Linking Training in Institutes with the Workplace

HANDBOOK
VERSION 2.0

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CONTENT

ABBREVIATIONS

BIA	Business and Industry Association
CBTA	Competency-based Training and Assessment
CBT	Competency-based Training
CVT	Cooperative Vocational Training
IMC	Institute Management Committee
NAVTTC	National Vocational and Technical Training Commission
NMC	NVQF Management Committee
NSU	NVQF Support Unit
NVQ	National Vocational Qualification
NVQF	National Vocational Qualification Framework
QAB	Qualification Awarding Bodies
RCC	Recognition of Current Competencies
RPL	Recognition of Prior Learning
SSC	Sector Skill Council
TEVTA	Technical Education and Vocational Training Authority
TNA	Training Need Assessment
TVET	Technical Vocational Education and Training
WBT	Workplace-based Training

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Introduction

Competent and well-motivated employees are indispensible assets of any company. Such employees have the skills, knowledge and attitudes required by employers. The creation of these attributes is the role of Technical Vocational Education and Training (TVET). Likewise, an efficient and effective, high quality TVET system is the gatekeeper for self-employment, company start-up, diversity and growth of the private sector, as well as employment and equitable local wealth creation.

The bulk of vocational training has been and still is delivered either through formal fulltime institution-based courses or non-formal and informal on-the-job training in companies of all sizes.

All stakeholders in TVET (the private sector, private and public training institutes, trainees and Government) have come to the conclusion that both training approaches alone and in isolation, are imperfect:

- The supply-oriented formal institution-based courses lack the relevance of the world of work and inadequately respond to labour-market demands and requirements. As a result, employment rates after training remain too low, which in turn contributes to a poor image of TVET as a career choice.

- Demand-oriented non-formal and informal on-the-job training lacks the important elements of well-structured training with required theoretical knowledge leading to recognised qualifications, whilst restricting labour mobility and acceptable living wages.

Only formal Apprenticeship as a time bound qualification pathway combines practical training in the workplace with theory and often, practical training in training institutes. However, the Apprenticeship system caters for less than 5% of the entire formal trainee population.

Against this background, and due to the fact that training in the private and public sector is not linked with each other has led to a duplication of the national training effort and created a mismatch between labour-market supply and demand. Formal full-time institutional training in a supply-oriented approach became the norm. At the same time, the private sector became reluctant to absorb trainees from institutions and increasingly opted for on-the-job skilling to meet labour-market demands.

It is for this reason that Pakistan embarked on a comprehensive TVET reform. At the core of this reform is the demand orientation of TVET qualifications in the National Vocational Qualification Framework (NVQF) and training delivery under the competency-based training and assessment (CBTA) system with the recognition of the essential role of the workplace. In short, the reform aims at effective linkages between institution-based and workplace-based training.

The launch of Pakistan's first national TVET Policy in March 2015 reflects Government's commitment towards providing access to high quality training for young people. To improve the quality and relevance of TVET in Pakistan, the on-going TVET reform calls for greater involvement of the private sector. To heed this call, the TVET Sector Support Programme has supported the development of pilot schemes in close collaboration with public and private stakeholders. Within these schemes, companies, training institutes and TVET authorities share the responsibility for planning and delivering technical and vocational training courses. The approach addresses the need for demand-oriented training by combining vocational courses in training institutes with workplace-based training (WBT) phases in companies or vice-versa. If replicated on a large scale, workplace-based training approaches will contribute to produce an internationally competitive workforce for Pakistan.

From an international perspective it is key to engage the private sector in all procedures relevant for providing training courses. Case studies from other countries, in which the WBT approach is applied, suggest this mode of

training delivery as the most promising way to match vocational training with the demand of the labour market. In this way, WBT provides mutual benefits to companies, training institutes and young people.

The current version of the Handbook is the result of five years implementation of WBT. In the past, the TVET Sector Support Programme has successfully piloted this type of training arrangement under the term 'Cooperative Vocational Training (CVT)'. For trainees who are new entrants into TVET and are recruited by companies, the CVT scheme differs little from formal Apprenticeship, save for the inclusion of all company sizes and the arrangement under CBTA and its delivery modalities. Encouraging results are also being registered through the Training Fund of the TVET Sector Support Programme in Sindh and Baluchistan, in which different approaches of WBT are applied. Overall, the Training Fund aims at enhancing the employability of trainees through workplace-based training.

This Handbook provides useful information on the features of the WBT approach and presents concrete guidelines and tools for its implementation. In this way, the handbook describes the training approach of WBT courses, defines the tasks and responsibilities of training institutes, companies and business and industry associations (BIA) and sheds light on the assessment procedures. Other chapters deal with potential coordination and finance mechanisms, which can be used to provide the foundation for successful training delivery. In order to support training institutes and companies in the implementation of courses, the handbook contains links to other documents and manuals, which are hyperlinked in the text, as well as attached templates and checklists.

2 Pakistan's evolving TVET System

For decades the vocational training system (TVET) has been pursuing a number of different training and qualification pathways: formal, non-formal and informal, in companies and in private and public training institutions.

FORMALITY	TRAINING PATHWAYS
Formal	• Institutional course-based Training • Apprenticeship
Non-Formal	• Industry/Company-based short courses and training programmes
Informal	• Informal Apprenticeship (Ustad-Shagird) • Self-learning/Self-employment

Currently, all these training pathways exist side by side with the bulk of training delivered through formal institutional training and non-formal and informal on-the-job training. Formal Apprenticeship, which is the 'flagship' of workplace-based training, benefits only a small number of the entire trainee population.

In the foreseeable future, institution-based training is likely to continue to dominate the delivery of formal TVET. However, it is anticipated that an effective linkage between formal institutional-based training with non-formal and informal workplace-based training (and vice-versa) will eventually become the norm for training and qualification pathways. A number of successful and promising pilot programmes have already been implemented, but the approach has so far not reached system maturity.

In order to attain a level of sustainability and eventual system maturity of institutional training with workplace-based training phases or workplace-based training with institutional training phases requires an uncompromising buy-in from employers and a well-coordinated approach in the delivery of training. Pakistan's TVET Policy asks for a greater involvement of the private sector in policy-making and implementation to match technical and vocational education with the demands of the labour market. The policy emphasises that companies need to play a key role in strategy formulation, governance and management, standard setting and the implementation of training programmes. The TVET Policy therefore, proposes to develop an inclusive framework to ensure an active participation of companies, which creates mutual benefits for all stakeholders while minimising administrative hurdles.

The question is, what will convince the private sector to commit to this framework?

'What is new; what is different?'

✓ **The adoption of the National Vocational Qualification Framework (NVQF)**

✓ **The change to competency-based training and assessment (CBTA)**

✓ **The recognition of the importance of the workplace in training (WBT)**

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2.1 National Vocational Qualification Framework (NVQF)

Under the management and coordination of the federal apex body, the National Vocational and Technical Training Commission (NAVTTC), experts from participating companies develop a definition of the qualification for all formal institution-based courses and increasingly for non-formal workplace-based courses in demand by the private sector. The qualifications define the job profiles and occupational as well as competency standards, describe the responsibilities and tasks of a graduate in an occupation and the related skills, knowledge and attitude required to perform it. The qualifications are classified within the NVQF.

NAVTTC endorses the qualifications and notifies the curricula, and thereby, levels all competency units against level descriptors, which define the level of knowledge, skills and attitude. After the development of standards and their levels as per level descriptors, same levels of standards are grouped and formed as package and considered as certificate level 1, 2, 3 or 4.

NAVTTC publishes and constantly updates the competency standards and curricula for all national qualifications on its www.navttc.org

The NVQF recognises all existing qualification pathways and allows them to move towards greater formality through the assessment system and Recognition of Prior Learning (RPL) and Recognition of Current Competencies (RCC), which paves the way for subsequent training pathways with higher formal qualifications.

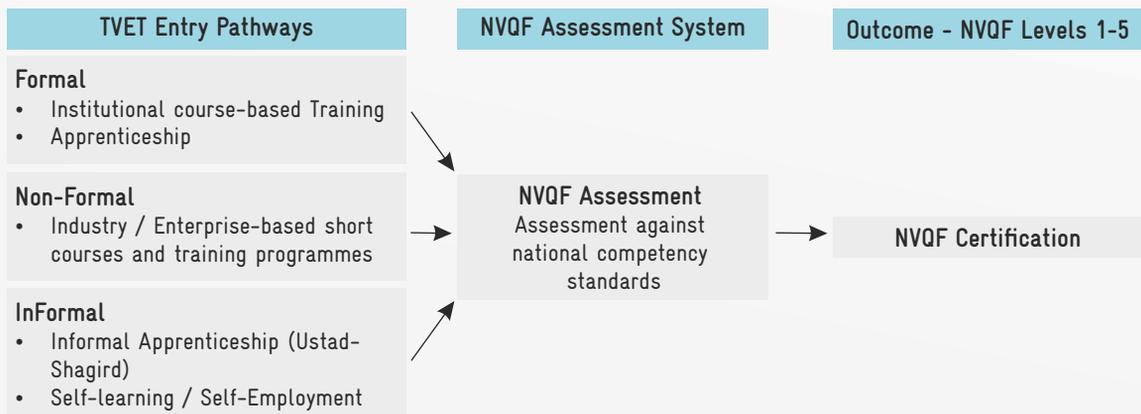| TVET Entry Pathways	NVQF Assessment System	Outcome - NVQF Levels 1-5
Formal • Institutional course-based Training • Apprenticeship		
Non-Formal • Industry / Enterprise-based short courses and training programmes	**NVQF Assessment** Assessment against national competency standards	**NVQF Certification**
InFormal • Informal Apprenticeship (Ustad-Shagird) • Self-learning / Self-Employment		

Figure 1: Adapted from NVQF Version 2

In addition, the introduction of the NVQF has provided the opportunity to meaningfully involve the private sector and its organisations in the management of TVET bodies, such as Sector Skill Councils (SSC) and Institute Management Committees (IMC), and in the delivery of competency-based training (CBT) and assessment of qualifications.

2.2 Competency-based Training and Assessment (CBTA)

Training institutes increasingly adopt the CBTA system. The system departs from the traditional approach to education and training by placing a heavy emphasis on what a person can do in the workplace after the completion of training. Progression of learners within CBT is not time-bound; instead it depends on the person's ability to demonstrate the necessary competence for the occupation.

CBTA is based on competency standards. The competency standards for each qualification provide the foundation for the training content of CBTA and serve as guidelines for the development of the curricula and assessment packages. In this way, the training content and assessments are subsequently linked with the demands of each occupational profile, which are set by the industry. The course design, the curricula and assessment criteria are derived from these standards. This approach ensures that the training content reflects the needs of the labour market. In this way, CBTA supports learners to acquire competencies demanded in the labour market, which leads to better employability of graduates.

The assessment packages reflect the competency standards, which are required to perform the occupation. The competency standards are the basis for the assessments, which reflect tasks and responsibilities of the respective occupational profile. The packages define exercises, methods and documentation to collect evidence of a trainee`s performance. In this regard, the assessment packages support the assessors to define whether a candidate is 'competent' or 'not yet competent' in performing the occupation-related skills. Accredited assessors representing training institutes and companies jointly assess the competency of trainees. The graduates receive national certificates and reference letters from companies that have provided training at the workplace.

2.3 The Workplace-based Training (WBT) Approach

The WBT approach can be defined as a series of formal training phases, which integrate the CBT curriculum with the workplace to create a different learning paradigm. It deliberately merges theory with practice and acknowledges the intersection of explicit and tacit forms of doing and knowing. By definition, WBT is vocational training conducted in the workplace as part of the productive work of a trainee.

The introduction of CBT promotes flexibility in the Pakistani TVET system by allowing for individualisation and diversification of learning pathways. In this way, training pathways and courses can be designed and delivered in a flexible manner that meet the requirements of companies.

The flexibility should foremost emphasise the recognition of the importance of the workplace in training. Inclusion of the workplace in institution-based training will complement and complete the training outcome, whilst non-formal company-based training will become formal through the adoption of CBT curricula of the structured training, which is usually delivered in the training institute.

In this way, WBT creates career awareness and helps trainees attain competencies, such as practice-oriented skills and positive work attitudes. It provides them with real-life work experiences where they can apply theory and technical skills and enhance their employability.

The WBT approach furthermore, promotes the value of shared responsibility between public and private stakeholders. WBT is guided by a number of procedures on how to facilitate the cooperation between TVET authorities, training institutes and companies, including their respective business and industry associations (BIA), in planning and jointly delivering training courses.

The key driver for successful WBT is the need for active policies and approaches to secure training that meets the need of the workplace. Ideally, 70% of training should be practice-oriented with as much as feasible conducted at the workplace.

At the centre of this training approach are the curricula. They translate the competency standards into learning outcomes and specify where the different learning modules are conducted. In this regard, the curricula select either

the training institute or the company as the place of learning and link institutional and workplace-based training with each other. Furthermore, the curricula define trade-specific as well as general subjects, such as communication, computer literacy, English and life skills as topics for classroom lessons in training institutes.
WBT courses cater for two types of trainee populations:

➢ **Trainees enrolled in institution-based training**
➢ **Trainees employed and receiving non-formal or informal training at the workplace**

This distinction is important for the planning of WBT (see 3.1), whereas no distinction is made for its delivery under the Training Plan (see 3.2). Both approaches would apply the same training plan. Companies and training institutes jointly select qualifications and trainees relevant to the labour market and for new entrants, combine practical learning at the workplace with theoretical and structured learning in the classroom or workshop from the onset.

Trainees enrolled in Institution-based Training

WBT for trainees enrolled in formal institution-based training pursues a different rationale from conventional trainee exposure to the workplace (such as internships, job attachments and job placements during and/or after institutional training).

In the context of Pakistan's institution-based training, WBT is the work experience or 'hands-on' training at the workplace. This is where trainees, working under the supervision of a qualified or experienced supervisor in the company, undertake work that allows them to put into practice the knowledge they have acquired during the formal training in the institute and build on and further develop their practical skills.

Company participation in WBT is voluntary and a company is under no obligation to employ trainees during or after training has been completed.

The responsibility of sourcing workplace-training opportunities in companies lies with the training institutes and/or the trainee. In cases where trainees are encouraged to source workplace training opportunities, institutes will have to provide adequate support. Trainees would have to be prepared on how to approach companies, be provided with referral letters from the institute, and be given sufficient time off from the structured training to source potential openings. Trainees, on their part, would be required to provide regular feedback on their endeavour to the institute. The institutes could also cooperate with BIAs in identifying, approaching and enlisting companies for WBT phases. Apart from having to match the training phases in companies with the structured CBT curricula, it will be important for the institute to be satisfied that the company has the necessary range of work, equipment, and facilities to support delivery of the nominated training or workplace exposure.

For trainees who cannot be placed into companies for WBT, the alternative would be to engage them in institute-initiated workplace simulations, such as production units at institutes; training phases in teaching factories; or reverting to short-term workplace exposure. However, these alternatives would not count as formal WBT.

Trainees employed and receiving Training at the Workplace

Employees or trainees undergoing non-formal or informal training at the workplace may want to formalise their qualifications through access to theoretical and structured training at training institutes, or have their competencies recognised as NVQs through RPL or RCC depending on the identified competency level of the qualification to be achieved. In these cases the company, with or without the support of BIAs, will approach the training institute on behalf of the employees and arrange training sessions.

For employees, who want their competencies to be recognised and/or reach for advanced competencies and before preparing the training plan, the companies and institutes enter into a dialogue in priority sectors to identify training needs. Through a training needs assessment both parties discuss and identify the skill shortages that affect the operations of companies. Skill shortages exist when companies are unable to recruit from the local labour market for jobs they want to fill, when the need exists to bridge skill gaps among existing employees to perform an occupation effectively, or when the introduction of new technologies and work processes demand an upgrading of existing skills, knowledge and qualifications.

The training needs assessment becomes the foundation for the development of the training plan. Based on the findings, the training institute and partnering companies select a full or part qualification from the NVQF to address the skill and knowledge need. The identified qualification details the vocation, qualification title and qualification level to be undertaken by the trainee, the mode of training delivery and other preliminary training information. If the NVQF does not cater for the proposed qualification or unit of competence, the training institute shall submit a proposal to the relevant BIA, Sector Skill Council (SSC) or NAVTTC for the notification of the new qualification.

In the training needs assessment it is also important to quantify the number of trainees, companies and institutes are willing and able to engage in WBT. It requires focusing on the individual capabilities of trainees in meeting the required learning outcomes. Therefore, the size of trainee batches needs to be limited so that teachers can support trainees individually to progress throughout the course. However, any batch size shall never be larger than the commitment of workplace training places provided by the partnering companies.

They will also discuss and record training resources that will be provided to support both the trainee and the company.

As this is a demand-oriented approach, the institute might have to either integrate the trainees into existing courses, create additional capacity or offer the training outside normal training hours, e.g. in the evening or on weekends.

3 Preparing for Workplace-Based Training

WBT can be initiated by companies and/or training institutes. Either way, it is essential that institutes and companies enter into discussion and undertake joint planning. Foremost, they need to agree on a training arrangement that meets the requirements of the relevant Unit(s) of Competence(s) and specify the training required to achieve the appropriate nationally recognised qualification under the NVQF.

3.1 The Training Plan

The training institutes develop the training plan in consultation with companies and/or their representative BIAs. The training plan covers any type of training arrangement. It details the proposed training and the training institute that will deliver the formal or structured training, including the sequencing of the institutional and workplace training phases. It should be customised within the qualification packaging guidelines to accommodate the needs of the trainee and the workplace, and to provide enough details to assist companies to meet their responsibilities under the training plan.

A Training Plan should cover three elements:

I   It should record relevant details of parties responsible. It outlines proposed overall time lines for both the structured training and at the same time serves as the training agreement.

II   It should include the selected units of competency as discussed during the pre-training discussions with companies and is used to record details of assessment as competence is achieved. It should be reviewed and updated as required. It may also be used as evidence of completion of the structured training.

III It should record details of the proposed training and assessment arrangements in cycles of not more than a defined number of months in duration. At the end of each cycle an evaluation should be undertaken and a plan developed for a further cycle.

A Training Plan is designed to incorporate the following principles:

- Clearly define all parties/signatories
- Concisely set out the rights and responsibilities of all parties
- Set out the qualification to be achieved and the agreed   methodology for achieving the qualification
- Support competency-based progression and completion
- Be flexible and able to be adjusted to accommodate changes
- Be relevant to, and supportive of, industry and workplace requirements
- Provides details of the formal training and assessment to be undertaken as part of the training
- Be straightforward, easy to follow and written in plain language

Information captured in the Training Plan includes:

- Company and Institute details
- Units of competency to be undertaken, and how, when and by whom training and   assessment will be delivered
- Sequencing of training phases
- Training materials, resources, facilities and supervision arrangements that will support the   training

The Training Plan must:

- Specify Units of Competency that meet training package requirements for the issue of the appropriate qualification
- Comply with Training Package requirements relating to training delivery and assessment

- Be customised to the nature of the company's business
- Be used to record the support of the work supervisor, on behalf of the company/employer, for competency assessments
- Support and reflect the trainee's workplace activities
- Be used for the duration of the training and updated as necessary to reflect the   current status of training
- The institute and companies jointly sign the training plan. The institute must provide a copy of the training plan, including any agreed changes, to the participating companies and trainees.

3.2   Sequencing Training Phases

Sequencing refers to the trainees' alternation or rotation between training venues: companies (workplace) for the practical work experience and institutes (classroom and workshops) for structured training. There is no 'golden rule' for frequency or duration of training at either the institute or the company. Flexibility is the watchword and clear arrangements between companies and institutes are essential for success. If the company may not be in a position to provide the workplace-based training for a particular unit of competency, the institute, in consultation with the company must outline alternative arrangements agreed to (such as practical training phases in institutes), to support the workplace-based component of the required training against that unit.

In line with the curricula, theoretical and structured training is always delivered in the institute (unless special arrangements are made for the institute to deliver training at the workplace), whilst practical training is divided into training at the workplace and/or structured training in the institute, depending on the availability of equipment at the workplace and the institute.

The sequence of institutional and training at the workplace is responsive to the parties' preferences and is defined through consultations between companies and training institutes in the initial planning phase. Therefore, training phases can be organised in multiple ways – on a daily, weekly or monthly basis. The planning will determine, which type and duration of WBT is required for institution-bases trainees, and which structured training would have to be delivered by institutes for trainees/employees of companies. For training at the workplace, business circumstances and production cycles must be taken into account when planning the workplace-based sequence.

For both types of trainee population, the institute will discuss with the companies and trainees, and record in the training plan, the units of competency to be undertaken, the sequence in which they will be delivered, and how, when, where and by whom training and assessment will be delivered.
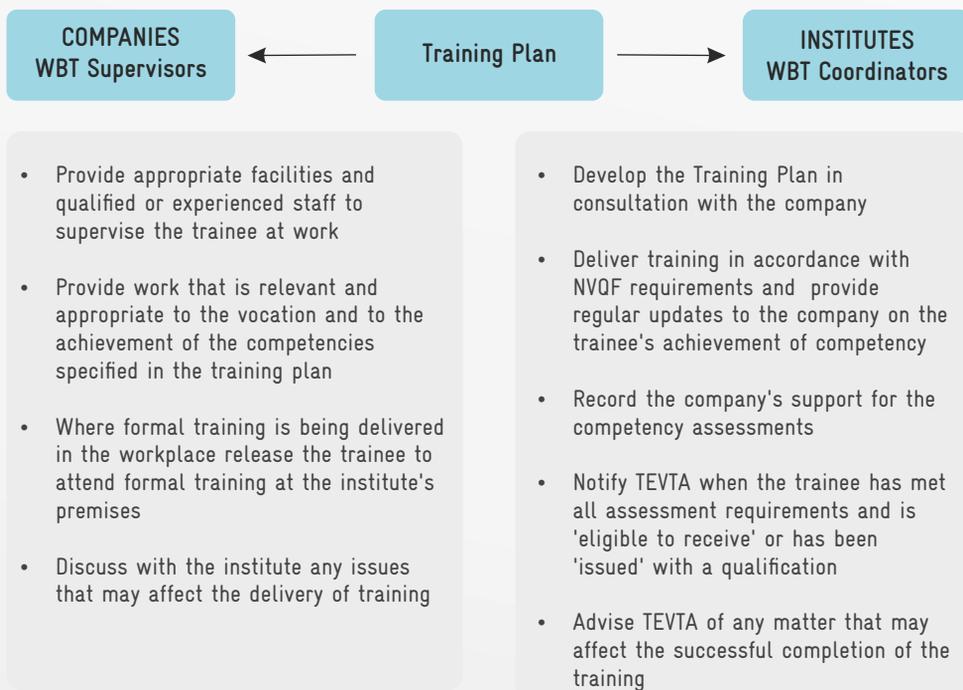
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4 Delivering WBT - Roles and Responsibilities

Companies contribute to the training of young people and ensure that the relevant competencies are practiced to perform the respective job profile. In doing so, WBT enables companies to train their future workforce while avoiding costs for recruitment and induction of new staff. International experience shows that the productivity of in-house-trained employees is higher than of externally recruited staff members.

The core criteria to successfully implement WBT are the modalities of cooperation defined between the training institutes and companies delivering training at the workplace. The responsibilities apply regardless whether a trainee comes from the participating company or the training institute.

Training institutes and companies are jointly responsible to establish the working procedures for the training delivery within their organisation. Those responsible in training institutes and companies need to find an arrangement through regular meetings and visits to coordinate the training delivery by sharing information on the status of the training progress. The tasks include, for example, creating linkages between the training phases, consulting each other on the learning progress of trainees, preparing orientation sessions for trainees before the beginning of each training phase and registering the trainees for the final assessment.

The following figure provides an overview of the key responsibilities of companies and institutes:

COMPANIES WBT Supervisors	← Training Plan →	INSTITUTES WBT Coordinators

• Provide appropriate facilities and qualified or experienced staff to supervise the trainee at work	• Develop the Training Plan in consultation with the company
• Provide work that is relevant and appropriate to the vocation and to the achievement of the competencies specified in the training plan	• Deliver training in accordance with NVQF requirements and provide regular updates to the company on the trainee's achievement of competency
• Where formal training is being delivered in the workplace release the trainee to attend formal training at the institute's premises	• Record the company's support for the competency assessments
• Discuss with the institute any issues that may affect the delivery of training	• Notify TEVTA when the trainee has met all assessment requirements and is 'eligible to receive' or has been 'issued' with a qualification
	• Advise TEVTA of any matter that may affect the successful completion of the training

4.1 Responsibilities of Training Institutes

The main responsibility of training institutes is to ensure a linkage between the workplace and theoretical input and practical exercises (structured training) at the institute. Institutes stay in close contact with participating companies and update training content in accordance with the needs of companies and latest labour market trends. In this way, trainees are supported in gaining the relevant competencies for the respective trade they are trained in and prepare them for the training at the workplace.

Training institutes need to focus on the following objectives:

- Develop the Training Plan in consultation with the company and lodge the Training Plan with TEVTAs (see Chapter 6). The institute must also review the training plan at regular intervals, and/or at dates agreed with the company and trainee if there are any changes to the training arrangements resulting from matters raised above.
- To impart basic and advanced trade-related knowledge and skills as defined in the competency standards
- To impart general subjects, such as computer literacy, English and life skills
- To prepare trainees for training at the workplace in advance focusing on an orientation on the behaviour at the working place and teach basic occupational health and safety rules

In order to achieve these objectives, the training institute needs to meet the following prerequisites, which refer to teaching staff and equipment:

Teaching staff: Competency standards are taught along units and learning outcomes. This kind of teaching requires the use of modern pedagogical and didactic methods. Teachers shall act as facilitators, clarify the learning objectives with the trainees and engage them in all aspects of acquiring the knowledge, skills and attitude needed for an occupation. Consequently, the job profile of teachers is demanding: It ranges from practical skills and occupational theory required for performing the respective trade to general and occupation-specific skills in pedagogy and didactics.

Equipment: Another requirement refers to the workshop facilities and equipment available at the training institute. The competency standards and curricula define for each course, which machinery, tools and equipment is needed for the training purpose. However, the hardware requirements need to be considered in consultation with the cooperating companies. Relevant machinery, tools and equipment may also be available at partnering companies and does not have to be installed at the training institute. In the preparatory phase, a corresponding equipment check is recommended to define whether learning units can take place at the training institute or need to be shifted to workshops at partnering companies.

Besides these requirements, the training institute needs to appoint a WBT Coordinator, who is responsible for the communication with partnering companies. Through the drafting of the training plan, the coordinator sets out with his or her counterpart in the company the procedures for selecting the companies and/or trainees, orientation of trainees before the beginning of the workplace training and communication on the learning progress of trainees.

4.2 Responsibilities of Companies

Companies contribute to the training of young people and ensure that the relevant competencies are practiced to perform the respective job profile. In doing so, WBT enables companies to train their future workforce while avoiding costs for recruitment and induction of new staff. International experience shows that the productivity of in-house-trained employees is higher than of externally recruited staff members.

In WBT, the company is responsible for delivering training and/or work exposure at the workplace. The workplace subsequently provides trainees the opportunity to apply skills and knowledge in a work environment under the supervision of qualified company personnel. Furthermore, the company may be responsible to impart certain competencies of the structured training, which are defined in the curricula of the course.

The main objectives of the training at the workplace are:

- To expose trainees to various working levels and to actively involve them in the working processes. (Provide work that is relevant and appropriate to the vocation and to the achievement of the competencies specified in the training plan)
- To provide trainees with an insight into the organisation and operation of the company
- To equip trainees with soft (or employability) skills and knowledge of occupational health and safety standards
- Where formal training is being delivered in the workplace release the trainee to attend formal training at the institute's premises, OR   withdraw the trainee from routine work duties for the purpose of undertaking formal training, self-paced learning and assessment activities

Setting up a conducive environment for the training and providing appropriate facilities and qualified or experienced staff to supervise the trainee at work, companies need to consider the following requirements before joining the WBT scheme:

Supervisors: The management of the company appoints one or more supervisors to implement the practical training at different stages during training at the workplace. The supervisors are usually technical staff working in the production and service units. During the training at the workplace they are responsible to provide guidance, mentoring and supervision to the trainees. Equally to instructors and teachers in training institutes, supervisors shall consider the competency standards of the course and shall support the trainees in gaining the relevant skills, knowledge and attitude. The curricula specify which learning outcomes are relevant during the training phases at the workplace.

Planning and Documentation: The management of the company, in consultation with the institute is responsible to plan the training activities at the workplace in advance. The training plan ensures that the trainee gains experience in all trade-relevant tasks of the competency unit. Throughout the training, the trainee is obliged to document his or her learning activities in a logbook, which is regularly submitted to the supervisor for signature. The maintenance of the logbook is important for communicating the learning activities back to the training institute.

# 4.3 Responsibilities of Trainees

In WBT, young people gain access to training, which reflects the needs of the particular industry and the labour market.

The trainees benefit from the periodic rotation between the learning venues at the training institutes and companies and develop their skills in an actual working environment. Thus, they are better prepared to enter the competitive labour market in Pakistan, enhance their employability and build careers.

Trainees must make reasonable efforts to:
- Acquire the competencies of the trade or vocation
- Obtain the appropriate qualification or qualifications for that vocation
- Discharge their obligations under the WBT, and
- Discuss with the company and institute any issues that may affect completion

5 Assessment Modalities
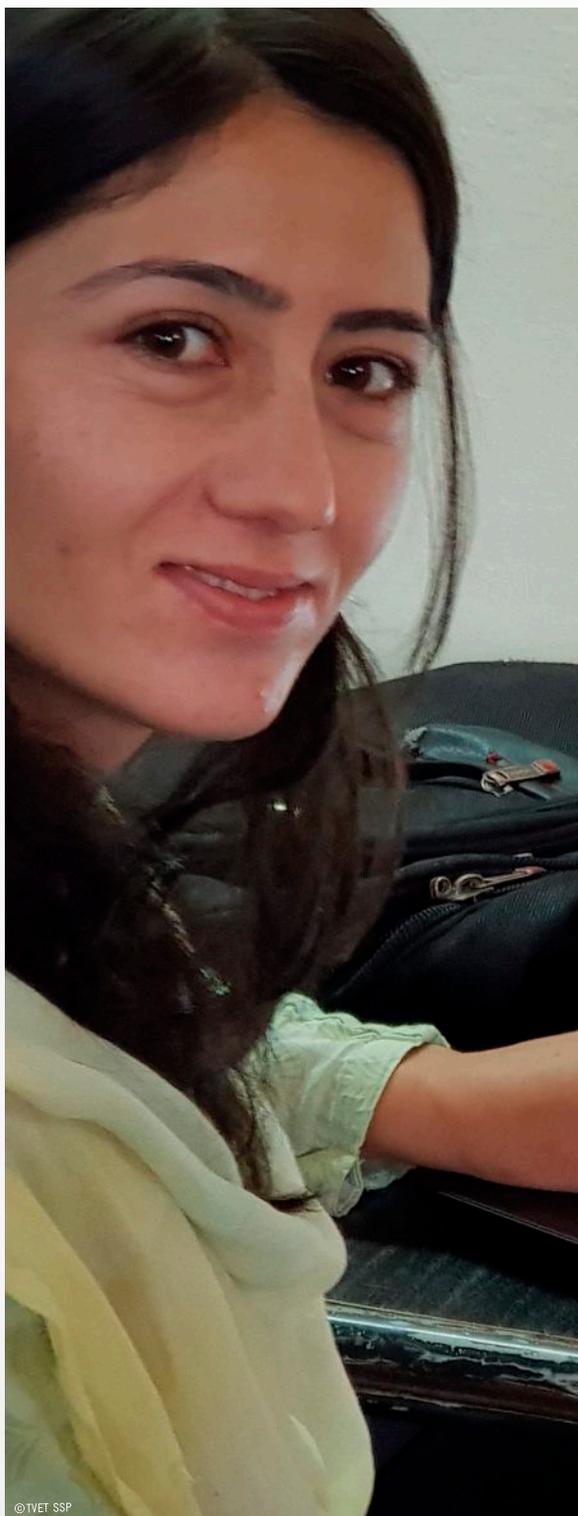
Assessments in the competency-based system differ fundamentally from tests. In competency-based assessments an individual's performance is assessed against defined competency standards, which are required to perform a job. Individuals are not compared against other individuals; they do not receive scaled grades, but are graded as 'Competent' or 'Not-yet Competent'. A NVQF assessment, therefore, includes the full range of activities that clarify a candidate's skills, knowledge and attitude. It also includes different methods for examining competencies, such as demonstrations, simulations, presentations, assignments, projects, creations and scenarios. All NVQs are composed of competency Standards, which are a combination of generic, functional and technical.

Currently, after development of standards and their levels as per level descriptors, same levels of standards are grouped and formed as packages and considered as certificate level 1, 2, 3 or 4.

The set-up, quality and integrity of the assessment system are crucial to gain recognition for TVET certificates among employers.

NAVTTC has defined certain quality criteria, which prescribe that the assessments shall:

- Require standards to be set and validated by industry and end-user groups
- Rely on assessment packages developed and validated for all NVQF qualifications
- Ensure competence and integrity of the registered assessors who are trained and observe fully the assessor's code of professional practice
- Provide an opportunity to the candidate for appeal against unprofessional or corrupt practice by the assessor; use of incorrect, unapproved or out-dated assessment instruments or interference with or

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interruptions to the assessment process
- Include a moderation system to ensure that the assessment tasks and judgements that are made for any competency are the same as or equivalent to any others that are being administered anywhere in the national system for the same competencies
- Support feedback from relevant stakeholders, companies and individuals regarding relevance and validity of competency standards and related assessment packages

The NVQs assessment is not limited to just the formal pathway. There are informal and non-formal pathways that individuals may follow for assessment for NVQs. The NVQF provides pathways and progression for Recognition of Prior Learning (RPL) entry to acquire NVQs certification at different levels. Candidates entering through RPL system shall be assessed for their skills against those standards and may qualify for either national vocational certificate of full qualification if they are declared "Competent" or "Record of Achievement" if they are declared competent in certain numbers of competency standards. RPL assessments will be carried out and managed by NAVTTC and the NVQF Support Units (NSUs) of TEVTAs, Qualification Awarding Bodies (QABs) and by certified assessors from QABs.

The entities responsible to conduct the assessments for courses are the provincial Trade Testing Boards (TTBs), the Boards of Technical Education (BTEs) or, if not available, other assessment bodies accredited by NAVTTC. They schedule the assessment dates, determine the venue along with the qualification to be assessed. This information is made available on their websites for the candidates to access. The responsible assessment body supervises the assessments to ensure compliance with NVQF requirements, validity and consistency. They provide accredited assessors, both from the public and private sector, to the assessment panel.

The assessments take place either at the training institute, the premises of companies or designated assessment centres. The responsible assessment body facilitates the process and is responsible to ensure that the venue is equipped with the required trade-related infrastructure, tools, consumables and material.

In preparation to the final assessment, teachers conduct formative assessments throughout the training. A briefing with the assessment candidates is held by the assessors at least one week prior to the final assessment date to instruct them on the procedure.

It is the training institute's responsibility, normally assigned to the Institute Coordinator, to ensure trainees are registered with the responsible assessment body for an assessment within a defined period after they joined the training. The assessment dates are recorded in the training plan.

If considered competent, the candidate will be awarded a national certificate verifying the competencies acquired. Graduates shall also receive a reference letter from the company that has provided the training at the workplace. Additional certificates are possible, but need to be in line with the CBTA system.

NAVTTC's Manual on Assessment for NVQs features a number of templates on the assessment for further reference.

6 Managing and Supporting WBT

A strong ownership in planning, managing, delivering and monitoring is the backbone of WBT. In this regard, WBT differentiates between operational and management tasks. With regard to delivering WBT, each stakeholder needs to take over certain responsibilities at the operational level.

Efficient, effective and smooth management and coordination of NVQF and WBT calls for the establishment of a well-defined management structure at national, and coordination structure at provincial and sector levels with clear roles, responsibilities and functional relationships for management, coordination and support at all levels.

Whilst policy and direction for the functional relationship among stakeholders is the domain of NAVTTC, coordination of workplace-based training is mainly the responsibility of training institutes (WBT coordinators in training institutes) in cooperation with companies (see Chapter 4). However, in addition, the active involvement of BIAs and the private sector at large is not only desirable, but is essential.

(The Operational Guidelines for BIAs by the Federation of Pakistan Chambers of Commerce and Industry (FPCCI) deals in detail with the engagement of BIAs in TVET.)

6.1 Management at National Level

The NVQF is managed at national level through the NVQF Management Committee (NMC) of NAVTTC. Besides overall management and policy directions on management and implementation of NVQs, NMC will have to ensure that NVQF level structure is appropriate, objectives are being met, management of the NVQF system is effective and efficient and employers are satisfied with the quality of the graduates with NVQF qualifications. Furthermore, NAVTTC in cooperation with stakeholders will ensure efficiency, consistency and integrity of the NVQF operations as per national skill demand and trends of labour markets.

Membership of the NMC is drawn from representatives of the organised private sector (Chambers, Associations, SSC), representatives of TVET service providers in the public and private sectors, representatives of non-formal and informal sectors and the chairs of QAB committees.
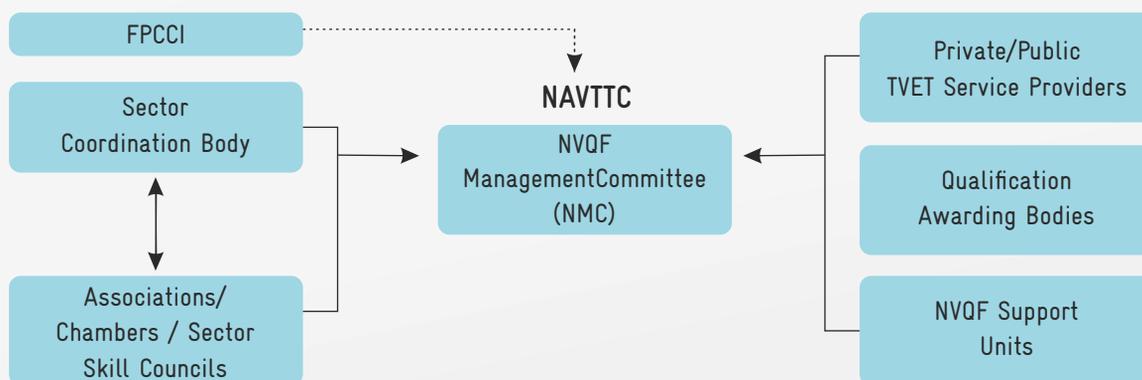

Figure 2: Management at national level

6.2   Facilitation at Provincial and Sector Levels

Provincial TVET authorities in the public and private sector play an important role in management of the NVQF at provincial level. It therefore, makes good sense to manage WBT in close cooperation between TEVTAs (and Punjab Vocational Training Council – PVTC) and BIAs. While training providers participate in policy discussions in NMC meetings, they also have a particular role in supplying the resources needed by the institutions introducing NVQs. In addition, TEVTAs and training institutions under their administration need to monitor that training is in accordance with the NVQs and prepare trainees sufficiently for competency–based assessment and workplace requirements.

TVET service providers will be responsible (among others) to:

• Coordinate with private sector / technical working group / Institute Management Committee meetings and assisting in implementation of decisions of these committees
• Process requests for development, registration and review of national vocational qualifications
• Arrange / organise trainings for managers, instructors, assessors, M&E and accreditation etc.
• Create liaison with private sector for support in voxcational counceling and job promotion activities
• Determine the necessary budgets and supply funding to meet equipment and machinery demand and prepare a roll–out plan for introduction of NVQs
• Establish and install quality assurance M&E system in all the institutions for quality delivery of training and assessment (CBTA, WBT, Accreditation, RPL)
• Undertake human resource development (HRD) activities (Teachers Training/Principals, Trainings/Assessors Training, etc.)

For this purpose TVET service providers may manage and coordinate the responsibilities in cooperation with associations (BIAs), Sector Skill Councils (SSCs), Institute Management Committees (IMCs) and NVQF Support Units (NSUs).
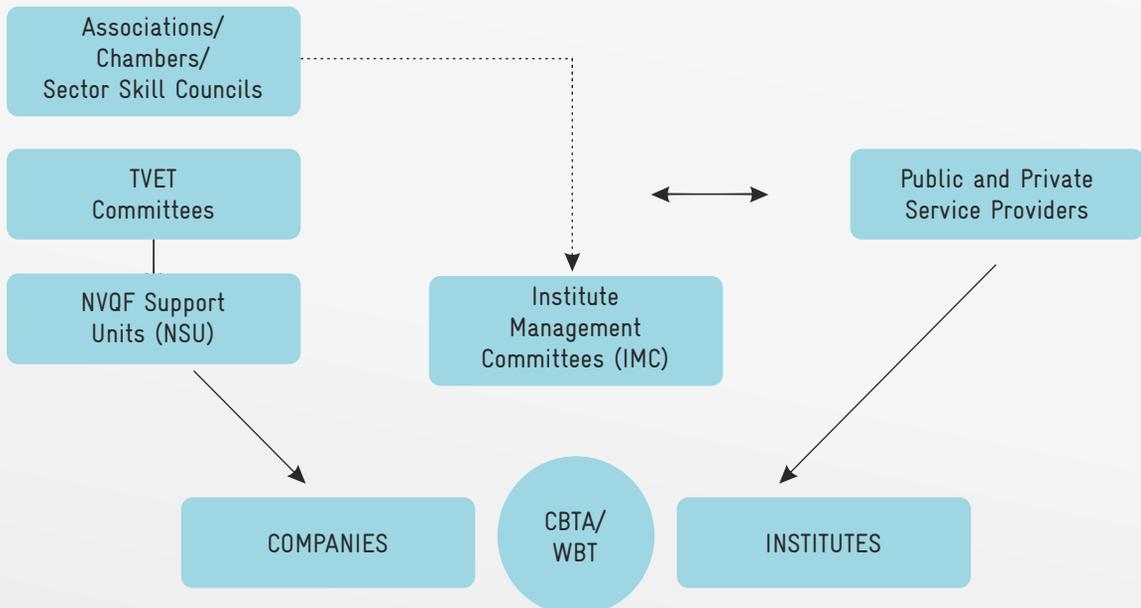

Figure 3: Facilitation at provincial and sector levels

TVET service providers may enter into cooperation agreements with BIAs to support the relationship between

companies and institutes in delivering workplace–based training phases in companies or providing access to company workers and employees for formal training in institutes. Such agreements can cover a number of elements, such as:

- Identification and selection of participating companies
- Joint induction sessions
- Assistance with the drafting of training plans
- Conducting of assessments in cooperation with QABs
- Monitoring and evaluation of WBT

BIAs may establish Sector Skill Councils (SSC) to develop structure/procedures for the sector, implement annual business strategies of sectors, mobilise and reach out to the companies within the sectors and publish annual reports. The Governing Body (membership) of SSCs will be drawn from sector associations, leading companies (allied industries) and training providers (institutes). SSCs may invite ad hoc experts to sit on the Council when discussing specific issues. These experts shall only attend upon request and shall not be considered as members of the Council. (detailed information on SSCs is contained in the SSC Handbook.)

In addition, BIAs and SSCs have representation on Institute Management Committees (IMC) of training institutes for the promotion of WBT. The IMCs manage the training activity of training institutes to ensure that training is aligned with the skills need of industry, it is cost effective and it is heading towards the employment or towards further training. The main role of BIA representation on IMCs is to ensure that institute management gives due recognition to CBTA as well as WBT.

NVQF Support Units (NSU) will be established at national (NAVTTC), provincial (TEVTAs and QABs) level. The main objectives of establishing NSUs within partner's organisations are to:

- Support sustainability in NVQF development, implementation, assessment & certification processes
- Develop a team of "NVQF Quality Champions" in the relevant organizations to look after different quality assurance aspects of NVQF
- Improve coordination at national and provincial levels in implementation and management of NVQF
- In addition, BIAs could also establish NSUs and perform the following support services within the framework of agreements with training providers:
- Identification of WBT courses, such as definition of trades, number of trainees, time schedules and sequencing of classroom and workplace training phases
- Identification of training institutes and companies as implementing partners for the delivery of WBT
- Organise WBT promotion and recruitment events
- Assist trainees at training institutes to find companies willing to provide workplace training (alternatively, this could also include facilitation of job placement, internships, practical training exposure, job shadowing, etc.)
- Assist trainees undergoing non–formal and informal training at the workplace and those who are self–employed to access theoretical and specialised practical training phases in institutes and prepare them for RPL or RCC
- Facilitation of accreditation of training plans, assessments and certification

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7 Financing WBT

Funding is a key element in ensuring the sustainability and continuity of WBT. Ownership, commitment and the diversification of financing sources are elementary, while not relying on external funding provision. In this regard, the TEVTAs in consultation with the implementing partners needs to agree on a budget estimate and define ways for financing the courses.

WBT is funded by both, training institutes and companies, which take part in the training. The implementing partners need to identify expenses and jointly find ways for funding in a transparent manner.

As training costs vary by trade and the scope of training, this handbook cannot provide exact budget estimates of costs. The list below shows a breakdown of budget lines that should be considered when designing a budget estimate for implementation:

Budget Items
Staff of NSUs
Monitoring System
PR and marketing
Capacity development for implementing agencies
Procurement of additional machinery, equipment and teaching and learning material at training institutes
Consumables for training delivery at training institutes
Institute Coordinator
Teachers at institutes.
Facilities and training expenses for training delivery at companies
Company Supervisors
Admission and course fees
Monthly stipend for trainees
Fees for assessment and certification

The financing is an issue of joint agreement between TEVTAs and the implementing partners. They can agree on a self-financing scheme, in which training institutes and companies cover their expenses individually and TEVTAs avail funds for financing management expenses. External funding from public and private entities in Pakistan should also be considered.

In all aspects of budgeting and financing it is necessary that TEVTAs as well as the implementing partners rely on transparent financial and accounting systems within their field of responsibility.

8 Glossary

Accreditation	Procedures and processes observed to ensure that the institutes/organizations meet minimum criteria to manage and conduct NVQ training and assessment
Apprenticeship	The legal framework under which apprenticeships are administered, including obligations of individual parties and organisations
Apprentice	A person who has been employed in a recognised trade vocation and who has entered into a training-contract with his/her employer under the Apprenticeship Act (except for informal apprenticeship)
Apprenticeship	A contractual agreement under which an employer agrees to employ and, with the assistance of a registered training institute, train a person to learn the skills of a trade
Assessment Evidence Guide	Guide prepared at the national level for use by the assessors for modular and integrated assessment. It consists of summary of assessment outcomes and list of tasks to be performed by the trainees
Assessment System	Procedure, processes and guidelines for undertaking NVQ assessment
Assessment Task	A problem, a project or an activity to be performed by the individual under the prescribed competency standard
Classroom-based training	Training that takes place away from a person's job, either off the premises or in a separate training area in the workplace, and usually involves face-to-face teaching. No matter where training is delivered, classroom based training is primarily defined by the fact that it does not happen directly in the learner's workplace, as part of their work activities. Delivery strategies for classroom-based training may include a range of delivery techniques such as simulations, case studies, discussions, etc.
Competency-Based Completion	Competency-based completion allows for a variation of the training plan to allow early completion of traineeship based on the successful achievement of required competencies
Competency-Based Progression	Competency-based progression allows trainees to progress through their training based on completion of competencies rather than time served
Competency Standards/Competency Standard Package	A statement specifying the required performance to a defined standard at the workplace. It is determined by industry and specifies the performance required to be able to work effectively
Competency Unit	A sub-component of the competency standard containing the group of related competent performances to perform a particular function or task in a particular job or occupation and a specification of knowledge and skill and the application of that knowledge and skill to the standard of performance required in the workplace
Competent	An individual who have been declared successful through an integrated assessment organized by QABs and qualify for NVQ certificate
Consistent Assessment	An assessment based on evidences that provide different assessors to make consistent decisions about candidates' competence at different times, and on different occasions

Credit hours	A measure of the volume or amount of learning time needed to achieve the competency. In the NVQF, one credit is equivalent to 10 hours of learning
Curriculum	A systematic plan, based on the competency standards and competency units that sequence learning and assessment activities to enable trainees to gain the competencies required to achieve the qualification
Knowledge and Understanding	Component of the competency standard and a NVQF level descriptor that describe what an individual knows and understands (the body of facts, principles, theories, practices) related to the particular qualification at that level
Levels (NVQF Levels)	Levels means NVQF level structures which starts with level 1 qualification (semi–skilled worker) and successively progress up to level 8
Module	A sub-component of the curriculum that defines a sequence of related learning experiences related to one or more Competency Units. They are derived from the Competency Standards
NVQF Level Descriptors	A statement that describes the main learning outcome under "Knowledge & understanding", "skills", and "responsibility" relevant to the qualification at that particular level
NVQF Level	Level describes the pathway for horizontal and vertical progression under a set of descriptors that indicate the complexity of the skills and knowledge that the learner will have achieved
Pathway	Indicate path to the trainee to move through qualification levels with full or partial recognition for the qualifications and/ or learning outcomes they already have • Formal Pathway – Learning or achievement acquired by an individual through a structured curriculum, which is offered in a formal technical and vocational institute and/or at the workplace • Non-formal Pathway – Learning and achievement acquired by an individual through on-the-job training in companies • Informal Pathway – Learning or achievement acquired by an individual through work place/ labour market experience or traditional apprenticeship (Ustad–Shagird) system
Qualification Awarding Bodies (QAB)	Bodies which are responsible for assessment and certification of NVQs as managed under their Act/ Functions
Recognition of Prior Learning (RPL)	Process of recognition of already gained skills of the individuals (with or without portfolios) to enable them to acquire NVQ after going through NVQ assessment system
Training Institute	A training organisation registered to provide vocational education and training and/or assessment services and issue nationally recognised qualifications. All registered training organisations are required to meet the NVQF standards. The nationally recognised qualifications a registered training organisation can issue are defined by its scope of registration

Trainee	A person who has been enrolled in a recognised traineeship and who is undergoing training at a training institute and/or company
Training Needs Assessment	The Training Needs Assessment details the qualification to be undertaken by a trainee, the mode of training delivery and other preliminary training information. The signed Training Needs Assessment confirms acceptance by the Institute of the nomination by the parties to deliver the structured training
Training Package	Comprehensive publications developed by industry to support the national vocational education and training system. Training packages are made up of endorsed components (national competency standards, assessment guidelines and qualifications) and non-endorsed components (which may include learning and assessment resources)
Training Plan	The Training Plan provides details of the formal training and assessment to be undertaken as part of a traineeship
TVET Practitioners	Companies and Workplace Training Supervisors and Teachers, Instructors and Coordinators at TVET Institutes
TVET Service Providers	National and provincial TVET bodies in the public and private sector that are responsible for management, development and assessment of NVQs. They include NAVTTC, provincial TEVTAs, QABs in the public sector and bodies like PVTC, SSC and other private sector institutions providing NVQs across the country
Workplace-based Training	Training conducted in the workplace as part of the productive work of a trainee. Training may be delivered by the institute and/or the workplace supervisor on behalf of the institute. If the workplace supervisor is delivering the training, he/she will be supported by training materials (and possibly learning materials) provided by the institute for this purpose

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