports enterprises in identifying their skills needs, and the second one, called special training contracts (contrats spéciaux de formation, or CSF), financially assists enterprises in developing and implementing plans for continuing training for employees. A total of 1 244 enterprises were supported in 2005 (Moroccan Ministry of Employment and Vocational Training, 2007).

2.3.2   TVET governance

A common challenge facing all countries in the Mediterranean region is to improve the mechanisms for a more effective governance of the TVET system by encompassing different aspects of the exercise of authority and relationships between the public and private sectors.

The highly fragmented responsibilities for TVET, which fall somewhere between the general education and higher education systems, often require reorganising and concentrating responsibilities, drawing up adequate cooperation agreements and ensuring effective flows of information between the various national governmental administrations involved in the development of TVET policies and activities.

One of the most common solutions to overcome fragmentation in TVET governance is the appointment of a supreme council with a mandate to define strategic visions and coordinate the various actors in implementing the relevant tasks. In Syria this body is the Supreme Council for Intermediate Institutes, in Egypt, the Supreme Council for Human Resources Development, in Lebanon, the Higher Council for Technical Vocational Education and Training, and in Algeria, the National Advisory Council for Vocational Training (Conseil national consultatif de la formation professionnelle). In all these countries there have been long periods in which the councils have been largely inoperative.

In Jordan, the Employment and TVET Council was created, to replace the ineffective TVET Council. In executive terms, the new council reports to the Ministry of Labour, with one of its main functions being to coordinate the different stakeholders active in TVET, including representatives from the private business sector.

The establishment of such bodies is an important step in the right direction towards improved governance of the TVET system. However, an organisation at central level alone cannot overcome the excessive centralisation that remains a key feature of TVET in most of the Mediterranean countries.

To ensure progress, further efforts towards improving the governance of the TVET system should include the promotion of participative arrangements at different levels (regional, local and sectoral) in order to involve social partners and other stakeholders in decision-making processes related to content, offer and organisation of training.

In managerial terms, decentralisation in public provision of training needs to be strengthened and the accountability of training organisations should be increased. The promotion of quality management systems in training organisations can be seen as a decisive tool for extending their autonomy and responsibility and, at the same time, increasing their accountability.

Experiences with the establishment of a decentralised management model in TVET in Tunisia are described in Box 3.

> ### Box 3: TVET institutional autonomy in Tunisia – a decentralised management model
>
> A national strategy for the reform of vocational training and employment in Tunisia, known as MANFORME (Mise à niveau de la formation professionnelle et de l'emploi) was launched in the mid-1990s with the strategic goals of developing a demand-driven, flexible and cost-effective vocational training system, which would provide trainees with the skills required by Tunisian businesses.
>
> The development of a new decentralised management model, piloted in four sectoral training centres, was launched in 1997, but actual implementation only began in 2001. Benefits from this experience so far include a better partnership between enterprises and training institutions, particularly in the development of curricula and in enterprise-based provision of training. However, experience also shows that the quality of private sector participation is uneven, with some private sector representatives unprepared to assume their responsibilities. Resistance to change can also come from within the training institutions themselves and from the central agencies.

In Morocco, the creation of a decentralised management system has only recently been placed on the agenda. Current efforts to improve TVET governance encompass three priorities:

- the establishment of broader and more intensive partnerships between the TVET system and economic and social partners in order to increase training system responsiveness to the demands of the labour market;
- the creation of adequate information and communication channels between the different stakeholders in the system, in order to increase the accountability and transparency of training organisations, especially with regard to better information on achieved performance in training provision;
- more decentralisation and more autonomy for training providers and the establishment of steering procedures based on goal-oriented contracts.

Furthermore, the Ministry for Employment and Vocational Education has envisaged a planning strategy in order to overcome existing shortcomings in TVET system governance. According to the inventory report submitted by the Moroccan authorities to the ETF, this strategy will be implemented with one leading training organisation per sector and will include managerial elements such as target setting, encouragement of institutional change and inclusion of economic and social partners in training delivery.

2.3.3 National qualification frameworks

A milestone in the achievement of greater coherence in TVET policies and overcoming fragmentation in the delivery of TVET is the establishment of national qualification frameworks. These frameworks ensure that certain commonly agreed professional profiles are defined, which, once accepted nationwide, can be used as a reference for deriving standards and criteria for quality in training.

In Egypt, the National Skill Standards Project identified and prioritised three economic sectors for the establishment of national skills standards and certification, namely, construction, tourism and certain areas of manufacturing. The project developed a series of formal qualifications called Egyptian Vocational Competency-based Qualifications. It is hoped that the project will open access to a more demand-driven delivery of VET and that employers will gain confidence in terms of recruiting graduates that comply with specific job competences. However, Egyptian Vocational Competency-based Qualifications deriving from the national skills standards have not as yet been implemented nationwide, and the project so far has not proceeded to the next phase of incorporating other economic sectors in terms of establishing national skills standards.

Currently, the Egyptian Supreme Council for Human Resources Development is setting up a regulatory authority that will be in charge of endorsing vocational qualifications and accrediting training providers in the three mentioned sectors. Certification requires recognised awarding bodies to ensure that skill standards are delivered consistently year after year and across the different VET provision locations, it being a major pre-condition for training providers to have appropriate quality assurance arrangements in place.

In the framework of the ETF project National Qualification Frameworks, national working groups composed of the main stakeholders have been established in four countries in the region: Jordan, Egypt, Morocco and Tunisia. The project aims to ensure:

- more clarity in the relationship between different kinds of qualifications through more transparency in the definition of qualifications;
- more compatibility between graduate skills and the needs of the labour market;
- better opportunities for people who currently face dead-ends and bottlenecks, as the framework recognises the achievement of all learners and also prior learning through formal and non-formal education and training;
- improved possibilities for international benchmarking at regional level.

The project is in its third year. Experience shows that projects on qualification frameworks require time and considerable human and material resources. By the end of 2008 it is expected that the national reform agendas in these countries will include the design of a new qualifications framework.

2.3.4   Curriculum reforms: the competence-based approach

In the Mediterranean region the delivery of TVET programmes is largely institution-based and many curricula are not sufficiently related to labour market needs. TVET programmes tend to be outdated and reviewed too infrequently. Quite often, the emphasis is on theoretical teaching rather than on practical learning. In order to deliver competences and skills that are more relevant to labour market demands, a number of national initiatives have been undertaken to improve the quality of TVET in terms of the development and modernisation of training programme curricula.

In Israel, efforts to reform the TVET sector are focused on reviewing and modernising curricula, taking into greater consideration the demands of modern technology. Increased cooperation between training institutions and enterprises, for example, by promoting apprenticeship training, is seen as a key factor in reaching this goal.

Apart from these efforts, there seems to be a general trend in the Mediterranean region to move towards competence-based approaches when readjusting curricula, in accordance with up-to-date labour market standards and future economic development perspectives as objectives for training. Under this approach, key elements to improve the relevance of vocational training are to identify current occupational skills in use and in demand in today's labour market, define them in terms of competences, and incorporate them in training programmes delivered in close cooperation with relevant professional and private organisations.

Similar to the establishment of national qualification frameworks, efforts for reforming curricula, teaching and testing are focused on certain economic sectors, such as crafts, textiles, tourism, and agriculture, that are considered priorities in the development of national industries.

In Lebanon in 2001, a curriculum update was implemented that covered the development of competence profiles for 45 occupations. This was done through a process that brought together practitioners in each occupation with training specialists, with the tasks and duties associated with each occupation translated into training programmes

and pedagogical content. A pilot project established a new standard for curriculum and learning resource materials in the electrical and electronic disciplines, by including a definition of the curriculum following a competence-based approach and preparing teacher guidelines and student manuals.

In Algeria, the National Institute for Vocational Training (Institut national de la formation professionnelle) is responsible for the implementation of the competence-based approach, the development and certification of new training programmes, the dissemination of pedagogical innovations and the training of inspectors and managers of TVET institutions. All newly developed training programmes apply the competence-based approach.

The competence-based approach has been implemented in Morocco since 2003 with the support of the Canadian government. Seven institutions representing the most important employment sectors in the economy (including textiles, tourism, services, crafts and agriculture) were included in a pilot programme run between 2003 and 2007. The long-term perspective is to apply the competence-based approach throughout the TVET system by making wider use of the tools and instruments developed in the pilot programme.

In brief, these examples demonstrate that the development and implementation of a competence-based approach in TVET is an asset in any initiative towards the improvement of quality both at the level of the TVET system and at the level of training institutions. Clearly defined competences are a pre-condition for defining standards and criteria for training and also help verify the quality of provision.

2.3.5   Teacher and trainer training

A shortage of qualified and experienced instructors seems to be experienced by many Mediterranean countries. Activities to extend and improve training for teachers and trainers seem to be a necessary pre-condition for making progress in the reforms aimed at ensuring a better quality TVET sector. In particular, many instructors in TVET need to upgrade pedagogical skills and acquire skills related to new technologies. Preferably, any professionalisation of instructors should be organised by developing cooperative agreements with enterprises.

In Morocco, the training of personnel in the TVET sector is a major concern in regard to improving the quality of the national education system. Since 1996, approved information is available on the existing qualifications of trainers both in the public and private sector, thus providing a baseline for further action. One of the goals is to establish a certification procedure for the human resources employed in the TVET system. The existing data suggests that there is, in particular, a great need to improve the pedagogical qualifications of personnel in the private sector.

In the West Bank and Gaza Strip, a recent initiative has been launched to improve the pedagogical skills of VET teaching staff. Around 500 staff members completed 12 modules each consisting of 20 to 40 hours covering topics such as an introduction to vocational training, models and techniques of instruction, planning for instruction, theories and models of learning, education guidance and counselling, measurement and evaluation of performance, educational resources and the technology of education, vocational roles and professional development, the sociology of education,

communication and class management, workshop layout and management, and
developing relations with communities and local industry.

In Algeria, training of trainers is both a responsibility of the National Institute for
Vocational Training and six local vocational training institutes, which together develop the
plans and programmes for relevant courses. Starting from this background, the Institute
for Vocational Training (Institut de formation professionnelle) of Birkhadem in Algiers has
set up a coherent approach to the training of trainers in the northern part of the country.
Based on a continuous analysis of training needs, inspection reports and its own surveys,
a yearly programme is drafted that is disseminated via the Internet and in printed material
sent to local training institutions. The Institute for Vocational Training of Birkhadem offers
training modules that are obligatory for training personnel to obtain formal qualifications;
another part of the programme is dedicated to updating and fine-tuning teaching and
training skills according to new labour market demands. An internal quality assurance
system has been developed in order to evaluate and to improve the provision of training
courses, with participants asked to assess the quality of training courses according to
nine indicators covering opinions on the adequacy of content and the length of training,
pedagogical methods and achievement of training objectives. Ratings to date suggest a
positive attitude of participants towards the training received. However, the resources for
providing adequate and updated training courses for trainers are limited, mainly because
qualified trainers who are experienced enough to train other trainers are in short supply.

Although expanding the training of trainers and teachers in TVET is part of a
national strategy in some Mediterranean countries (for example, Tunisia and Turkey), the
shortage of adequate personnel to train trainers is not a problem that is solely confined to
Algeria, but is a prevalent challenge for most of the countries in the region. Among other
reasons, this problem has arisen because of low salary levels and poor career
perspectives for TVET teachers and trainers.

In order to overcome these bottlenecks a master trainer concept for recruiting and
training trainers in adult education has been developed in Egypt, described in Box 4.

Box 4: Train the trainers – the master trainer concept in Egypt

In the Egyptian textile sector, a small scale pilot programme has been developed by
Traintex, the technical implementation arm of the national programme for reforming
the TVET system[8]. The main element of the new experimental concept for the
training of trainers is to identify and recruit 'master' trainers with long-standing
experience to train less qualified trainers and thus to systematically expand the
number of qualified trainers. To strengthen the training of trainers, technical training
on TQM is part of the training package for trainers. Additionally, a system for tracing
and following up master trainers and trainers who have received training has been
implemented aimed at supporting sustainable progress.

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8   Further information available on: www.traintex.org/

2.3.6   Partnerships between TVET and the private sector

In this section, private sector participation in TVET will be discussed under three headings: private sector participation in governance of the TVET system, role in the delivery of initial training and involvement in continuing training.

Governance issues

As discussed above (see Section 2.3.2), supreme councils for TVET have been established in several Mediterranean countries with the main aim of unifying objectives and strategies for further development. Quite often, however, these institutions lack operational capacity; in some cases they hardly ever meet.

Although mechanisms for partnership with the private sector in the governance of TVET have been established at the national level in most of the countries, there is still a need to develop partnerships at the institutional level, i.e. with private sector businesses in the local and regional environments. Broad partnerships with private sector enterprises should include participation in the identification of skills needs, the development of curricula, the provision of enterprise-based training, student testing and examination and monitoring and evaluation activities of training institutions.

In Egypt, the TVET reform programme supported by the European Union includes the creation of partnerships between public TVET institutions and the private business sector at the local level. These partnerships have the twofold objective of establishing a mechanism to enhance participation by small and medium enterprises in the design and delivery of TVET and increasing the labour-market relevance of TVET provision in terms of content and learning methods.

Whereas private sector representatives have not always shown a strong and reliable commitment to participation in governance of the system, there are also examples of how private businesses are trying hard to contribute to TVET reform in the interest of their economic sector. The Egyptian Junior Business Association[9] is a forum committed to developing a positive business environment and playing an active role in the overall development of the country. With 430 members representing around 225 000 employees, the association is divided into a number of councils and committees that work on both sectoral issues and on general horizontal issues. The sectoral committees seek to enhance the performance of businesses through cooperation with all official and regulatory authorities. A horizontal training and development committee is working on the development of integrated training programmes that meet the needs of members. The Ministry of Education has appointed several board members of the association to represent the business sector in national partnership committees for the development of the education system.

Leaving this example aside, in most Mediterranean countries the involvement of the private business sector in the governance process is limited by a number of factors, among them a lack of sufficiently skilled staff, limited resources, and the fact that TVET is still the priority for only a limited number of enterprises and sectors. Overcoming these constraints is an essential component in any enhancement of public-private partnership in TVET.

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9   Further information available on: www.ejb.org.eg/

Delivery of initial training

Excessive centralisation and the absence of structured communications with the private sector remain key issues for the TVET systems in the region. In some countries, however, the private sector has a strong record of participation in the delivery of initial TVET.

In Lebanon, for example, private provision is quantitatively more important than public provision; around 60% of TVET students are enrolled in private institutions. In Jordan, at the post-secondary level, there are 51 community colleges, of which 35 are non-governmental. Both public and private community colleges are expected to have the same curricula and examinations.

In Morocco, private sector organisations contribute substantially to the delivery of initial training; in accordance with the number of trainers employed the share of private training institutions is up to 40%. The norms and rules for the participation of private training institutions are defined in a detailed legislative framework, with Law No 13-00 dating from May 2000 being its major backbone (Moroccan Ministry of Employment and Vocational Training, 2004). TVET in public training organisations is mainly provided in residential centres (more than 80%), with alternating formats (10%) and apprenticeship training (10%) playing a minor role. Plans for the future envisage a steady increase in all modes of training.

Under an apprenticeship training programme in Egypt called the Mubarak-Kohl Initiative, technical education is offered in 24 trades relevant to current industrial needs. However, after 11 years of implementation it is still trying to achieve critical mass, with fewer than 1% of technical students enrolled in the programme.

In contrast, the Algerian Ministry for Vocational Education and Training would like to give a more active role to enterprises and employers in the delivery of training in order to increase the responsiveness of the TVET system to the needs of the market. Plans are being made for the future to increase the number of work experience programmes for learners and enhance apprenticeship training and the role of continuing training for employees.

Continuing training

It goes without saying that continuing training for employees – even more than initial training – cannot be delivered seriously without taking into consideration the needs of enterprises and economic sectors.

In Morocco the provision of continuing training has developed significantly since 1996 due the creation of the inter-professional aid and advisory groups (groupements interprofessionnels d'aide au conseil, or GIAC) and the special training contracts (contrats spéciaux de formation, or CSF). Nevertheless there are a number of shortcomings to be overcome concerning activities, quality of interventions and tools applied. More recently, the creation of a targeted sectoral approach has been one of the strategic elements that aim at achieving better quality in the provision of continuing training. In order to improve the responsiveness of the TVET system to the demand for human resources in sectors crucial for the national economy, a number of initiatives have been undertaken and implemented through different pilot programmes. Along with these programmes, several

instruments and tools have been developed that might prove useful in supporting a quality assurance approach in the TVET system.

In Algeria, in a number of national priority sectors (for example, construction), specialised training institutes (for example, the Institut national spécialisé de formation professionnelle of Kouba in Algiers) provide technical and pedagogical assistance to private enterprises and public institutions in order to improve the qualifications of their employees through continuing training adapted to their specific needs (à la carte training).

Similarly, in a limited number of rapidly growing Egyptian economic sectors in special need of qualified workers, private business organisations have taken the initiative to overcome a supply-driven approach to training. Thus, social partners have tried to compensate for deficits in initial training in their respective branches by establishing their own continuing training programmes for employees. For example:

- The Egyptian Tourism Federation has set up a human resource and training department that has developed a more demand-driven approach to continuing training for employees in this industry. Centre-based training is implemented quite rarely; rather, mobile trainers deliver training all over the country, in-house and on-the-job. Based on the experience of having trained more then 100 000 adults so far, some attempts have also been made to contribute to reform initial training; however, the progress and results achieved are quite limited, given a low level of response from the public education system.
- More progress has been made in the ready-made garment sector, where a project under the umbrella of the Egyptian Chamber of Textile Industries and co-funded by the European Commission and the Egyptian government is establishing local enterprise-TVET partnerships. Through these partnerships the project implements demand-driven in-service and pre-service training activities and develops capacities that will progressively transform the TVET system. A parallel objective is to develop networks in the form of decentralised (regional or local) partnerships between groups of enterprises from the same sectors or sharing common technical skill needs, with public and private TVET providers covering the different components of the TVET system (from technical education to vocational training centres managed by different ministries).

2.3.7   Main findings on the pre-conditions for a quality approach

The preceding sections referred to the crucial elements for a quality approach. An analysis of these pre-conditions has shown that although some elements have been or are being implemented, several weaknesses remain. These weaknesses are summarised below.

- Although general policy objectives for reform and development have been formulated in most countries, they need to be complemented with measurable targets. Without a clearly shaped and widely shared reform strategy a quality approach will be meaningless.
- Efforts aimed at decentralising the management system for TVET are underway but, with the exception of Tunisia, local organisations rarely have the necessary autonomy to pursue a quality approach.

- Although curriculum reform according to national qualification frameworks and on the basis of competences is underway, it still remains to be developed and implemented in most sectors and branches.
- Although training of trainers is seen as an important issue and relevant activities have already been put into place, there is still a shortage of adequately qualified personnel in education and training.
- Increased participation of private sector organisations, both in the design and the delivery of training, is on the reform agenda, but needs greater encouragement and more appropriate schemes.

2.4 Quality assurance in TVET

Whereas the previous section referred to the pre-conditions for a quality approach to TVET, this section examines the availability and use of methods, instruments and tools for ensuring quality in TVET provision. The analysis encompasses both the TVET system and training organisations. At the system level, we look at the availability of quality assurance approaches, the relevance and scope of monitoring and evaluation activities, the existence and functioning of external verification and quality control, and the presence of any kind of quality-improvement incentives in the funding system for TVET. The discussion of quality assurance in training organisations analyses the possibilities and restrictions with regard to the implementation of internal quality management systems and ends with an example of good practice.

2.4.1 Quality in TVET systems

In the Mediterranean region, quality of TVET provision is quite often seen in terms of whether the curriculum is recent and competence-based, whether the qualifications of teachers and trainers are sufficient, and whether technical equipment is up-to-date. In comparison to the relevance given to these input factors, there seems to be less concern about the use of output and outcome factors to assess the quality of TVET programmes; in other words, the quality and adequacy of the skills acquired during training, dropout and completion rates, employment rates and the type of employment obtained are barely taken into consideration. In most cases this can be attributed to weaknesses in the monitoring and evaluation systems put in place to support the delivery of TVET programmes (for more details see Section 2.4.2 below).

The prevailing approach to quality assurance in the provision of training, including the evaluation of teachers and trainers, seems to be inspection (see Section 2.4.4 below). In some countries, statistical instruments have been put in place, which, together with the inspection reports, should allow for decision making. However, the information provided by inspection reports and existing statistical instruments is rarely valid (according to information obtained during the study visits) and is therefore currently not suitable for supporting any kind of licensing, accreditation or quality labelling. In those countries where monitoring and evaluation systems are in place, the information provided could facilitate the implementation of a quality assurance approach at the TVET system level.

So far, experiences in nearly all the Mediterranean countries are limited to pilot programmes or to sectoral initiatives, with the exception of Tunisia, which has started to implement a coherent national system for quality assurance (Box 5).

Box 5: The Tunisian national quality framework

In Tunisia a national framework for quality in VET, which was designed as the result of a feasibility study undertaken as part of the MANFORME programme, has been implemented on a step-by-step basis.

The structure of the framework is strongly based on quality assurance principles, encompassing as it does management regulations (55 standards) and measurement tools (287 indicators). Amongst others, the ISO 9000ff standards have been introduced in vocational training centres as part of their recognition. At the moment 130 centres participate in this quality assurance approach, which is constantly fine-tuned and improved.

While the implementation of a quality assurance approach in vocational training centres is making progress, complementary reforms at the central institutional level that build on local achievements and thus capitalise on bottom-up processes are still pending.

The Tunisian government has targeted the following activities in the MANFORME programme to improve the quality of VET provision:

- introduction and operation of a quality process for key personnel at all levels in the training system (ministry, government agencies and training centres), involving ISO standards and a quality charter;
- definition of standards for the certification and assessment of training programmes and the establishment of suitable procedures.

According to an updated legislative framework in Morocco in place since 2003, training organisations in the private sector undergo a licensing procedure for the professional profiles for which they provide training (Moroccan Ministry of Employment and Vocational Training, 2004). Their training programmes must be submitted to the relevant ministry for approval, so as to ensure that the content of the delivered training programmes corresponds to minimum technical and pedagogical standards in the relevant profession. Positive approval leads to the awarding of a permit to deliver state-recognised diplomas. As a result of this procedure the diplomas are valued in the labour market and the quality of training is ensured in terms of certain minimum criteria. This framework, however, does not include either obligations or incentives to improve the quality of training in a self-determined process and in a sustainable direction by the training organisation itself.

The situation of TVET in the public sector in Morocco is different. Although a more detailed strategy for quality improvement in continuing training still needs to be launched, several elements for implementing quality assurance in initial training already exist, described briefly in Box 6.

Box 6: Quality Framework in Training in Morocco

Based on the results of a feasibility study, a nationwide programme to implement internal quality management systems based on a self-assessment approach was launched in 1997. Entitled Quality Framework in Training (Démarche Qualité en Formation), it was launched with just 13 VET participating institutions, and has now increased to 45 centres covering different sectors and all regions in Morocco.

The programme consisted of three phases each covering a number of different actions. In the first phase the directors and trainers of the participating institutions underwent awareness and training sessions in quality assurance issues, and in the second phase, a quality management system was implemented. The final phase consisted of an overall evaluation of the experiment based on comparing results and objectives and a subsequent fine-tuning of the self-assessment approach.

The self-assessment tool developed covers 34 indicators referring to internal communication, human resources development, management of resources, pedagogical activities and partnerships with the local environment, all aimed at increasing the responsiveness of training provision to labour market demands.

Following up on this initiative, the establishment of an internal quality management system according to ISO standards is promoted in training organisations in the public sector.

Part of a longer-term strategy for the TVET sector in Morocco is to link certain elements for quality assurance at the provider level with an overall quality strategy at the system level. The creation of a national reference framework for quality in public vocational training with a perspective leading up to 2015 is planned. This framework is to include a number of concrete targets and performance criteria for training organisations, such as rates for successful completion of education and training, rates for the integration of students into employment, and satisfaction surveys of employers. Further criteria are linked to the qualifications and competences of the training staff and the relationship of training organisations with employers and business enterprises.

Egypt has piloted a quality assurance programme focused on technical colleges, described in Box 7.

2.4.2 Monitoring and evaluation

Monitoring and evaluation is a necessary element for quality assurance of whatever kind. In most Mediterranean countries, monitoring and evaluation is an area that is attracting growing attention, although, so far, the information provided by the existing monitoring and evaluation systems is not used for any kind of accreditation or quality labelling of TVET institutions.

Certain bodies that ensure monitoring, evaluation and control in TVET systems already exist in all the Mediterranean countries, although their roles and functions are different.

Box 7: A pilot quality assurance programme for technical colleges in Egypt

In Egypt, structural support is given to eight out of 45 technical colleges through a pilot programme that includes:

- revision of curricula and creation of new curricula;
- investment in modern technical equipment;
- staff training with new technical equipment;
- recruitment of new staff according to appropriate selection criteria.

Furthermore, the initiative includes the establishment of internal quality management systems in three colleges.

- Quality centres have been established at the college level.
- Quality units with relevant monitoring functions have been established for college departments.
- Self-assessment guidelines have been made available by using existing tools for higher education institutions adapted to TVET.
- Staff members have been trained in making appropriate self-assessment.
- A ministerial monitoring unit undertakes external quality assurance.

Each technical college draws up an annual quality plan and a report on achievements, which are reviewed by a board of trustees, composed of representatives from the government, private businesses and NGOs.

In Morocco, several elements for monitoring and evaluation are in place. The national charter for education and training requires regular evaluation of internal and external effectiveness, including pedagogical and administrative aspects. The general approach consists of external audits based on self-assessment by the training organisations and used by public authorities for decision making and further planning. Some sectoral employment observatories that form part of the institutional setting for monitoring deliver additional information on prevailing trends in the labour market.

Tracer studies on employability examining the destination and professional career pathways of students have been carried out regularly since 1986, providing state authorities with important information on further development of the TVET system. There is, however, no clear indication as to how much the existing data is used for planning, monitoring and better steering of the system. Despite the multitude of evaluation activities, a need for improvement has been articulated by a number of stakeholders. Most of the tools applied to date seem to collect opinions rather than data and merely accompany the training programmes; in other words, the evaluation of the results achieved is still considered to be weak. Due to the absence of an approved set of indicators, comparison and aggregation of data seems to be quite restricted, as, in turn, is the usability of the results.

The planned national body for evaluating the TVET system is seen as a key element in the better coordination of monitoring and evaluation, both of training organisations and the system as a whole. This body will develop a more target-oriented evaluation approach together with indicators, tools and instruments for the collection of information.

> ### Box 8: Monitoring and evaluation by the Centre for Studies and Research on Professions and Qualifications in Algeria
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> The Centre for Studies and Research on Professions and Qualifications (Centre d'études et de recherche sur les professions et les qualifications, or CERPEQ) is charged with the overall monitoring and evaluation of the TVET system in Algeria, including the assessment of the impact of vocational training on the labour market. The destination of graduates is surveyed one and five years after they complete their training and analysed according to a number of criteria including gender, level of qualification achieved and economic sector.
>
> Other statistical instruments cover the financial management of training organisations, recruiting practices affecting learners, monitoring and evaluation of results, the impact of training, and information on training for teachers and trainers. Furthermore, an observatory for education and employment has been established which, together with the statistical instruments for data collection on outputs and outcomes of vocational training, could serve as a backbone for the implementation of a quality strategy in TVET.
>
> In order to achieve this goal, the data that is gathered by CERPEQ would need to be disaggregated according to individual TVET institutions, which so far is not the case. Furthermore, it would be interesting to know to what extent the collected data is taken into consideration in planning, monitoring and evaluation of current practices and in making decisions for further improvements.

Tunisia has also introduced mechanisms to monitor and evaluate the effectiveness of publicly delivered TVET programmes. An observatory on skills development and employment was launched in 1996 and pilot impact studies have been conducted that have provided important feedback aimed at supporting the development of a methodological framework for mainstream evaluation of vocational training programmes. Moreover, Tunisia seems to be the only country in the region that has introduced impact evaluation studies for its TVET programmes, including a comparison of training programme beneficiaries with a control group.

Compared to these achievements, monitoring and evaluation systems in Egypt are under-developed. Although there is information on admissions to different educational streams, there is little valid data on output and outcomes achieved in the TVET system. With support from the ETF, at the end of 2007 an employment observatory was established for better monitoring general trends in education, training and employment and to identify future demands in the labour market. Its overall function is to bridge the gap between education and training system outcomes and labour market demand. The observatory is to follow human resources development according to sectoral, social and regional criteria and it is hoped that its findings will support evidence-based decision making in the education systems and thus contribute in the long-term to the employability of the Egyptian workforce. To date, use of results is still limited, but a web portal has been set up to deliver indicators on vacancies in the Cairo region, mainly in the textiles sector[10]. Several additional steps and experiments will need to be made in order to use the observatory as a service delivery tool for human resources development planning.

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10   Further information available on: www.observatory.gov.eg (in Arabic)

2.4.3   Institutional settings for accreditation

In a number of countries, there are at least plans to establish a recognised body for quality labelling and accreditation of training organisations at either the national or sectoral level.

Thus, in recent years in Egypt, Lebanon, the West Bank and Gaza Strip, Jordan and Syria, national frameworks have been envisaged for the accreditation of higher education institutions. In Syria the corresponding legislation (Law No 36 of 2007) was adopted only recently, but the new legislative framework for Lebanon still has to be drafted. In the West Bank and Gaza Strip an Accreditation and Quality Assurance Agency for Higher Education is already operational.

Taking into account the need to enhance the relevance of education in the face of increased competitiveness, new legislation, standards and accreditation rules have been developed, agencies for accrediting higher education institutions have been created and guidelines and manuals for self-assessment by higher education institutions have been distributed.

Whereas a quality assurance culture has strongly emerged in higher education, it is still under-developed in TVET. In a number of countries, however, it is likely that progress with quality assurance in higher education will filter down to TVET, either through the creation of a specific TVET body or by extending the area of operation of the existing body.

Box 9: The National Quality Assurance and Accreditation Agency in Egypt

Following a Presidential Decree, Law 82/2006 established the Egyptian National Quality Assurance and Accreditation Agency with the mission of ensuring quality, continuous development and efficient performance by Egyptian education institutions, their systems and their programmes, in accordance with the corresponding mission statements and declared goals, and of gaining the confidence of the community in their products, dependent on distinguished and competent human resources and based on internationally recognised evaluation mechanisms implemented through an independent, neutral and transparent framework.

The National Quality Assurance and Accreditation Agency will also establish a system for reviewing institutions with the intention of accrediting institutions that satisfy published criteria.

A proposal has been made to establish three interconnected departments in the Egyptian National Quality Assurance and Accreditation Agency, referring to general education, higher education and TVET, with each one to work out in detail the operational and technical issues for accreditation in their specific sector. A special department for accreditation in TVET could also contribute to more integration and finding common ground for TVET amongst the different ministries involved in this sector.

So far, the agency has concentrated its efforts on higher education institutions only, with no accreditation procedures or activities as yet in place for TVET. Achievements according to learning outcomes and performance in terms of integration of students in the labour market are seen as the most important issue for successful accreditation. At the university level, the agency has supported the establishment of quality assurance centres, the drafting of strategic plans and external evaluation of those plans. In parallel, a resource based on trained and experienced peer reviewers has been built up.

At the university level, the agency has supported the establishment of internal quality assurance systems in 60% of existing faculties and has generated the relevant self-evaluation reports for participating faculties. Furthermore, a programme has been established to support faculties in producing action plans allowing them to apply for accreditation.

As a horizontal result of its activities, the agency can build on a handbook for quality assurance and accreditation for higher education in Egypt that was produced in 2004 by the National Quality Assurance and Accreditation Committee. The handbook offers a comprehensive description of the processes and methods for quality assurance and accreditation, with guidelines and templates to inform all stakeholders and to support continuing improvements (NQAAC, 2004).

2.4.4 Quality assurance in training organisations

Overall, little information is available on the readiness and the preparedness of TVET organisations to implement a quality approach in their daily routines.

As a result of a global quality plan introduced in Tunisia in 2002, several training centres have been certified according to ISO 9001 standards. At the moment 130 centres participate in this quality assurance approach, which is constantly fine-tuned and improved. In Morocco, a number of training institutes have been trained to apply a self-assessment approach as part of the Quality in Training Approach (see Section 2.4.1 and Box 6 above), but unfortunately these practices are not always implemented. Some training institutions in Algeria working in close cooperation with international companies apply the quality standards of partners from the private business sector. Although in a number of countries self-assessment guidelines have been prepared for higher education institutes (see Section 2.4.3 above), these instruments are rarely applied in TVET.

In Turkey, a TQM approach has been implemented in 208 pilot schools. So far only schools belonging to the general education system have taken part in this pilot project, but further implementation of this project in the TVET sector might be an option for further activities in relation to quality and quality assurance.

Apart from these examples, and in line with the limited autonomy of training providers in terms of governance of the TVET system (see Section 2.3.2 above), an inspection approach seems to be prevailing in many countries in the Mediterranean region, the elements of which are summarised below.

- Due to the strong degree of centralisation in TVET, there are limited possibilities for TVET institutions to develop their own visions and missions in cooperation with stakeholders from the private business sector and according to local demands.

- Given the strong external guidance, there are few possibilities for training institutions to identify quality objectives of their own and to work systematically towards improvements in quality.
- Widely accepted tools and instruments, such as, for example, self-assessment guidelines, which could assist training organisations in assessing and improving the quality of their services, are rarely available.
- Although training institutions in some countries are obliged to draft self-assessment reports, according to the impressions gleaned in the study visits, these reports seem to be of minor importance as far as internal quality management is concerned.
- The main intention of self-assessment reports seems to be, rather, to respond properly to inspection guidelines.
- As could be observed in Algeria, external inspection is not focused primarily on results achieved but is implemented as a way of exercising control over technical, administrative and pedagogical issues, and including the assessment of teachers and trainers.
- Quite often inspections are based on personal judgements, with an absence of quantitative and measurable indicators reflecting training outputs and outcomes.
- There is a general lack of external support from state bodies for training organisations in terms of improving the quality of TVET provision or overcoming poor quality in delivering training.

In order to overcome the prevailing tradition of inspection and to effectively implement a quality approach in the TVET system, training institutions will need to be empowered further and will need easy-to-use instruments to develop the quality of their services on their own.

One of the positive outcomes of the study visits undertaken under the auspices of the ETF's quality and quality assurance project was the revelation of the number of methods and tools being used, which, if applied more systematically, could help to assess and improve the quality of training provision. Although these methods and tools are not part of a comprehensive approach to quality assurance at the TVET system level, altogether they provide an important block of experience that might be used as the backbone for mainstream regional TVET systems.

Box 10: An internal company training centre quality management system in Egypt

Arab Contractors is one of the biggest state-owned companies in Egypt, employing over 50 000 workers. It runs a large training institute of its own[11], which provides training in technical and managerial areas.

The Arab Contractors Management and Technology Training Institute (MTTI) has put in place a highly functional and sophisticated quality management system that can be qualified as a good practice example.

The quality management system consists of a three-level system, with an internal quality cycle, continuous approval by company headquarters and external certification according to ISO standards. The first ISO certificate was awarded in 1996 and the current certificate is valid until 2009.

The internal system reflects and applies all the elements that form part of an ideal quality cycle:

- a preliminary analysis of training needs, forming the basis for an annual training plan;
- continuous adaptation of curricula and training of trainers according to new demands;
- pre-assessment of students so as to customise training provision;
- final assessment of students in compliance with curricular demands;
- assessment of training quality and usability in the workplace by student follow-up surveys;
- ongoing cooperation with external customers including customer satisfaction surveys;
- continuous review and organisation of change;
- incentives for trainers and other staff in the form of rewards for activities leading to good results.

In accordance with ISO standards, all processes are described and related with tasks and individual responsibilities, and results achieved are regularly documented, evaluated and compared over time.

2.5 Conclusions and future priorities

Improving quality in TVET is essential to providing relevant learning opportunities to a large number of young people and adult employees in the Mediterranean countries, so as to reduce social inequality, open up employment prospects and support economic growth. Important initiatives have already been undertaken in the area of national qualification frameworks, curriculum reform and the training of trainers. Other areas, such as monitoring and evaluation and TVET institution accreditation need increased attention.

Key findings of the analysis of the current state of TVET and the challenges for TVET development undertaken in the previous sections are described below, along with some conclusions with regard to further activities.

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11   Further information available on: www.mtti.arabcont.com/

2.5.1   Key findings

Even though quality and quality assurance are of strategic importance for the
modernisation of TVET systems they will not work as drivers of the process if they are not
an integrated part of a political and strategic framework. There is no general definition of
quality in TVET; the concept of quality is context-dependent and becomes meaningful
only in relation to clearly articulated objectives. Quality assurance is the technical toolbox
that can help define objectives, criteria and standards for quality and verify that progress
is being made in the right direction. Thus, quality and quality assurance need to be
embedded in a general framework for reform and linked to clearly defined objectives and
measurable achievements.

Strengthening the attractiveness of the TVET system can be seen as a general
objective for all Mediterranean countries. In most EU countries vocational routes are fairly
accepted and the strategy for lifelong learning initiated at the European level is bringing
even more strengths to vocational streams. An absence of pathways between TVET and
the rest of the education system prevails in the Mediterranean countries, however.
Strengthening the attractiveness of TVET will require a coherent strategy for lifelong
learning that should include initial and continuing training as an integrated part of the
education system.

Another need shared by all countries in the region is to improve the mechanisms for
more effective governance of the TVET system, encompassing different aspects of
authority over VET institutions and the relationships between the public and private
sectors. Overcoming excessive centralisation and the establishment of structured
communications with the private sector remain key components in TVET reform in the
region.

Most public TVET institutions suffer from a lack of administrative autonomy, which
hampers them in terms of shaping their own profiles and setting quality objectives.
Vocational schools need to be able to develop and adapt their education programmes in
close cooperation with the companies in their environment, as, when steered from the
centre, they fail to take into serious consideration the demands of the labour markets,
and, in particular, local and regional needs.

A quality approach at the managerial level of vocational training institutions is rare.
Whereas in the European countries various efforts have been made to shift steering of
VET systems from external control and inspection towards self-guided management, VET
institutions in Mediterranean countries are most often driven top-down. In order to improve
the attractiveness and quality of VET systems, there is a need to encourage bottom-up
participation by VET providers. The quality process must encompass all levels, with the
local actors and their regional networks of stakeholders playing a more decisive role.

Growing importance is being attached by European countries to using quality
indicators as tools for measuring performance and progress in the provision of training. In
comparison, many VET organisations in Mediterranean countries operate on inputs from
outside and fail to monitor results and achievements. There seems to be little concern
with the use of output and outcome factors to assess the quality of TVET programmes,
with the quality and adequacy of the skills acquired during training, dropout and
completion rates, employment rates and the type of employment achieved barely taken
into consideration. At the European level a reference set of coherent indicators (Annex 3)

has been established that focuses on indicators measuring output and outcomes. The greatest importance is attributed to the employment effects of training programmes, with the destination rate – indicating the placement of graduates in jobs – as the core measure of performance. In the most advanced systems, the best performing VET institutions are even rewarded with extra public funding, which acts as an additional incentive for quality improvement.

In most Mediterranean countries the state plays a predominant role in the provision of TVET; the participation of private sector organisations, however, is now generally on the reform agenda. In Europe, increased recognition of the demands of VET customers (trainees and employers) and a continuous trend towards the involvement of all relevant stakeholders in the development of VET can be observed. In many Mediterranean countries, steering committees with government and social partner representatives have been established at national levels, but too often have proven to be less effective than planned. There is also a need to develop stronger partnerships at the level of vocational training institutions, i.e. with private businesses in the local and regional environment. Broad partnerships with private sector organisations could help to enhance the labour-market relevance of TVET provision in terms of content and learning methods, and could also raise the participation of small and medium enterprises in the design and in the delivery of TVET.

A quality assurance culture has strongly emerged in higher education in the Mediterranean countries, but is still insufficient in TVET. For a number of countries, a higher education accreditation body has been established and it is likely that accreditation might eventually include TVET as well, whether through the creation of a similar body or by extending the area of operation of the existing accreditation body. The establishment of a body for quality assurance at the system level is surely a step forward, but will have limited effects unless quality assurance mechanisms are established at the level of the training institutions. It is only by complementing external assessment with internal efforts towards quality that change and improvement will happen.

Self-assessment of VET organisations will give ownership of the quality process to those involved in the learning process and will motivate efforts for change. But self-assessment needs to be counter-balanced by a view from outside in order not to become an end in itself. In most European VET systems, self-assessment and external assessment are combined, with clear signs that external quality assurance has shifted in recent years from a mere controlling function to a dialogue with and support for VET providers. Several guidelines for combining self-assessment with external assessment or accreditation of VET provision have been made available. A key challenge for quality assurance, however, is to maintain the balance between internal ownership and external assessment.

2.5.2   Quality objectives

Although in most Mediterranean countries a detailed quality strategy for TVET has not as yet been definitively developed, a number of necessary pre-conditions are already in existence which might be a useful baseline for further action. National intentions towards reforming TVET are backed by the articulation of relevant political objectives but, in most cases, these objectives are not yet sufficiently linked to measurable targets.

A number of levers and priorities for reform in key areas have been identified. Similar to development needs in the European Union, necessary reforms and investments should particularly focus on the following:

- increasing participation in TVET by improving the image and attractiveness of the vocational route for employers, parents and students;
- achieving greater quality of training provision in order to improve the employment prospects of TVET students;
- linking TVET with labour market requirements for a highly skilled workforce for a competitive economy;
- taking account of the needs of low-skilled individuals and disadvantaged groups with a view to achieving social cohesion and increasing labour market participation.

In order to make progress with the implementation of a quality approach at the policy level, it seems crucial to agree on concrete and measurable targets for quality both at the level of the TVET system and at the level of training organisations and, furthermore, to link these targets to a precise implementation agenda.

Furthermore, the definition of targets for improving quality in the TVET sector should be complemented with agreement as to a set of indicators, suitable methods for data collection and a routine for regularly updating statistical records.

2.5.3   A quality framework for TVET

Any initiatives for improving quality should preferably be part of an overall strategic framework, as otherwise their impact will be limited. Increasingly decentralised implementation of public education and training and enhanced autonomy for local TVET institutions may be seen as crucial elements in such an overall framework. A quality framework will need to devolve authority to local TVET institutions and make them accountable for results on the basis of pre-defined and clear objectives. Given the close relationship between governance and quality issues, the implementation of a quality assurance approach in local and sectoral training institutions could be a useful element in supporting political objectives for improved governance of TVET and vice versa.

The inventory report for Morocco identified the link between a national quality assurance approach at the TVET system level and a quality approach in training organisations as one of the most crucial points for further development. This issue will be tackled within the national reference framework for quality, which is part of a longer-term development strategy for the TVET system in this country. The envisaged creation of a national body for evaluating the TVET system could serve as a cornerstone for developing the system further, and a meticulous definition of format, functions and tasks to be fulfilled can be considered as a challenge for the future.

A description of wide-ranging needs in terms of developing a framework for quality in TVET is given in a report of the Ministry of Labour of the Hashemite Kingdom of Jordan (El-Saies, 2007) (Box 11).

Box 11: A framework for quality in TVET – the Jordan quality continuum

1. Quality programmes:

- programmes relevant to industry;
- strong industry involvement in programme development;
- models of delivery that get students into the marketplace (cooperative education, work experience, job placement);
- faculty/industry exchanges;
- flexible programming that meets industry needs.

2. Increased institutional capacity: Since TVET institutions focus on outcomes, it means that they have to develop their institutional capacity to achieve these outcomes.

3. National support: As TVET institutions develop the institutional capacity to function like businesses, the government will need to take on a leadership role in system planning.

4. Industry support: Industry will need to become increasingly involved in TVET.

5. TVET policy support: The government will need to assist TVET institutions and colleges to help implement a national agenda.

6. National professional associations: National professional associations need to take on an increasingly important role in

- lobbying the government and advocating on behalf of TVET institutions;
- bringing TVET institutions together to collaborate, develop and share strategies;
- providing leadership and guidance to TVET institutions;
- conducting research into TVET institutions and the TVET system as a whole;
- promoting TVET institutions and colleges, both nationally and internationally.

Given the wide range of crucial issues that could be tackled with initiatives to improve quality and quality assurance in the TVET systems of the Mediterranean countries, it seems advisable to launch (in one of the Mediterranean countries at least) a feasibility study that could outline the main elements of a quality framework for TVET by looking more closely into the potential synergies between the different activities, identifying potential barriers and obstacles for implementation and assessing the possible impact of the cross-fertilisation of initiatives.

2.5.4 Strengthening the institutional setting for quality in TVET

In a number of countries, national agencies for accreditation and quality assurance in education support quality development in TVET. Although these agencies are designed primarily to improve quality and competitiveness in the higher education sector, the accreditation rules and standards that have been formulated and self-assessment manuals that have been provided are of potential use to the TVET sector; in Syria, for example, the Council for Higher Education recently adopted Decision No 31 (26 November 2007) in this respect. In some countries it is likely that the mission of these agencies will also have an impact later on on other parts of the education system.

QUALITY AND QUALITY ASSURANCE IN TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

For the TVET sector, however, specific pre-conditions will need to be taken into consideration when it comes to developing criteria and procedures for accreditation. For TVET, increased partnership with the private business sector in the governance, design and delivery of training is the main priority in launching a process of change towards more demand-driven programmes.

Based on the experiences of several European countries in the implementation of a framework for quality assurance, a number of elements can be pointed to as crucial.

- TVET organisations should be made responsible for complying with standards and for the achievement of pre-defined objectives for quality.
- Measured outcomes should respect the individual mission statement of the institution and its stated strategic aims.
- A comprehensive approach towards quality assurance should combine the institution's systems for internal quality assurance (self-assessment) with external processes for accreditation.
- Such a combined approach for quality assurance in TVET should support sustainable progress and ongoing quality improvements.
- Incentives for improving quality should be provided by a reward system, ideally part of funding mechanisms.
- At the system level there should be supporting institutions (such as the accreditation bodies created in a number of countries for higher education institutions) providing published guidelines, training, methods and tools for quality assurance.
- Institutions active at the system level should be held accountable and should undergo regular quality assurance reviews.

In seeking a theme that includes and unites the crucial sub-themes mentioned above, a strategic nucleus for common activities in the Mediterranean region seems to be the development of institutional capacity for external accreditation in combination with initiatives to facilitate internal quality management of training institutions. Understood in broad terms as an external evaluation of training provision, accreditation can be a focal point for developing quality and accountability in the TVET system.

- Accreditation is strongly related to the institutional framework for TVET governance as it implies the creation of specific bodies to evaluate and promote quality in training provision.
- As a lever for granting autonomy, responsibility and self-assessment powers to local training providers, accreditation is a necessary pre-condition for decentralisation.
- With regard to the governance issue, accreditation requires discussion and decision making on the quality objectives and concepts to be applied and on the stakeholders and actors to be involved in decision-making processes.
- Accreditation enables training programmes to be evaluated according to their usefulness and effectiveness from the perspective of the labour market and the national economy, and also according to their suitability to students and their efficiency for the country.
- Accreditation requires the necessary quality tools to assess training inputs (for example equipment, trainer qualifications), processes (curricula), results (certificates) and outcomes (employability).
- Accreditation supports transparency when suitable mechanisms to communicate and disseminate training provision results and outputs have been set up.

Last but not least, given that accreditation is a highly topical issue on the European agenda for quality and quality assurance in TVET, such parallel developments would provide excellent opportunities for exchanges of experiences and mutual learning.

2.5.5   Curriculum reform

Curriculum reform is an area where significant efforts have been made with the aim of improving the relevance and quality of training, with the main focus being on curriculum revision and modernisation while taking into greater consideration the demands of the labour market. Although the extent and depth of curriculum reform may vary from country to country, at least some initiatives have been undertaken to address particular challenges in all Mediterranean countries, with greater efforts invested in countries where curricula have been modified following the competence-based approach.

The competence-based approach, which is quite complex, constitutes a fundamental change from previously applied methodologies for curriculum development, which tended to apply mainly academic standards and rules. The competence-based approach requires closer links between public training institutions and the business sector in order to inform the educational content of the training programmes and to ensure that each programme is consistent with the skills identified as necessary for individual occupations. Furthermore, such curricula are upgraded and adapted continuously in line with the evolution of new technologies and new operational procedures.

This approach to curricula reform can be as a key factor in terms of improving quality and, moreover, can be expected to lead to changes towards more autonomy in the operation and organisation of training centres.

2.5.6   Capacity-building for human resources development in private enterprise

As with curriculum reform, an overall challenge is to overcome the widely practised supply-driven delivery of training; this can be done by strengthening links between the TVET system and the business sector at all levels. Some experiences show that social partner involvement in TVET can be achieved but requires recognition, support and encouragement. In general, however, and even though it is seen as a strategic objective of major importance, partnership between the TVET sector and the private sector is often poorly developed.

In order to fulfil their role, business enterprises need to elaborate human resources development plans by undertaking an assessment of their strategic requirements for personnel. They must start by building their human resource capacities for the future in accordance with their economic objectives. Many stakeholders from the private business sector, however, lack vision in human resources development. Furthermore, active participation in developing the TVET system and its policies is weak, resources are often limited and not sufficiently skilled to cooperate with the TVET system. Numerous obstacles exist, in particular a lack of capacity among employers to identify training needs and participate in the actual design of training programmes. With their current resources, employers are not able to contribute to the development of curricula and other quality aspects of the training system.

Therefore, capacity building is required so that social partners can assume their role. In a strategy that aims to increase TVET partnership with the private sector, a key

area will be to improve the capacity of the private sector for human resources development by providing employers with the resources necessary to actively participate in identifying and assessing current and future training needs, delivering training and continuously improve quality.

2.5.7   Training of trainers

In all the countries in the region, a shortage of qualified training personnel is a major obstacle to reforming and improving the quality of TVET. This shortage is due to structural obstacles such as low salaries, trainers having academic rather than practical qualifications and the lack of professional career paths for teachers and trainers in the short and medium term.

Other elements are more likely to change sooner. Trainers and teachers need to reach out to business companies so as to broaden their experiences and adapt their knowledge to the demands of the workplaces. Ongoing training of trainers should help to update the traditional academic style of teaching. Appropriate programmes already operating at the local level that respond to these needs have been described in this report.

At the sectoral level certain activities are underway in terms of the systematic development of capacities to train trainers – for example, identifying and tracking master trainers – and it is worthwhile considering this approach to building up a permanent stock of master trainers as a blueprint for other sectors and countries.

2.5.8   Supporting quality management in TVET institutions

Attempts to reform TVET at system level should preferably go hand in hand with complementary activities in the institutions delivering training, because these are in direct contact with the customers, namely, students and business stakeholders in the market needing qualified personnel. It is at this level that any initiative for quality and quality management should ultimately deliver.

Exclusive reliance on top-down initiatives for better quality makes it difficult to overcome the prevailing inspection approach. In order to work towards better quality, local training institutions must have room to manoeuvre to adapt existing quality tools to their specific needs.

A number of countries have experimented with detailed quality tools at the local and institution levels, and initiatives to develop internal systems for quality assurance and improvement could build on these experiences. Morocco, for example, as part of its Quality in Training Approach programme (Démarche Qualité en Formation), has a lengthy and well-documented experience with self-assessment in training institutions; Egypt has experimented with a quality assurance approach for technical colleges in a pilot programme; and Tunisia has put a coherent system for quality management in place under the MANFORME programme. Furthermore, in Egypt, many TVET institutions are ISO certified, and there are many cases of institutions with a lengthy experience in internal quality management of human resources development, such as, for example, the Arab Contractors Management and Technology Training Institute in Egypt.

Any initiatives to develop and implement quality management systems in training institutions need to build on these experiences.

3. POTENTIAL FOR IMPROVED COOPERATION

Whereas the previous section identified a number of strategic elements to support a quality strategy for TVET in the Mediterranean region in general, the following section will address the potential for cooperation between the Mediterranean countries themselves and between the Mediterranean region and the EU member states in terms of strengthening national and regional strategies for better quality TVET.

3.1 Cooperation between Mediterranean countries

As analysed in the previous sections, there are many common elements and shared challenges facing the TVET systems in the Mediterranean countries. Reform attempts tackling a wide range of issues are underway all over the region. Although national efforts may depart from different starting points, they aspire to common aims. Similar to the policy objectives drawn up for the European VET systems, they essentially refer to:

- strengthening links between TVET and the employment system;
- increasing the responsiveness of education and training to the real demands of the labour market;
- upgrading student competences and skills and enhancing employability;
- strengthening the attractiveness of TVET as a recognised educational career path in an appropriate system of lifelong learning.

Apart from these overall policy objectives there are strong efforts to overcome the highly fragmented responsibility for TVET, which is hindering TVET integration in the education system in a lifelong learning perspective. All over the Mediterranean region efforts are being made to improve TVET governance, promote participative arrangements at different levels and involve social partners and other stakeholders in decision-making processes related to content, offer and organisation of training. In particular, there is a need to develop partnerships between local training institutions and private sector businesses in the local environment.

▶ The Mediterranean countries could exchange ideas and experiences on strategies to enhance partnerships with the private business sector and help develop its capacities to contribute to the identification of skills needs, the development of competence-based curricula and the provision of enterprise-based training.

The Mediterranean countries could also share experiences on the concepts and approaches they plan to implement in other TVET reform areas so as to ultimately ensure better TVET quality.

▶ Common areas where TVET quality in the Mediterranean countries could be improved include the development of national qualification frameworks, the reform of curricula according to a competence-based approach, and the training of TVET teachers and trainers.

In most of the Mediterranean countries, monitoring and evaluation is an area that is attracting growing attention. Although bodies already exist in all Mediterranean countries aimed at ensuring monitoring, evaluation and control in the TVET system, their roles and functions are different.

▶ As with the recently created employment observatories in the region, the Mediterranean countries could exchange experiences with regard to the design of their TVET monitoring and evaluation systems and reliable methods for data collection, and could also share ideas on how to create more integrated systems.

Quality assurance can play a decisive role in modernising regional TVET systems and improving their performance and attractiveness. A culture of quality assurance has already emerged strongly in higher education, and, in some countries, this culture is likely to filter down to the TVET system.

▶ In some Mediterranean countries standards and rules for accrediting higher education institutions have been developed, agencies for accreditation have been created and handbooks, guidelines and manuals for quality assurance have been developed. An exchange could be organised with regard to the accreditation standards and guidelines and the statutes and mandates governing existing accreditation bodies.

Although accreditation is crucial in terms of ensuring quality in TVET, it can never replace internal quality improvement efforts by the training institutions themselves. In order to overcome the prevailing tradition of inspection and to implement an effective quality approach in the TVET system, there is a need to encourage bottom-up quality processes in training institutions. Local providers will need to be empowered more strongly and will need some easy-to-use instruments to develop quality in their services for themselves.

▶ The promotion of quality management systems in local training organisations is a decisive tool for extending autonomy and responsibility and, at the same time, increasing their accountability.
▶ Local training institutions in the Mediterranean countries should be encouraged, in cooperation with stakeholders from their local environment, to develop an internal quality management system with their own vision on better quality. Since appropriate tools for internal quality management are already available in the region, a system for exchanging these instruments, methods and tools could be put into place.
▶ Quality-certified training centres already exist that could function as centres of excellence and sources of support. Furthermore, these centres could function as the backbone of a regional network for quality and quality assurance in TVET.

3.2 Cooperation between the European Union and the Mediterranean region

Just as commonalities exist in the Mediterranean region, there are many strategic elements which could be considered important for the further development of TVET systems in both the countries in the Mediterranean region and the member states of the European Union.

The main difference between the two regions is that the Mediterranean countries have, to date, confined themselves to their national experiences and ideas only; the EU member states – in pursuing the principles of the Copenhagen Process – have developed common ground, common objectives and common instruments and tools aimed at increasing the attractiveness of their TVET systems. Thus, the European Union has operationalised at least some of its policy objectives into measurable targets in order to make progress with quality improvement.

▶ EU and Mediterranean countries could exchange experiences on the development of concrete and measurable targets for quality in TVET systems and training institutions and also on how these targets could best be linked to a precise agenda for implementation.

ENQA-VET was established for the European Union in order to ensure effective progress towards achieving targets and to allow sustainable cooperation in the field of quality assurance across member states. This network, consisting of government representatives from member states and social partner organisations, provides a platform for a structured exchange of information, debate and mutual learning, and ultimately aims at maximising the results of Europe-wide cooperation.

▶ With support from the ETF, the Mediterranean countries could build up a network similar to the EU-based ENQA-VET. Once established, a continuous exchange of experiences could be organised between the Mediterranean and EU networks so as to foster cross-fertilisation and develop synergies.

Furthermore, at European level, the Common Quality Assurance Framework model has been developed, aimed at ensuring and improving quality, regardless of the context, system or type of training institution. This model has frequently served as a guiding instrument for the development of national approaches to the modernisation of TVET systems. One of the main objectives of European cooperation is to complement the Common Quality Assurance Framework model with a toolbox of additional instruments to support practical implementation.

▶ The Mediterranean countries could experiment with and apply the Common Quality Assurance Framework model to their own contexts, thereby participating in fine-tuning the model and in complementing it through the contribution of new tools that have proven to be effective in their own environment. In particular, with a view to differences in governance, experiences with different combinations of internal and external quality assurance mechanisms could be exchanged.

Further European networking activities are centred on the organisation of peer-learning visits to countries that have implemented examples of good practice of quality in TVET. A group of experts, mainly government officials and/or scientific experts,

visit the host country and assess the good practice in the context of their previous experience. Peer-learning visits assess good practice from an external point of view with a twofold objective: to support the host country in its efforts to improve the quality of its practices, and to enable the visiting country representatives to identify benefits for their own context. The impact of peer learning includes the development of a shared language for discussing problems and policies, altered definitions of what constitutes good policy and decisions taken, policies implemented and measurable results at the national level (Casey and Gold, 2005).

▶ Representatives from the Mediterranean countries could participate in peer-learning activities organised by EU member states and thus contribute to mutual learning. The Mediterranean countries could also organise peer-learning visits to their own regions and invite representatives from outside to contribute to an improvement of their practices from an external point of view.

Measuring quality and its elements is a major challenge in all TVET systems, as improvements to quality need to be made in accordance with objective criteria. Developing quality means measurement before and after an activity is carried out, and, in order to be able to measure, a number of indicators are needed. Cooperation on quality assurance at the European level has led to the development and adoption of a set of coherent indicators covering the entire TVET cycle. In assessing the quality of training, and in contrast with the importance attached to input factors in the Mediterranean countries, the European set of indicators focuses more on measuring outputs and outcomes.

▶ Representatives of the Mediterranean countries could participate in the technical working groups established at European level in order to define and put into practice common indicators for quality in TVET. Thus, EU member states and Mediterranean countries could exchange experience about how they have started to measure training programme outputs and outcomes as indicators of effectiveness, relevance and efficiency.

Although there is a shift in the European Union towards measuring outputs and outcomes when monitoring and evaluating TVET, the steering of training institutions according to pre-defined goals for better effectiveness and efficiency is still a major concern. There is a widely shared consensus that new funding mechanisms should be introduced and that accountability for training provision should be linked to outcomes and performance. However, arriving at appropriate solutions is not an easy task and so far examples of good practices are rare.

▶ Diversifying public funding of training institutions to create incentives for greater effectiveness, efficiency and relevance in the provision of TVET is a common interest of the Mediterranean countries and the EU member states. Both regions could work together to share their ideas and experiences in developing and implementing performance-based funding mechanisms.

Accreditation of training institutions and training programmes is a very topical point on the European agenda for quality and quality assurance in TVET and similar tendencies are observed for the Mediterranean region. Accreditation means including an external vision to all steps of training provision and quality assurance, it being widely accepted that an external view can provide a broader and clearer picture of a particular situation.

Interventions from outside, however, will only have a sustainable impact if they are adopted and put into practice by the training institutions themselves. Quality, furthermore, requires people to be self-motivated. It has to be emphasised that, in recent years, external assessment and accreditation procedures have shifted from a control function to dialogue and support for training institutions.

▶ In implementing accreditation as a tool for better quality it is of vital importance for both the European Union and the Mediterranean countries to develop procedures that go beyond control and inspection. Debate and developmental activities are still needed in order to strike the right balance between external assessment and internal ownership of the quality process.

An effective approach to quality assurance in TVET has to combine external verifications – such as accreditation – with internal self-assessment by training institutions. Self-assessment can serve as an effective starting point for achieving better quality, and continuous application of self-assessment is one of the most effective tools for quality improvement. At European level, a self-assessment guide has been developed to support training institutions all over Europe to better manage the quality of their training provision.

▶ With the support of the ETF an exchange and adaptation of tools for training institution self-assessment could be organised between the European Union and the Mediterranean countries.

Quality and quality assurance are never ends in themselves. The measures discussed above will only be valuable if they contribute to fulfilling student needs, provide better employment prospects for the workforce and contribute to economic and social well-being. It is in this regard that the Mediterranean countries and EU member states share a common interest in improving the attractiveness of their TVET systems and in integrating them into an appropriate system for lifelong learning.

Annex 1: Common principles for quality assurance in education and training

Quality assurance, which is necessary to ensure accountability and improvement of education and training, should be carried out in accordance with the following principles.

- Quality assurance policies and procedures should cover all levels of education and training systems.
- Quality assurance should be an integral part of the internal management of education and training institutions.
- Quality assurance should include regular evaluation of institutions or programmes by external monitoring bodies or agencies.
- External monitoring bodies or agencies carrying out quality assurance should be subject to regular review.
- Quality assurance should include context, input, process and output dimensions, while giving emphasis to outputs and learning outcomes.
- Quality assurance systems should include the following elements:
  - clear and measurable objectives and standards;
  - guidelines for implementation, including stakeholder involvement;
  - appropriate resources;
  - consistent evaluation methods, associating self-assessment and external review;
  - feedback mechanisms and procedures for improvement;
  - widely accessible evaluation results.
- Quality assurance initiatives at international, national and regional levels should be coordinated in order to ensure overview, coherence, synergy and system-wide analysis.
- Quality assurance should be a cooperative process across education and training levels and systems, involving all relevant stakeholders, within member states and across the Community.
- Quality assurance guidelines at Community level may provide reference points for evaluations and peer-learning.

Source: European Commission, 2006.

Annex 2: Quality criteria and indicative descriptors for developing and implementing the European Quality Assurance Reference Framework

Planning		
Quality criteria	**Indicative descriptors at system level**	**Indicative descriptors at provider level**
Goals and objectives are formulated in clear terms and as far as possible combined with well defined indicators.	The procedure of the planning process is clearly described and transparent. VET goals/objectives are described for the medium and long terms. Goals/objectives are translated for the different levels of implementation and communicated to the relevant stakeholders. Clear targets are set up and monitored. Specific quantitative indicators (success criteria) have been defined, enabling the achievement of objectives in later stages to be checked. Timeframes for the achievement of specific goals have been established. A policy for assessing performance linked to rewards and incentives is in place. Monitoring mechanisms, including early-warning systems, are set up. References for accreditation/external evaluation and/or programmes have been provided. Standards for certification of individuals have been defined.	Appropriate mechanisms are in place to communicate national and local goals throughout the institution. The procedure for the planning process is clearly described and information on this is disseminated. Policy objectives are reflected in the local goals set by the providers. Timeframes for the achievement of specific goals have been established.
Goals and objectives reflect a clear vision on VET policies and have been set up with the relevant stakeholders.	The relevant stakeholders participate in the definition of goals and purposes at the different levels. Future training needs are identified according to systematic procedures. Planning foresees a strategic approach to promoting continuous improvement and self-regulation at all levels. Planning ensures that success rates are equally outstanding for learners from different backgrounds. Support schemes for vulnerable groups are in place. Providers are encouraged to have clear and transparent information policy on the principles of rights and ethics.	Regular contact takes place with relevant stakeholders to identify specific local/individual needs. Systematic and early involvement of staff in planning, and quality development policies. A clear strategy for staff development that includes incentives is in place. Future training needs have been identified according to systematic procedures. Timely and appropriate responsiveness to local needs is assured. Strategies for the inclusion of vulnerable groups have been developed. Information on individual rights and duties is clear and made available by all appropriate means. A complaint management system is implemented by registering feedback from users, purchasers and other relevant stakeholders. A policy on ethics is defined and documented.
Goals and objectives include European goals and objectives for VET.	An action plan has been drawn up to achieve the European goals.	Cooperation initiatives with VET providers from other EU countries are launched with a focus on European goals.

Implementation		
Key principles are established to underpin and support implementation of the actions planned to achieve goals at different levels.	A national/regional approach to quality assurance in VET has been devised and a quality approach is required at the provider level. Key principles are set up by legislation (broad or narrow regulations, laws and rules). Implementation principles have been established in cooperation with the social partners and VET providers and the relevant stakeholders at the different levels. Public funding (based on input or output) is used as an incentive for providers. Weakly performing providers receive support for improvement. Capacity-building of key actors is encouraged and supported. Guidelines on procedures have been provided.	A systematic quality approach and plan is in place. Relevant stakeholders are involved in the process of organising appropriate answers to local needs. Tasks, competences and responsibilities are aligned, including quality assurance and development. Communication procedures to staff on strategies and planning by the VET provider's organisation/institution are developed. Responsibilities in quality management and development have been clearly allocated. Staff undergoes regular training to develop capacity building of key actors on quality issues.
Mechanisms have been set up to influence/support the implementation process.	VET provider responsibilities in the implementation process are clearly described and made transparent to all stakeholders. The (minimum) criterion that providers must meet has been defined when appropriate and is well known. Specific quality assurance procedures have been devised for VET providers. Strategic approach and support promotes ownership and personal motivation in quality improvement among staff, trainers and trainees.	The management process and the allocation of resources takes into account the principles underpinning the implementation process. Relevant partnerships at different levels are clearly supported. Clear procedures have been set up to promote self-improvement at all levels. Teachers and trainers are encouraged to follow regular training. Teaching material is regularly updated. Working conditions and facilities throughout the organisation are regularly reviewed.

Evaluation and assessment		
Relevance of input, process, outputs and outcomes of VET systems and provision are regularly assessed against policy goals and planning.	A specific assessment framework brings together input, process, output and outcomes and clearly defines the methodology and frequency of assessment and feedback to stakeholders at all levels. On the occasion of VET reforms, ex ante, in itinere and ex post evaluations are made. Compliance with national/regional standards on input, process and output is checked. The national partners ensure that the standards and processes for assuring, monitoring and measuring quality are relevant and minimise the burden of bureaucracy. Regular data collection is made according to pre-defined indicators to measure success across the system, together with other specific measurement tools, e.g. questionnaires and scales for measurement. The relevance of the data collected is regularly checked. Self-assessment is used to provide a systematic and general overview of provider activities and is combined with external evaluation to provide feedback on strengths, areas for improvement and recommendations for action. Combined early warning systems are used. Benchmarking results, whenever available, are considered.	A quality approach is in place based on a standard quality system. Self-assessment is regularly carried out according to national and regional regulations/framework or at the initiative of VET providers, associating a number of different internal and external actors. Assessment covers results of training and learning outcomes, management and teaching staff performance as well as organisational matters. Regular data collection is made according to pre-defined indicators and the relevance of the data collected is regularly checked. Specific instruments are used, e.g. questionnaires, interviews and others, to evaluate client satisfaction. Benchmarking is used for mutual learning and performance improvement. Regular reporting from departments to management level is installed, supported by specific indicators.
All relevant stakeholders are involved in the assessment process.	Stakeholder involvement in the assessment of results and follow-up debate in view of the review have both been agreed and are clearly described. Competent bodies are identified. Appropriate mechanisms and instruments have been set up to enable feedback at different levels. Client satisfaction is measured through appropriate instruments.	Assessment is a participatory process that includes adequate mechanisms to involve managers, teachers, students, parents and employers. Learner feedback on learning experiences is systematically used to inform responses to needs.
Results of quality assurance procedures are widely communicated and publicly available.	A specific information policy framework defines the rules of publication of quality assurance results considering individual and organisational rights for data protection. The web is used to make the quality of VET provision transparent to customers.	Information on assessment outcomes is available. Methods and tools for the dissemination of quality assurance results are in place and take into consideration rights for individual data protection.

Feedback and procedures for change		
The procedures to organise systematic feedback on the results of assessment and change are clearly described.	A general framework sets out procedures for feedback and review. Review takes place regularly, in close cooperation with the relevant stakeholders.	The structure of the quality system includes clear strategies and procedures for change. Procedures on feedback and review are part of a strategic learning process in the organisation. Each department reports to management in accordance with a fixed plan. An appropriate setting for discussing results with relevant stakeholders is in place.
Feedback on quality of VET is provided in a transparent way.	Results and an updated action plan are published through websites and other appropriate means. Seminars/conferences are organised to discuss results.	Internal debates on results and improvement are organised. Information is available on the provider website or on paper. The action plan for changes is made available to all stakeholders by appropriate means.
Effective use is made of results in supporting review and improvement.	Appropriate follow-up and support is provided through review and work with the relevant stakeholders in order to develop and implement change and improvement. External actors influence change through participation in advisory boards on VET. Procedures for complaint are established and well known. Incentives (in particular a sanctions/rewards funding system) are used to promote good practices and further improvement.	Internal work is carried out with the different departments to organise change as a systematic part of the decision-making process. Relevant internal and external stakeholders are associated with the process of change. Results are used as a basis for benchmarking in order to foster mutual learning.

Annex 3: A reference set of quality indicators

Indicator	Type of indicator/ relating to	Definition of (i) VET provider and (ii) VET system	Rationale/ support of European policy objectives	Applicable to	Used for	Source of informa-tion for VET systems
Overarching indicators for quality assurance						
No 1 VET providers applying quality assurance systems	Context/input indicator	(i) VET provider: VET provider applies an effective internal quality assurance system (ii) VET system: share of VET providers applying an internal quality assurance system/share of accredited VET providers	To support the implementation of quality assurance systems at VET provider level To improve quality of training provision	Initial and continuing training (not applicable where VET providers are obliged by law to apply an internal quality assurance system)	Planning Monitoring Assessment of VET providers	New
No 2 Investment in training teachers and trainers	Input/process indicator	(i) VET provider: share of teachers and trainers participating in further training (hours p.a.) (ii) VET system: amount of funds invested in training of teachers and trainers (p.a.)	To improve responsiveness of VET to changing demands in the labour market To improve quality of training provision	Initial and continuing training	Planning Budgetary target setting Monitoring Assessment Reward schemes	New
Indicators supporting quality objectives for VET policies						
No 3 Participation rate in VET programmes according to…	Input/process/ output indicator	(i) VET provider: number of participants in VET programmes according to type of programme and individual criteria of students (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.) (ii) VET system (initial training): aggregated number of participants in VET programmes according to type of programme and individual criteria of students (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.) (iii) VET system (continuing training): percentage of population at a given age and gender admitted to formal VET programmes leading to certified qualifications	To achieve basic information on the attractiveness of VET To support accessibility of VET, in particular for socially disadvantaged groups	Initial training: period of grace needed (six weeks) before a student is counted as a participant Continuing training Lifelong learning: share of population participating in lifelong learning	Planning Budgetary target setting Monitoring accessibility and attractiveness of VET programmes Assessment	Eurostat/ Labour Force Survey

						Labour Force Survey
No 4 Completion rate according to…	Output/ outcome indicator	(i) VET provider: number of successful completions/dropouts from VET programmes according to type of programme and individual criteria of students (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.) (ii) VET system: aggregated number of successful completions/dropouts from VET programmes according to type of programmes and individual criteria of students (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.)	To achieve basic information on educational achievements To calculate dropout rates compared to participation rates To support successful completion as a main objective for quality in VET To support adapted training provision, in particular for socially disadvantaged groups	Initial training Continuing training: applicable to courses leading to certified qualifications only	Planning Budgetary target setting Monitoring Assessment Benchmarking of results (comparisons of VET providers, including dropout rates) Reward schemes	
No 5 Placement rate: destination of VET students after completing training	Outcome indicator	(i) VET provider: destination of VET students 6, 12 and 36 months after completion of training according to type of programme and individual criteria of students (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.) Destination criteria: employed/ self-employed; unemployed; in further education; in other VET education; and not available for employment (different reasons, for example: pregnancy, military service, illness) (ii) VET system: share of employed graduates 6, 12 and 36 months after completion of training according to type of programme and individual criteria of students (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.)	To support employability of VET students To improve responsiveness of VET to changing demands in the labour market To support adapted training provision, in particular for socially disadvantaged groups	Initial training: information on destination of dropouts to be included Continuing training: not applicable	Planning Assessment of results and effectiveness Benchmarking and comparison of VET providers Reward schemes	New

No	Type	Definition	Purpose	Level	Assessment / Planning	Source
No 6 Satisfaction rate: utilization of acquired skills at the workplace both from the perspective of the former student and the employer	Outcome indicator	(i) VET provider: information on occupation obtained by VET graduates and satisfaction with acquired skills and competences both from former students and employers (ii) VET system: information on jobs obtained by VET graduates	To support employability of VET students. To improve responsiveness of VET to changing demands in the labour market. To support adapted training provision, in particular for socially disadvantaged groups	Initial training: provider level. Continuing training: provider level. Mix of qualitative and quantitative data	Assessment of results and effectiveness	New
Context information						
No 7 *Context indicator* Unemployment according to…	Context	Definition according to ILO and OECD: individuals aged 15-64 without work, actively seeking employment and ready to start work, according to individual criteria (gender, age, and other social criteria like early school leaver, highest educational achievement, migrant, ethnic minority, people with disabilities, etc.)	As background information for policy making at VET system level	Initial training: system level. Continuing training: system level	Planning at VET system level. Budgetary target setting	Eurostat
No 8 *Context indicator* Prevalence of vulnerable groups	Context	Percentage of population (in a defined region or catchment area) classified as vulnerable, at a given age and gender. Available data from Eurostat: early school leavers (dropouts); young unemployed (<25 years); long-term unemployed (>1 year); older people (>55 years)	As background information for policy making at VET system level. To be mapped against relative participation and success of vulnerable groups in VET. To support accessibility of VET, in particular for socially disadvantaged groups. To support adapted training provision, in particular for socially disadvantaged groups	Initial training: system level. Continuing training: system level. VET providers may collect relevant information in their area	Planning at VET system level. Budgetary target setting. Assessment of: attractiveness of VET for vulnerable groups; suitability of VET for vulnerable groups; and capacity of VET providers to deal with vulnerable groups	Eurostat/ national registers

		Qualitative information				
No 9 *Descriptive indicator* Mechanisms to adapt VET to changing demands in the labour market	Context/input	Qualitative information on different mechanisms used at provider and/or system level to adapt VET to changing demands in the labour market together with evidence of their usefulness	To support employability of VET students To improve responsiveness of VET to changing demands in the labour market To improve quality of training provision	Initial training: provider and system levels Continuing training: provider and system levels	Mutual learning Planning Innovation	To be included in quality criteria
No 10 *Descriptive indicator* Schemes to promote better access to VET	Process	Qualitative information on national, regional or sectoral schemes used at provider and/or system level to promote better access to VET (including orientation, guidance and support schemes), together with evidence of their usefulness	To support accessibility of VET, in particular for socially disadvantaged groups To support adapted training provision, in particular for socially disadvantaged groups	Initial training: provider and system levels Continuing training: provider and system levels	Mutual learning Planning Innovation	To be included in quality criteria

Cedefop	European Centre for the Development of Vocational Training (Centre européen pour le développement de la formation professionnelle)
EFQM	European Foundation for Quality Management
ENQA-VET	European Network for Quality Assurance in VET
ETF	European Training Foundation
EU	European Union
Eurostat	Statistical Office of the European Communities
FETAC	Further Education and Training Awards Council, in Ireland
ILO	International Labour Organisation
ISO	International Organisation for Standardisation
MANFORME	Upgrading of vocational training and employment (Mise à niveau de la formation professionnelle et de l'emploi), in Tunisia
NGO	non-governmental organisation
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
TQM	Total Quality Management
TVET	technical and vocational education and training
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VET	vocational education and training

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