NATIONAL VOCATIONAL QUALIFICATIONS FRAMEWORK OF SRI LANKA

Operations Manual

October 2009

Implemented by
Tertiary and Vocational Education Commission
354/2, Elvitigala Mawatha,
Colombo 05.

Sponsored by the Technical Education Development Project
ADB Loan 2197 - SRI (SF)

Ministry of Vocational and Technical Training
Note: The content in this Operational Manual is covered by Copyright. Permission is granted to the Users of this manual to copy or reproduce the content for personal, non-commercial or for teaching purposes only.
# Table of content

1. **Preface:** 1

2. **National Vocational Qualifications Framework of Sri Lanka** 3
   - 2.1 Introduction 3
   - 2.2 Overview of the Qualifications System 4
   - 2.3 Qualifications Upgrading Pathways 6
   - 2.4 National Competency Standards 8
   - 2.5 Quality Assurance 9
   - 2.6 Certification 10
   - 2.7 Flexible Skills Acquisition 10
   - 2.8 Levels Descriptors of National Vocational Qualifications 10

3. **National Competency Standards and Qualifications of NVQ** 13
   - 3.1 Policy 13
     - 3.1.1 Identification of Industry Sectors / Occupations for National Competency Standards 13
     - 3.1.2 Components of National Competency Standards 13
     - 3.1.3 Sources of Information for Competency Standards 15
     - 3.1.4 Process of the Development of National Competency Standards 15
     - 3.1.5 Formulation of Qualifications 18
     - 3.1.6 Criteria for Determining Qualifications of Levels 5 & 6 19
     - 3.1.7 Format of the National Competency Standard 20
     - 3.1.8 National Industry Training Advisory Committees (NITACs) 23
     - 3.1.9 Sector Policy and Training Advisory Councils (SPTACs) 24
     - 3.1.10 Endorsement Processes for National Competency Standards 24
     - 3.1.11 Revisions of National Competency Standards 25
4 CBT Curricula

4.1 Policy

4.1.1 Development of Curricula for Competency Based Training (CBT)

4.1.2 CBT Curriculum Development Process

4.1.3 Industry Participation in Task Analysis Workshop for NVQ Levels 1 – 4

4.1.4 CBT Curriculum Documents

4.1.5 Assessment Guides in CBT Curriculum

4.1.6 Industrial Training Phase

4.1.7 Revision of Curricula

4.1.8 CBT Curriculum Validation and Endorsement

5 Assessment

5.1 National Policy on Assessment and Certification of Competence

5.1.1 Introduction

5.1.2 Overview of the Assessment system

5.1.3 Principles of Competency Based Assessment

5.1.4 Practical Aspects on Conduct of Assessments

5.1.5 Curricula Based Continuous and Summative Assessments for NVQ Level 5 and Level 6 Diploma Programmes

5.2 Assessment Resources

5.3 Assessment Resources Development Process

5.4 Endorsement process of Assessment Resources for Levels 1 - 4

5.5 Assessors

5.5.1 Assessor Qualifications

5.5.2 Assessor Training

5.6 The National Consistency in Competency Based Assessments
8 Quality Management System

8.1 Quality Management System policy and scope

8.2 Features of the quality management system for a training provider

8.3 The implementation and operation of a quality management system in training centers

9 Implementation of the NVQSL

9.1 Roles and Responsibilities of TVET National Agencies and Registered Training Providers of the Private Sector

9.1.1 Tertiary and Vocational Education Commission (TVEC)

9.1.2 National Apprentice and Industrial Training Authority (NAITA)

9.1.3 University of Vocational Technology (Univotec)

9.1.4 Vocational Training Authority of Sri Lanka (VTA)

9.1.5 Department of Technical Education and Training (DTET)

9.1.6 National Youth Services Council (NYSC)

9.1.7 Registered Training Providers of the Private Sector

9.2 Regulatory Processes of the Tertiary and Vocational Education Commission

9.3 Procedures for the Implementation of NVQ Framework by the Training Provider

9.4 Management of the NVQ System by Training Centres

9.5 TVEC Database and Website to Support the NVQ Framework

9.5.1 Classification and Coding

9.5.2 Inclusion of NVQ Information in the TVEC Website

9.6 Additional NVQ Components in TVEC Database
10 Appendices

10.1 Glossary of terms

10.2 Terms of Reference for the Inter-Agency Steering Group for the Implementation of the National Vocational Qualifications Framework in Sri Lanka

10.3 Framework level descriptors

10.4 Assigning levels by the elimination of outliers

10.5 Relevant International Websites
List of Tables

Table 1. Seven Levels of Qualifications 4
Table 2: Level descriptors for the national vocational qualifications framework 11
Table 3: Competency Standard Format 22
Table 4: Industry Participation in Tasks analysis workshops for NVQ levels 1-4 28

List of Figures

Figure 1: Strategy for Technical and Vocational Education and Training Development in Sri Lanka 5
Figure 2: NVQ Framework of Sri Lanka 6
Figure 3: Competency Standards Development Process 17
Figure 4: Process for endorsement of Competency Standards 25
Figure 5: Process for endorsement of Assessment Resources 41
Figure 6: Process Approach of QMS 57
ACRONYMS

ADB    Asian Development Bank
B. Tech. Bachelor of Technology
B. Ed. Tech. Bachelor of Educational Technology
CBT Competency-based Training
CEO Chief Executive Officer
CoT College of Technology
DG Director General
DTET Department of Technical Education and Training
ECTS European Credit Transfer and Accumulation System
EMIS Education Management Information System
GoSL Government of Sri Lanka
HRD Human Resources Development
ILO International Labour Organisation
ISCED International Standard Classification of Education
ISCO International Standard Classification of Occupations
ISIC International Standard Industrial Classification
ISO International Organisation for Standards
LMIS Labour Market Information System
LRDC Learning Resource Development Centre
LRUC Learning Resource Utilisation Centre
MIS Management Information System
MVTT Ministry of Vocational and Technical Training
NAITA National Apprentice and Industrial Training Authority
NGO Non-Government Organisation
NIC National Identity Card
NITAC National Industrial Training Advisory Committee
NITESL National Institute of Technical Education of Sri Lanka
NVQ National Vocational Qualification
NVQSL Sri Lankan National Vocational Qualifications Framework
NYSC National Youth Services Council
OJT On the Job Training
PSC Project Steering Committee
QMS Quality Management System
RPL Recognition of Prior Learning
SEPI Self Employment Promotion Initiatives
SDP Skills Development Project
SLIATE Sri Lanka Institute of Advanced Technical Education
SPTAC Sector Policy and Training Advisory Council
TEDP Technical Education Development Project
ToR Terms of Reference
TVEC Tertiary and Vocational Education Commission
TVET Technical and Vocational Education and Training
Univotec University of Vocational Technology
VTA Vocational Training Authority
1. PREFACE

The Sri Lankan National Vocational Qualifications Framework (NVQSL) has been established to support the efforts in enhancing the development of an internationally competitive workforce in Sri Lanka. The framework is one of the key elements in unifying Technical and Vocational Education and Training (TVET). There will be national competency standards set in consultation with the industry, national quality standards for teaching and assessment using a competency-based approach, and national certification of learners and workers. The entire system will be internationally benchmarked.

This operations manual has been endorsed by the Tertiary and Vocational Education Commission (TVEC) in consultation with the Ministry of Vocational and Technical Training, National Apprentice and Industrial Training Authority (NAITA), Vocational Training Authority of Sri Lanka (VTA), Department of Technical Education and Training (DTET), National Youth Services Council (NYSC) and University of Vocational Technology (Univotec). The national lead body is the Tertiary and Vocational Education Commission (TVEC), which is the regulatory body for all aspects of implementation of TVET in Sri Lanka. The Manual outlines the agreed policies and processes for the implementation of all components of the National Vocational Qualifications in Sri Lanka (NVQSL). The manual states how national vocational qualifications are established in order to meet Sri Lanka’s occupational requirements, how training providers are to prepare courses so that the trainee will meet the industry specified competencies and how assessment and certification will be conducted.

Quality assurance is an important feature in the implementation of the NVQ system and training providers will establish their own quality management systems acceptable to the TVEC. Training providers shall be registered, accredited and audited by the TVEC.

The Asian Development Bank has supported the introduction of the National Vocational Qualifications Framework initially through the Skills Development Project and then through the Technical Education Development Project. International good practices have been studied and a model for a unified national system for qualifications has been developed for Sri Lanka. The Framework and its components, in particular the national competency standards identified by industry, are suitable for a formal benchmarking with vocational training systems in other countries.

The TVEC shall be working with the industry and countries which are major destinations for overseas workers, in order to ensure mutual recognition of competency standards and national vocational qualifications introduced in Sri Lanka.
This manual will assist all stakeholders to understand and implement the new national vocational qualifications framework. The manual will be used by officers in the industry and public, private and non governmental training agencies participating in TVET sector. It will be a valuable reference for those who wish to collaborate with the new system. It should also be useful to industry and professional groups wishing to collaborate with the Tertiary and Vocational Education Commission (TVEC) for the future development of human resources in Sri Lanka.

Dr. T. A. Piyasiri
Director General
Tertiary & Vocational Education Commission
354/2, Elvitigala Mawatha,
Colombo 05.

November, 2009
2. NATIONAL VOCATIONAL QUALIFICATIONS FRAMEWORK OF SRI LANKA

2.1 INTRODUCTION

This document outlines the key policy and operational features of the National Vocational Qualifications Systems in Sri Lanka (NVQSL). The NVQSL provides the opportunity for sustainable, strategic solutions for national training needs as well as for the employment mismatch for both the formal and the non-formal sectors. The NVQSL will easily be able to achieve national and international recognition for qualifications, knowledge, skills and attitudes of Sri Lankans in an increasingly globalised and competitive world. This will enhance the mobility of Sri Lankan workers nationally & internationally. The internationally benchmarked policies and processes adopted by the Tertiary and Vocational Education Commission (TVEC) shall enhance credibility to credentials awarded in Sri Lanka.

The Government of Sri Lanka is committed to ensure human resources development in keeping with the national and international labour market demand and recognise the importance of acquisition of competencies. The National Vocational Qualifications systems that is based on the certification of competencies was developed to be implemented in the Sri Lankan Technical and Vocational Education and Training sector with the assistance of Asian Development Bank funded Skills Development Project (SDP) and the Technical Education Development Project (TEDP).

The expectations sought from the establishment of a National Vocational Qualifications Framework relates to increasing the relevance and quality of Technical and Vocational Education and Training (TVET) Specifically there shall be:

- Unified qualification framework which is recognized nationally and understood internationally
- Development of progressive qualifications for career advancement
- Greater alignment to national goals.
- Strengthened linkages with industry, commerce and other external stakeholders.
- Increased responsiveness to industry competency needs.
- Convenient & flexible access for potential trainees.
- More proactive education and training strategies.
- Improved international linkages and recognition.
- Collaboration and rationalisation among the training agencies.
- Enhanced quality, relevance, performance, effectiveness, efficiency and transparency.
- An education and training culture of responsiveness and excellence.

Developing the NVQSL shall ensure that all current and newly emerging technical and vocational education and training (TVET) activities are well coordinated. Competency-Based Training (CBT) curricula and appropriate teaching, learning and assessment materials shall be available in the framework, together with requirements for registration and accreditation for training providers and courses respectively. The whole system shall be underpinned on acquisition of
competencies with an emphasis on quality. The TVEC is the authority for the implementation of NVQSL and the active participation of all the training agencies NAITA, DTET, VTA, NYSC, Univotec and other public, private and NGO sector training institutions are vital for the effective implementation of the National Vocational Qualifications of Sri Lanka.

This system shall be extended and be linked with secondary and higher education to provide pathways for continuing worker education and lifelong learning. Technical and vocational education and training may take place as “institutional training” (off the job training) as well as “industrial training” (on the job training).

2.2 OVERVIEW OF THE QUALIFICATIONS SYSTEM

The National Vocational Qualifications Framework makes provision for a nationally consistent, technical and vocational education and training in Sri Lanka relevant to economic and social development and is of an international standard. The National Vocational Qualifications of Sri Lanka are based on national competency standards identified by the industry stakeholders. The competency standards include relevant technical and employability competencies. The system awards qualifications at seven levels as given in Table 1.

Table 1. Seven Levels of Qualifications

<table>
<thead>
<tr>
<th>Level No.</th>
<th>Qualification</th>
<th>Generalized Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>National Certificate</td>
<td>Level 1 recognizes the acquisitions of entry level competencies</td>
</tr>
<tr>
<td>Level 2</td>
<td>National Certificate</td>
<td>Levels 2, 3, and 4 recognize increasing levels of competencies. Level 4 qualification provides for full craftsmanship/workmanship.</td>
</tr>
<tr>
<td>Level 3</td>
<td>National Diploma</td>
<td>Levels 5 and 6 recognize the increasing levels of competencies of technicians including supervision and process management.</td>
</tr>
<tr>
<td>Level 7</td>
<td>Bachelors Degree</td>
<td>Level 7 recognizes the vocational/technological competencies at Bachelors Degree level</td>
</tr>
</tbody>
</table>

Certification of 1 – 6 levels shall be carried out by institutions accredited by the TVEC. Certification at level 7 shall be carried out by the Univotec. They are nationally recognized and attests the achievement of a national standard determined by industry. Competency standard units can be acquired individually or progressively and lead towards a full award. The NVQSL encourages flexible skills acquisition both on and off the job and also recognizes that prior learning-policies and processes. These are established to allow knowledge and skills
acquired informally to be assessed, and competencies recognized towards national vocational qualifications.

A broad framework has been developed integrating technical/vocational and higher education and further levels may be added. The framework allows for an interface with secondary education and provides a progression for technical and vocational education qualified personnel to proceed to higher education. Industry and professional bodies participating in the development of the national competency standards are therefore in a position to plan for a smooth progression of qualifications from craft to technician to higher education.

Quality assurance is fundamental to all aspects of the NVQSL; it includes the determination of the national competency standards, training delivery to learners on and off the job, the assessment of competencies of candidates and the award of qualifications. Technical and vocational qualifications which comply with the national quality requirements are formally recognised through the National Vocational Qualifications of Sri Lanka. The framework is based on national competency standards which form the criteria for accreditation of courses. All other qualifications including foreign qualifications which conform to the requirements of the framework will be aligned with the NVQ system.

![Diagram of Strategy for Technical and Vocational Education and Training Development in Sri Lanka]

**Figure 1: Strategy for Technical and Vocational Education and Training Development in Sri Lanka**
2.3 QUALIFICATIONS UPGRADING PATHWAYS

The NVQSL is developed to assist trainees to join and leave the system at different stages with qualifications at different levels. The qualifications at different levels have been identified to suit employment requirements of the industry. Vertical mobility upwards through the system is straightforward as seamless progression is facilitated. Lateral entry into the system is possible at certain levels for those who have work experience in an appropriate field and assessed to have Recognized Prior Learning (RPL). Gaining NVQ qualifications through RPL is described elsewhere in this manual.

Figure 2: NVQ Framework of Sri Lanka
(a) NVQ Levels 1 – 4

Qualifications at levels 1 – 4 allows for a trainee to upgrade competencies starting from unskilled stage to reach full or master craftsperson stage through the acquisition of competencies specified at each level. These competencies are incorporated into the units of competencies which are packaged appropriately to form the National Competency Standards of a particular occupation. The trainee maintains a Record of Achievement of the units of competency that he/she has successfully completed and once all the units comprising a particular level has been successfully completed he/she is eligible to receive the National Certificate in the relevant occupation at the applicable level. Thus a trainee is able to upgrade his/her qualification level in a particular occupation through gradual acquisition of competencies as per the National Competency Standards.

(b) NVQ Levels 5 and 6

NVQ level 5 and 6 diploma programs allow a student to leave the system at the end of Level 5 with a National Diploma of NVQ level 5 or proceed and leave the system at the end of Level 6 with a National Diploma of NVQ level 6. However some diploma programmes may not have an exit at NVQ level 5. This is possible where the industry has identified that there is no employment category for a person with competencies achieved up to level 5 only in that technology area.

The programmes are developed so that persons with NVQ level 5 or 6 qualifications will have supervisory and/or process management competencies. These involve an increased percentage of knowledge component compared to competencies at lower levels. It is therefore necessary to ensure those entering NVQ level 5 programmes already have the necessary hands on skills to embark on a level 5 programme. The entry qualification to the Level 5 Diploma program is therefore fixed at NVQ Level 3 or Level 4 in a relevant occupation. The list of relevant occupations for each level 5 diploma will be notified when applications are called for these programmes. There is also a path of lateral entry for students with non NVQ qualifications mapped by the TVEC and assessed for their practical experience as well as for those who have work experience in an appropriate field and assessed to have Recognized Prior Learning (RPL) equivalent to NVQ level 3 or 4.

Candidates selected for entry to a NVQ level 5 programme may possess different skill and knowledge backgrounds. Even those coming through the NVQ system itself will have qualifications from different occupations. In order to ensure that all those selected to undergo a level 5 programme have the minimum skills and knowledge needed at entry, they will initially go through a Bridging program. This is carried out for the selected candidates after a selection test and an academic counselling session. The bridging program provides the necessary knowledge and competence to the students selected to Level 5. If there is a skill gap in a particular student that will be identified at the academic counselling session and the student is directed for necessary “Gap-Filling” programs. The “Foundation Studies” program is intended to provide the necessary mathematics, science and English knowledge and computer literacy needed to embark on a level 5 programme. Some students may get full or part exemption
from Gap-filling. However, it is recommended that all students follow the Foundation Studies program. There are four subjects under Foundation Studies with each subject having several Modules:

- Communication Skills in English
- Mathematics for Technology
- Science for Technology
- Computer Literacy

NVQ level 5 and 6 competency standards comprise of units of competency and each unit of competency is assigned a credit value. A trainee will be eligible to receive the NVQ level 5 qualification once he/she earns the required number of credits specified in the relevant competency standard. A level 5 qualification allows direct entry to the NVQ level 6 training programme in the same technology area with the credits earned towards the NVQ level 5 qualification counted towards the NVQ level 6 qualification.

(c) NVQ Level 7

NVQ level 7 programmes conducted by the Univotec allow students to acquire B.Tech. or B.Ed. Tech. degree qualifications. Pathways, from the National Diplomas, will be available to students who have achieved the relevant NVQ qualifications at levels 5 or level 6 to proceed to degree programmes. Those with NVQ level 6 qualifications are eligible to receive appropriate credit transfer towards the degree programme, to be determined by the Univotec.

2.4 NATIONAL COMPETENCY STANDARDS

Competency is the application of knowledge and skills relative to an industry standard of performance. The concept of competency focuses on what is expected of an employee in the workplace, rather than on the learning process, and embodies the ability to transfer and apply skills and knowledge to different situations and environments. Therefore, in Competency-based training (CBT) emphasis is placed on what a person can do in the workplace as a result of completing a program of training.

Competency standards are industry-determined specifications of performance that set out the skills, knowledge and attitudes required to operate effectively in a specific industry or profession. Competency standards are made up of units of competency, which are themselves made up of elements of competency, together with performance criteria, a range of variables, and an evidence guide. Competency standards are an endorsed component of a training package.

For a person to be assessed competent they need to demonstrate the ability to perform tasks and duties to the standard expected in employment. CBT focuses on the development of the skills, knowledge and attitudes required to achieve those competency standards.

One of the primary features of CBT is that each learner’s achievement is measured against the competency standards rather than against the achievement of other learners.
The competency standards are a basis for curriculum development, the preparation of teaching, learning and assessment materials, as well as training plans.

The framework shall progressively include new qualifications based on national competency standards. It is envisaged that over time, many areas of technical and vocational education and training shall be covered by national competency standards.

The competency standards approach allows continuous review of national vocational qualifications and shall together with the international benchmarking bring coherence to competency standards-setting at all levels.

The intellectual property contained in the national competency standards and the NVQSL is copyright to the Government of the Democratic Socialist Republic of Sri Lanka and shall be available through the Tertiary and Vocational Education Commission (TVEC).

TVEC shall make available a full listing of all accredited courses with their level and purpose for the information of learners and employers. This ensures comprehensive coverage of a sector and coherent identification of competency standards / qualifications including a sensible match adjusted to the labour market.

Guidelines are available to advice the developers of competency standards and qualifications in order to outline technical requirements for the format and content of the national vocational qualifications.

2.5 QUALITY ASSURANCE

Quality underpins all components of the NVQSL. A quality assurance model based on institutional self-assessment and continuous development has already been adopted. Quality assurance requires that all training agencies take responsibility for excellent performance and demonstrate to stakeholders that quality management systems are to the standard required by the TVEC.

TVEC is responsible to facilitate and regulate quality assurance and has four clusters of activities to support the NVQSL.

1. Registration of training providers
2. Quality Management System
3. Course accreditation
4. Monitoring and auditing

Quality assurance is a prerequisite for regular registration of training providers. Registration of training providers may lead to accreditation of courses and programs. Accreditation ensures that training providers adhere to active internal quality management systems with particular reference to the course for which accreditation is being sought.
The Quality Assurance system is subject to monitoring and audit by TVEC. This process systematically verify registration and accreditation through institutional quality audit. Training providers must have satisfactory audit results in order to maintain the status of registration and accreditation.

In addition the TVEC shall undertake monitoring, evaluation and research during the implementation of the vocational qualifications system, in order to modify policies and procedures in the light of Sri Lankan experience and international developments. An implementation, monitoring and research committee with external stakeholder representation shall be established by the TVEC.

2.6 CERTIFICATION

Accredited training providers and establishments are authorized to award national qualifications jointly with TVEC. The certification of national qualifications shall be maintained in a central database at the TVEC. This will facilitate ready verification of the authenticity of qualifications.

The national certificate will carry the logo of the Democratic Socialist Republic of Sri Lanka, logo of TVEC together with the logo of the respective training agency. The government of Sri Lanka will promote the NVQSL through benchmarking and official communication with relevant international agencies.

2.7 FLEXIBLE SKILLS ACQUISITION

The NVQSL framework which is based on national competency standards is flexible with regard to worker/trainee competency acquisition. Training providers may develop modularized courses, which are offered either full time or part time.

Progressive competency acquisition shall be recognized in the NVQSL. A worker/trainee achieving some of the units and not all the competencies specified in the respective national competency standard, is provided with a Record of Achievement.

2.8 LEVEL DESCRIPTORS OF NATIONAL VOCATIONAL QUALIFICATIONS

Table 2 provides information on the level descriptors for the “National Vocational Qualifications”. The units of the competency standards are individually assigned to a level and vocational qualifications are also assigned levels.

The factors to be considered in the assignment of levels for the units of competency standards are as follows;

- Process that a qualification holder will carry out
- Learning demand
- Responsibility
A guide on assigning levels is in Appendix 10.3

Table 2: Level descriptors for the national vocational qualifications framework

<table>
<thead>
<tr>
<th>Level</th>
<th>Process</th>
<th>Learning demand</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carry out processes that:</td>
<td>Employing:</td>
<td>Applied:</td>
</tr>
<tr>
<td></td>
<td>- are limited in range</td>
<td>- recall</td>
<td>- in directed activity</td>
</tr>
<tr>
<td></td>
<td>- are repetitive and familiar</td>
<td>- a narrow range of knowledge and cognitive skills</td>
<td>- under close supervision</td>
</tr>
<tr>
<td></td>
<td>- are employed within closely defined contexts</td>
<td>- no development of new ideas</td>
<td>- with no responsibility for the work or learning of others</td>
</tr>
<tr>
<td></td>
<td>- are single processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Carry out processes that:</td>
<td>Employing:</td>
<td>Applied:</td>
</tr>
<tr>
<td></td>
<td>- are moderate in range</td>
<td>- basic operational knowledge and skill</td>
<td>- in directed activity</td>
</tr>
<tr>
<td></td>
<td>- are established and familiar</td>
<td>- readily available information</td>
<td>- under general supervision and quality control</td>
</tr>
<tr>
<td></td>
<td>- offer a clear choice of routine responses</td>
<td>- known solutions to familiar problems</td>
<td>- with some responsibility for quantity and quality</td>
</tr>
<tr>
<td></td>
<td>- involve some prioritizing of tasks from known solutions</td>
<td>- little generation of new ideas</td>
<td>- with possible responsibility for guiding others</td>
</tr>
<tr>
<td>3</td>
<td>Carry out process that:</td>
<td>Employing:</td>
<td>Applied:</td>
</tr>
<tr>
<td></td>
<td>- require a range of well developed skills</td>
<td>- some relevant theoretical knowledge</td>
<td>- in directed activity with some autonomy</td>
</tr>
<tr>
<td></td>
<td>- offer a significant choice of procedures requiring prioritization</td>
<td>- interpretation of available information</td>
<td>- under general supervision and quality checking</td>
</tr>
<tr>
<td></td>
<td>- are employed within a range of familiar contexts</td>
<td>- discretion and judgment</td>
<td>- with significant responsibility for the quantity and quality of output</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- a range of known responses to familiar problems</td>
<td>- with possible responsibility for the output of others.</td>
</tr>
<tr>
<td>4</td>
<td>Carry out process that:</td>
<td>Employing:</td>
<td>Applied:</td>
</tr>
<tr>
<td></td>
<td>- require a wide range of technical or scholastic skills</td>
<td>- a broad knowledge base incorporating some theoretical</td>
<td>- in self – directed activity</td>
</tr>
<tr>
<td></td>
<td>- offer a considerable</td>
<td>concepts</td>
<td>- under broad guidance and evaluation</td>
</tr>
<tr>
<td>choice of procedures requiring prioritization to achieve optimum outcomes</td>
<td>analytical interpretation of information</td>
<td>with complete responsibility for quantity and quality of output</td>
<td></td>
</tr>
<tr>
<td>- are employed in a variety of familiar and unfamiliar contexts</td>
<td>- informed judgment</td>
<td>- with possible responsibility for the quantity and quality of the output of others</td>
<td></td>
</tr>
<tr>
<td>- a range of sometimes innovative responses to concrete but often unfamiliar problems</td>
<td>-</td>
<td>..contd.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Level descriptors for the national vocational qualifications framework

<table>
<thead>
<tr>
<th>Level</th>
<th>Process</th>
<th>Learning demand</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Carry out processes that:</td>
<td>Employing :</td>
<td>Applied :</td>
</tr>
<tr>
<td></td>
<td>- require a wide range of specialised technical or scholastic skills</td>
<td>- a broad knowledge base with substantial depth in some areas</td>
<td>- in self – directed and sometimes directive activity</td>
</tr>
<tr>
<td></td>
<td>- involve a wide choice of standards and non – standards procedures</td>
<td>- analytical interpretation of a wide range of data</td>
<td>- with broad general guidelines or functions</td>
</tr>
<tr>
<td></td>
<td>- are employed in a variety of routine and non routine contexts</td>
<td>- the determination of appropriate methods and procedures in response to a range of concrete problems with some theoretical elements</td>
<td>- with full responsibility for the nature, quantity and quality of outcomes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- with possible responsibility for the achievement of group outcome</td>
</tr>
<tr>
<td>6</td>
<td>Carry out processes that:</td>
<td>Employing :</td>
<td>Applied :</td>
</tr>
<tr>
<td></td>
<td>- require a command of wide-ranging highly specialised technical or</td>
<td>- specialised knowledge with depth in more than one area</td>
<td>- in managing processes</td>
</tr>
<tr>
<td></td>
<td>scholastic skills</td>
<td>- the analysis, reformatting and evaluation of a wide range of information</td>
<td>- within broad parameters for defined activities</td>
</tr>
<tr>
<td></td>
<td>- involve a wide choice of standards and non standards procedures,</td>
<td>- the formulation of appropriate responses to resolve both concrete and abstract problems</td>
<td>- with complete accountability for determining and achieving personal and / or group outcomes</td>
</tr>
<tr>
<td></td>
<td>often in non standards combinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- are employed in highly variable routine and non routine contexts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Carry out processes that:</td>
<td>Employing :</td>
<td>Applied :</td>
</tr>
<tr>
<td></td>
<td>- require a command of highly specialised technical or scholastic and</td>
<td>- knowledge of a major discipline with areas of specialisation in depth</td>
<td>- in planning, resourcing and managing processes</td>
</tr>
<tr>
<td></td>
<td>basic research skills across a major discipline</td>
<td>- the analysis, transformation and evaluation of abstract data and concepts</td>
<td>- within broad parameters and functions</td>
</tr>
<tr>
<td></td>
<td>- involve the full range of procedures in a major discipline</td>
<td>- the creation of appropriate responses to resolve given or contextual abstract problems</td>
<td>- with complete accountability for determining, achieving and evaluating personal and/ or group outcomes</td>
</tr>
<tr>
<td></td>
<td>- are applied in complex, variable and specialised contexts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(The permission of the New Zealand Qualifications Authority for the use of their descriptors as a basis for the development of descriptors in Sri Lanka is gratefully acknowledged.)
3. NATIONAL COMPETENCY STANDARDS AND QUALIFICATIONS OF NVQ

3.1 POLICY

The national competency standard specifies the competencies that a person has to acquire in order to get qualified and obtain national vocational qualifications in a particular industry sector or in an occupation. The national competency standard describes realistic workplace outcomes. The competency standards developed is the result of a consultation process that includes industry practitioners and any other key stakeholders. The TVEC shall identify the industry sectors or occupational areas for which national competency standards shall be developed. After identification the TVEC shall direct NAITA to commence the development of the national competency standards. NAITA shall develop competency standards according to processes and procedures described in this manual and submit developed competency standards to the TVEC for endorsement.

3.1.1 Identification of Industry Sectors/Occupations for National Competency Standards

Identification of industry sectors/occupations for competency standards development shall be done by TVEC, with the guidance of Sector Policy and Training Advisory Councils (SPTACs), industry bodies, government departments and/or according to government policy initiatives. TVEC shall approve feasible requests for Competency Standards development and inform NAITA. The labour market information system shall be used as an information source.

The criteria for the selection of industry sectors/occupations shall be:

- Significant employment opportunities both current and future.
- Significant social and economic contributions to the society.
- Formal skills currently recognized in the TVET system.
- Potential for foreign employment.
- Feasibility to provide training and assessment in the workplace.
- Completion of a feasibility study to confirm the need for competency standards.
- Request from industry bodies and/or professional bodies with an acceptable justification.

3.1.2 Components of National Competency Standards

National Competency Standards define the competencies required for effective performance in a particular industry sector or in an occupation. The important features of competency standards and their applications are:
• competency standards focus on what is expected from a worker in the workplace rather than on the learning process.
• competency standards stress upon the ability to transfer and apply skills, knowledge and attitudes to new situations and environments.
• competency standards are concerned with what people are able to do and the ability to carry out a task within a given range of context.

The combination of units for an industry sector / occupation must cover the following five components of competency:

• Task handling
• Task management
• Problem solving / contingency management
• Job / role / work environment handling
• Apply competencies to different environments

Competency Standards shall be developed for industry sectors/occupations identified through an analysis of relevant labour market sources and other information.

Categorization of competency Units

(i) For Level 1 – 4 Competency Standards

*Occupation Specific Competency Units:*

Under this category a set of compulsory competency units are to be offered. These are specific to the occupation of the certificate and are the key competencies in that occupation which the holder of the qualification must possess.

*Basic Employability Competency Units:*

These are generic competency units which are required by all employees in order to function effectively in the workplace.

(ii) For Level 5 & 6 Competency Standards

*Sector Specific Core Competency Units:*

Under this category a set of compulsory competency units are to be offered. These are specific to the main area of the qualification and are the key competencies in that sector which the holder of the qualification must possess.

*Employability competency Units:*

These are generic competency units which are required by all employees in order to function effectively in the workplace. These include those generally referred to as soft skills. For Example; problem solving and decision making.

*Elective Competency Units:*
These units focus on specific areas of the sector or on related areas from other sectors. Option is given to select elective units in order to specialize in a particular area.

The competency standards developed must be the result of a consultation process that includes industry practitioners and any other key stakeholders identified during development.

The units of national competency standards developed shall have the following eight mandatory components. These are:

- Unit title
- Unit descriptor
- Unit level and for Levels 5 & 6, Credit value
- Unit code
- Elements of competence
- Performance criteria
- Range statement
- Assessment guide
- Underpinning skill and knowledge

Individual units of competence within each industry sector/occupation shall be packaged by industry to form one or more qualifications under the “National Vocational Qualifications” of Sri Lanka.

Competency standard developer should refer to the Competency Standard Development Manual (formerly called Operational Manual) available at NAITA.

3.1.3 Sources of Information for Competency Standards

The Competency Standards Development Manual shall describe in detail the processes to be followed in the preparation of “National competency Standards” and provides details of the technical requirements of competency Standards. This operational manual shall contain copies of templates that shall be followed in the development of national competency standards and a copy of the relevant endorsement application forms.

The purpose of the Competency Standards Development Manual is to guide the Competency Standard developers on the quality requirements of TVEC for its final endorsement, and the following:

- The National Vocational Qualifications Framework of Sri Lanka
- Quality Assurance System
- The Competency Standards Endorsement Process
- The Assessment Policy
- Assessment Guides
3.1.4 Process of the Development of National Competency Standards

The following steps shall be adopted in the development of National competency Standards:

1. Identification of industry sectors/ occupations for competency standards development shall be done as outlined in section 3.1.1.

2. NAITA identifies 6 – 12 resource personnel to develop the competency standards and qualifications. At least two thirds of the personnel shall be current industry practitioners.

3. The development group shall conduct a Functional analysis / occupational analysis and a “Functional Map” shall be developed thereafter.

4. The Functional map/Competency profile, Unit titles and Unit descriptors are submitted to relevant NITAC for consideration and feedback.

5. The Functional map/Competency profile, Unit titles and Unit descriptors are forwarded to Univotec to initiate work on curriculum development.

6. The development group thereafter prepares the draft competency standard.

7. The Packaging Committee reviews the draft national competency standard and check the proposed qualification packages in keeping with the packaging policy.

8. The Competency Standard shall be sent for wide industry comments from stakeholders such as industry bodies, trade unions, technical experts and practitioners and also shall be made available for public viewing and comments.

9. Draft standard together with comments, if any, shall be referred to the relevant development group for formulation of the final draft and the cover sheet which outlines the qualifications.

10. The final draft standard shall be forwarded to the relevant National Industry Training Advisory Committee (NITAC) together with the functional map for technical validation along with a formal endorsement application.

11. Once the NITAC has validated the national competency standard and qualifications the competency standard together with the functional map shall be submitted to TVEC for endorsement.
12. TVEC shall endorse the national competency standard or return back to NAITA with reasons for not endorsing the competency standard.

13. Once endorsed by TVEC the national competency standard is forwarded to Univotec for any adjustments of curricula and finalising the same.
Figure 3: Competency Standards Development Process

1. Identify industry sectors/occupations for Competency Standards development using labour market information and training needs information (TVEC/SPTACs).
   - Identified economic and/or social need for development

2. TVEC informs NAITA of need for Competency Standards development.
   - Initiation of development process

3. NAITA assigns development work to a development group.
   - Guidance and templates provided by NAITA

4. Draft Competency Standards circulated for wide industry and public comment to ensure validity of industrial content.
   - Functional Map/Competency Profile sent to NITAC for feedback

5. Draft together with comments if any referred back to development group for preparation of final draft.

6. Final draft submitted to NITAC for validation.

   - NITAC validates Competency Standard
     - Yes
     - NAITA submits competency standard to TVEC for endorsement
       - No
       - TVEC endorses Competency Standard
         - Yes
         - TVEC endorses the standard and informs NAITA of successful endorsement and places endorsed Standard on Register
           - Competency Standard forwarded to Univotec for finalising curriculum

   - No
     - TVEC endorses the standard and informs NAITA of successful endorsement and places endorsed Standard on Register

Endorsed Competency Standard placed on register, printed and distributed by TVEC.
3.1.5 Formulation of Qualifications

The Sri Lanka National Vocational Qualifications Framework which is being internationally bench marked has assigned qualifications to seven levels as described in Appendix 10.3. The descriptors of each level describe the process, learning demand and the responsibility applicable to each level of performance. Accordingly individual units of competencies shall be assigned appropriate levels based on where they fit in the ladder of level descriptors.

The procedure for grouping of units of competence to form National Vocational Qualifications for Levels 1 to 4 and for Levels 5, 6 and 7 are given below.

Qualifications at Levels 1 to 4

For Levels 1 to 4 qualifications, units shall be clustered into a package to form an occupation according to the industry requirements and as well as to include a sufficient learning content. The level of the job (Qualifications package) shall be determined by considering the following factor:

The levels of units those practiced most frequently in a package will decide the level of the qualification.

Qualifications at Levels 5 - 7

The units of competence considered for NVQ Levels 5 and 6 are assigned a Credit value in addition to a Level. The Degree at level 7 is based on the Curricula prepared in terms of learning outcomes.

The Credit system used in the Sri Lankan NVQ system for NVQ levels 5, 6 and 7 is the European Credit Transfer and Accumulation System (ECTS). Number of notional hours per credit ranges from 20 to 30 in the ECTS; whereas, in Sri Lanka 25 notional hours is considered to be one credit. This is a student centered system based on the student workload required to achieve the objectives of a higher education program, objectives preferably specified in terms of learning outcomes and the competencies to be acquired.

Similar to the ECTS, Sri Lankan credit system is based on the principle that 60 credits measure the workload of an average full-time student during one academic year.

In the Sri Lankan credit system the student workload of a full time study program is defined as 1500 Notional hours per year. Notional hours includes direct contact time with teachers and trainers (“Directed Learning”), time spent in studying and doing assignments (“Self – Directed or On –Task” learning) and time spent on assessments.

Notional learning time can then be expressed in terms of credits where 01 credit point is equivalent to 25 notional learning hours (1500/60).

Credits can only be earned after successful completion of the work required and appropriate assessment of learning outcomes. Thus qualifications at NVQ Levels 5, 6 and 7 require the learner to earn a specified number of credits at specified levels in a training programme in order to qualify for the qualification.
One academic year may consist of two semesters. Each semester having 20 weeks and thus one academic year consists of 40 weeks.

3.1.6 Criteria for Determining Qualifications of levels 5 & 6

NVQ Level 5 Diploma

The minimum number of credits required for the NVQ level 5 diploma is 60 of which at least 40 credits must be at level 5 or above and the remaining (up to 20) credits at level 3 or above.

NVQ Level 6 Diploma

The minimum number of credits required for the NVQ level 6 diploma is 120 of which

- At least 40 credits must be at level 6 or above
- At least 50 additional credits are at level 5 or above
- The remaining 30 (or fewer) credits may be from level 3 or above

A maximum of 60 credits earned towards a level 5 qualification in the relevant technology area can be counted towards the credit requirement of level 6 qualification.

NVQ Level 7 (Degree level)

It is expected that majority of students enrolling for the degree programmes at the Univotec will have NVQ qualifications. As the new NVQ levels 5 and 6 qualifications are endorsed, the TVEC intends to negotiate a formal articulation agreement with the Univotec so that pathways, with appropriate credit transfer from the National Diplomas, will be available to students who have achieved the relevant NVQ qualifications at levels 5 and 6 through accredited TVET courses. The articulation negotiations will also identify any requirements for a bridging programme for students entering Univotec with NVQ qualifications.

The degree at the Univotec will meet international norms for first degrees and will consequently be a systematic, research-based, coherent, introduction to the knowledge, ideas, principles, concepts, chief research methods and to the analytical and problem-solving techniques of a recognized major technology subject or subjects. The programme leading to this qualification will involve major studies in which significant knowledge is available. The programme content will be taken to a significant depth and progressively developed to a high level, which can provide a basis for professional careers and post graduate study. The bachelors degrees at the Univotec will require a minimum of 180 credits (the equivalent of three years full-time study). The credit transfer negotiated by the TVEC may reduce that.

Special degree
Minimum requirement for successful completion of a Special Degree shall be 240 credits earned after NVQ Level 5. A maximum of 180 credits may be given exemption on credits earned in the General Degree.

3.1.7 Format of the National Competency Standard

The body of the Competency Standard document consists of three parts; the key information section, list of units of competency and the unit descriptors. Key information is given in the form of a table (Table 3). This table provides following information:

**Title of qualification**

This shall specify whether the qualification is a certificate assigned to levels 1-4 or a diploma assigned to levels 5-6, following the NVQ guidelines. The title of the qualification should accurately describe the scope of the learning areas covered in the qualification standards. For national and international consistency the TVEC is adopting the ILO international occupational classification for the naming of qualifications at Levels 1 - 4.

**Endorsement date**

This shall be the date that the TVEC officially endorses the qualification as representing the national industry standard.

**Date for review**

This shall be the date selected by industry by which the qualification shall be reviewed to ensure continuing relevance. It shall be 3 years from the date of endorsement, but in areas where technologies are advancing rapidly or where major changes are expected it can be less than 3 years.

**Qualification code**

This will be the qualification identifier assigned by the TVEC to the national vocational qualification.

**Development Group and National Industrial Training Advisory Committee**

This should contain a full list of all members with their contact details for ongoing involvement in the management of the qualification and for its future review. This consists of names of the members of the development group, National Industrial Training Advisory Committee (NITAC).

**Purpose of the qualification**

This shall state precisely what the holders of the qualification shall be expected to know and be able to do. It will guide learners as they consider study options and employers as they consider the competency levels of certificated workers or potential employees.
**Prerequisites**

Competencies which must be acquired before beginning the qualification/unit

**Regulations for the qualification and schedule of units**

This section shall outline the regulation/s applicable for the award of the particular qualification as per the Policy including foundation programmes and work experience.

**Accreditation requirements**

This section provides guidance to TVEC when training establishments seek accreditation and industry assessors identify suitable workplaces for assessment. The TVEC has determined the generic quality management requirements of establishments. In addition any specific industry requirements for the units in the package must be met, before accreditation can be granted. In particular this applies to matters of health and safety for specific units or sets of units. Industry may determine that some units may only be assessed in realistic work environments and this must be specified here.

**Transition arrangements**

This section provides for trainees whose programmes are incomplete at the time of transition to the new or revised qualification. TVEC shall develop a concept so that all trainees can be dealt with fairly and are not disadvantaged.
Table 3: Competency Standard Format

<table>
<thead>
<tr>
<th>Competency Standard for..........................</th>
<th>Code Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NATIONAL CERTIFICATE/ DIPLOMA in ............... at NVQ LEVEL .....</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. Endorsement date:</th>
<th>2. Date for review:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3. Qualification code:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>4. Development Group and the National Industrial Training Advisory Committee (NITAC) responsible</th>
<th>Development Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
<td>5.</td>
</tr>
<tr>
<td>1</td>
<td>1.</td>
</tr>
<tr>
<td>2</td>
<td>2.</td>
</tr>
<tr>
<td>3</td>
<td>3.</td>
</tr>
<tr>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Purpose of the qualification</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>6. Prerequisites</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>7. Regulations for the qualification</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>8. Schedule of Units</th>
<th>Title</th>
<th>Code</th>
<th>Level</th>
<th>Credit</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td>3.</td>
</tr>
<tr>
<td></td>
<td>4.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Transition arrangements</th>
<th></th>
</tr>
</thead>
</table>
3.1.8 National Industry Training Advisory Committees (NITAC)

The National Industrial Training Advisory Committees (NITACs) for different Industry sectors are constituted as interfaces or links between NAITA and different industry sectors.

NITAC members shall be appointed by the NAITA board of management for a period of three years. The NAITA board of management has the authority to replace NITAC members from time to time.

As a minimum, each NITAC shall include:

- 5 members with wide experience in occupations within the industry sector who are current practitioners (at least sixty percent of these members should be from industry).
- One representative from a trade union. (To be nominated by the Ministry of Labour)
- One representative from the Ministry of Labour.
- 5 representatives from private and public training providers (one each from VTA, NAITA, DTET, NYSC and private training institutions as appropriate).
- One representative from Univotec
- One representative from Ministry of Public Administration
- One representative from NAITA who will act as the NITAC executive officer.
- One representative from TVEC

Each NITAC will appoint a chairperson from among the members of industry practitioners.

NITACs may co-opt additional ex-officio members from time to time as they see fit.

The quorum for the NITAC meeting is a minimum of 1/3 of the membership, however minimum of 3 members from the industry sector must be present.

The terms of reference for NITACs are as follows:

- Assist NAITA in identifying suitable practitioners to take part in competency standards development and the development of assessment materials.
- Undertake technical validation of competency standards prepared for TVEC endorsement after wide circulation to industry and the public.
- Recommend competency standards to TVEC for endorsement.
- Recommend assessment materials to TVEC for endorsement.
- Consider industry comments on the continuing validity of competency standards and assessment materials.
- Assist NAITA in the review of competency standards and assessment materials.
- Assist NAITA in identifying work placements for trainees.
- Facilitate the provision to NAITA of technical advice in their occupations on various matters as and when requested by NAITA.
3.1.9 Sector Policy and Training Advisory Councils (SPTACs)

SPTACs are appointed by the TVEC.

Terms of Reference of SPTACs

The SPTACs will:

- Provide strategic advice to the TVEC on the human resource development requirements of their sector.
- Promote effective and efficient resource utilization
- Facilitate on the job training and public/private partnerships

The Membership of the SPTACs

<table>
<thead>
<tr>
<th>Association</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade associations</td>
<td>04</td>
</tr>
<tr>
<td>Professional associations</td>
<td>04</td>
</tr>
<tr>
<td>Education and Training providers</td>
<td>02</td>
</tr>
<tr>
<td>TVEC</td>
<td>01</td>
</tr>
<tr>
<td>Chair of the relevant NITAC/s</td>
<td>01</td>
</tr>
</tbody>
</table>

To promote pathways between the diplomas and higher education it is suggested one of the education and training provider representative should be from a University.

3.1.10 Endorsement Process for National competency Standards

TVEC is the national authority responsible for the endorsement of National Competency Standards. The endorsement is a formal declaration by the commission that Competency standards and “National Vocational Qualifications” are procedurally correct and comply with the requirements of the “National Vocational Qualification” of Sri Lanka. If the standards or qualifications are not endorsed, they are to be returned to NAITA with reasons, for revision.

Competency standards together with functional map shall be submitted by NAITA to TVEC after the validation by the relevant NITAC. TVEC shall:

- Ensure that the competency standards are procedurally correct and reflect the instructions provided by the TVEC
- Endorse NITAC validated competency standards if not they shall be returned to NAITA with reasons.
- Maintain a register of endorsed competency standards and National Vocational Qualifications.

The following steps shall be adopted in the endorsement of National competency Standards:
- NAITA confirms that the competency standards have met the technical requirements and the format outlined in the operational manual and requests TVEC for the endorsement of the standards.

- TVEC endorses the competency standards and then informs NAITA on successful endorsement. Competency standards which are not endorsed by TVEC will be sent back to NAITA with the observations and recommendations.

- TVEC makes arrangements to ensure availability of the endorsed Competency Standards to stakeholders and interested parties.

- The National Competency standards shall be coded, entered on TVEC data base and made available to industry assessors and accredited providers.

**Process for endorsement of Competency Standards**

![Flowchart showing the process for endorsement of competency standards]

Figure 4: Process for Endorsement of Competency Standards

### 3.1.11 Revisions of National Competency Standards

National Competency Standards are to be reviewed at least every three years or whenever necessary. TVEC will take comments from stakeholders and recommend revisions of the standards.
4  CBT CURRICULA

4.1  POLICY

NVQSL shall ensure that training and competency assessments are based upon standards required by industry. The policy for developing the competence based training curricula is based on the use of national Competency Standards. The functional map developed in the competency standard development process shall be used when the curriculum development process is initiated.

To ensure a responsive and high quality Technical and Vocational Education and Training (TVET) system in Sri Lanka, the system is committed to developing and maintaining a Competency Based Training (CBT) system that will be based upon the principles of:

- Learner centered training
- National Competency standards to specify the competencies, knowledge and attitudes required by the industry
- Direct industry involvement in the TVET system
- Competency based assessment
- Formal endorsement of Competency standards which lead to national qualifications
- Endorsement of curricular which leads to consistent training delivery
- A quality assured system for registering training providers
- A quality assured system for accrediting national courses.
- A quality assured system for assessment of competencies in the workplace.
- Flexible delivery of training.
- Training to meet industry needs.
- Recognition of competencies acquired through learning or work experience.
- Linking training and learning to the workplace.

4.1.1  Development of Curricula for Competency Based Training

Introduction

A Curriculum is a “Plan for Training” designed to provide learning experiences.

A CBT curriculum, in particular, is an integral component in a unified TVET system.

The University of Vocational Technology (Univotec) is the lead agency responsible for the development of competency based national curricula, for the unified national TVET system.

Univotec shall develop on the instructions of the TVEC the national CBT curricula and submit through TVEC to NAITA for validation.
The TVEC is the national authority of endorsing the curricula.

**The Basis of CBT Curricula**

The “Competency Standard” of any given industry sector/occupation describes the skills, knowledge and attitudes that a competent worker in the sector/occupation shall demonstrate at a work place.

Competency standards focus on what is expected from a worker in the workplace rather than on the learning process.

Hence, in the case of development of curricula for the certificate levels (NVQ 1 to 4) competency units specified in the Competency standards are transformed into “tasks” that the learner has to perform during learning.

And in the case of development of curricula for diploma levels (NVQ 5 & 6) competency units specified in the units are transformed into “learning outcomes” in the CBT curricula.

Therefore the national competency standards shall be the basis on which the national CBT curricula are developed.

**Learning Modules**

For convenience of learning, tasks or learning outcomes specified in CBT curricula are sequenced into distinctly identifiable independent building blocks, officially referred to as “Modules”.

**Concept of CBT curricula**

The CBT curriculum shall necessarily satisfy the following requirements, which adequately describe the dimensions of “Competency”

- **Task Handling** - The requirement to perform individual tasks to the required performance standards and output standards.

- **Task Management** - The process of managing a task through its life cycle, including planning, testing, tracking and reporting. Effective task management includes managing all aspects of a task, including its status, priority, time, human and financial resources assignments, recurrences, notifications and so on.

- **Contingency management** - The capacity for flexibility in varying responses and attitudes to meet the needs of different situations.
- **Job / role / work environment handling** - The requirement to deal with responsibilities and expectations of the work environment including interacting appropriately with others in the workplace.

- **Transfer skills** - Competencies in performance of a particular job which can be used in the performance of another job.

CBT curriculum shall, encompass the essential aspects of “Competency” as outlined in the national competency standards.

### 4.1.2 CBT Curriculum Development Process

CBT curriculum development process entails a wider analytical phase with a heavy “Industry Participation.” Besides, the training based on these curricula shall be directly relevant to the work done at the real work place situation in the industry.

Thus, the curriculum development process leads to a system, which is based on learners’ outcomes rather than the completing of a specific amount of training.

In order to meet this requirement, the CBT curriculum development process shall be initiated with the use of the “Functional map/Competency profile” developed for the Competency Standards generation.

Subsequently “The Task analysis” which follows is a very essential step in the process of development of curricula for certificate levels (NVQ 1 to 4)

Personnel from industry and experienced teaching / training personnel from training institutions are represented at these workshops.

### 4.1.3 Industry Participation in Tasks analysis workshops for NVQ levels 1 -4

**Table 4: Industry Participation in Task Analysis Workshops**

<table>
<thead>
<tr>
<th>Curriculum development stage</th>
<th>Outcome</th>
<th>Industry representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task analysis</td>
<td>Performance procedure, industry specific performance standards, conditions and range under which performance occur</td>
<td>80%</td>
</tr>
</tbody>
</table>
In “Task analysis” about 20% of experienced trained persons from training centres shall participate. For writing the curricula documents based on the workshop outcome the involvement of well trained, experienced training persons is essential.

Curriculum Developers may wish to revisit Functional Analysis to clarify / confirm industry requirements.

### 4.1.4 CBT Curriculum Documents

**(a) Curriculum documents for NVQ levels 1 to 4**

For NVQ Levels 1 to 4 the CBT curriculum consists of 3 documents, namely,

- Curriculum outline
- Learner’s guides (one per each module) and
- Trainer’s guide

For consistency of content and structure, formats have been developed for each type of curriculum document.

Curriculum outline is the basic document useful for anyone to learn, at a glance, what is in the given curriculum. This can be used even by administrators when planning their training activities or in budgeting the training programs. CBT curriculum provides specific instructions to the “Learner” through “Learner’s Guides”.

In order to meet this requirement, the format of learner’s guide, makes provision for inclusion of major learning objectives, guidelines for performance of tasks- (performance guides), practical applications, probable problem situations and projects. Learner’s Guide format facilitates the self learning process, as far as possible.

The trainer’s guide provides basic instructions to trainer in order to deliver effective training.

In addition effective and appropriate instructional methodology and effective media for “Trainee Centered learning” are included in this document.

The National (CBT) Curricula based on national competency standards shall necessarily be used by the 3 major training agencies namely; VTA, NAITA and DTET, as a minimum for the training delivery and be made available to NYSC and other training providers.
Besides, supplementary “Instructional material” shall be provided to the trainee in order to enhance “self learning”, which is an inherent feature in CBT methodology.

(b) Curriculum documents for NVQ levels 5 & 6

Competency based curricula for NVQ levels 5 & 6 have only one document that is the curriculum outline. The curriculum outline consists of module descriptors prepared for modules. The module descriptor has the following components:

- Module Title
- Module Code
- Module Type
- Relevant Units of Competencies
- Pre-Requisites
- Module Aim(s)
- Learning Outcomes
- Learning Content / Topics
- Resource Requirement
- Prescribed and Recommended References
- Suggested Teaching – Learning Activities
- Assessment and Weightings
- Duration

4.1.5 Assessment Guides in CBT Curriculum

The National CBT curriculum shall indicate the following assessment guides as per each module for assessing knowledge, skills and attitudes during the “continuous assessment process” (formative assessment) which is a vital component in competency based training delivery.

Level 1 to 4 curricula provides:

- Performance guides (check lists indicating steps together with relevant performance standards)
- Product rating instruments for rating the product (if any).
- Rating scales for assessment of attitudes (wherever applicable).
- Sample questions for knowledge assessments (these are given in Learner’s Guides).
- Exercises to be performed in class room /workshop. (These are specified in the Trainer’s Guide if applicable)

Since the format of the national CBT curriculum for levels 1 to 4 includes assessment guides, it paves way for “formative assessments” both during the institutional training phase and the industrial attachment phase.

Level 5 and 6 Curricula:
For NVQ levels 5 and 6 guidance is provided in the module descriptors as to the expected learning outcomes, modes of assessments and their weightings. Formative and summative assessments are conducted based on the learning outcomes of the modules. DTET will centrally manage course based formative and summative assessments for Colleges of Technology (CoTs).

4.1.6 Industrial Training Phase

The industrial training phase that follows immediately after a satisfactory institutional training phase provides ample opportunities for the trainee to develop competencies in contingency management, job/role environment handling and transfer skills to different situations. Besides, it exposes the trainee to real work place environment, enabling him/her to acquire and enhance industry specific performance standards, in line with CBT concepts.

4.1.7 Revision of Curricula

CBT Curriculum once developed shall first run on a pilot (trial) basis, during which period it is subjected to continuous improvement through a feedback process.

National CBT Curricula shall undergo periodic revisions in order to comply with requirements of the National competency Standards.

4.1.8 CBT Curriculum Validation and Endorsement

NAITA is delegated to validate the curriculum developed by the University of Vocational Technology (Univotec) or any other. The following process shall be followed:

- Draft “curriculum outline document” shall be submitted to NAITA through TVEC.

- TVEC shall officially request NAITA to initiate the validation process.

- NAITA shall convene the NITAC Curriculum validation meetings and coordinate the activities.

- The Curriculum developers shall assist the NITACs explaining the process, procedures and if necessary the contents of the curriculum.

- The NITAC, shall consider the following for validation.
- The Curriculum is based on a “Functional Map /Competency profile” derived from competency standards if any.
- Profiles of the curriculum developers who participated at the workshops and curriculum writers.
- Curriculum format.
- Evidence of matching the NVQ with the curriculum or units of qualifications with the curriculum.

- The validated curriculum shall be submitted to TVEC for endorsement together with the validation recommendations of NITAC. If the curriculum does not meet the requirement for validation it shall be returned to Univotec with observations.

- TVEC will take steps for printing of Competency Standards and Curricula.

- Development and translation of Competency Standards and course curricula/teaching guide/learner guide will be done through budgetary allocations by NAITA and Univotec respectively.
5. ASSESSMENT

5.1 NATIONAL POLICY ON ASSESSMENT AND CERTIFICATION OF COMPETENCE

5.1.1 Introduction

The national Policy on assessment of competence uses two different methods of assessment. For the award of Levels 1 – 4 qualifications the competencies are assessed through competency based assessments focusing on the performance criteria specified in the respective units of competencies.

For Levels 5 and 6 qualifications two stages of assessment are employed. Modular based (Formative and Summative) assessments are conducted for the assessment of learning outcomes as specified in the curricula. Whether the trainee is competent or not yet competent shall be decided through a competency based assessment with respect to all units of competence that constitutes the qualification which shall be conducted by a registered / licensed assessor. Records of the continuous assessments and the summative assessment conducted shall form part of the evidence used in deciding the competence of the trainee. A viva voce conducted by an assessment panel nominated by training provider shall be a mandatory part of the CBA. The assessment panel shall consist of three members with at least one member representing the industry which deals with the particular area of technology. The final outcome of the assessment shall be determined by the assessment panel.

5.1.2 Overview of the assessment system

Competency Based Assessment for Awarding the Qualification

A competency based assessment system must be based upon clear and unambiguous benchmarks. These benchmarks are supplied by the National Competency Standards which specify the skills, knowledge and attitudes to be applied in various industry sectors / occupations to the minimum standard of performance expected by the industry.

Assessor/s must collect sufficient evidence of competence from candidates in order to be able to reach an assessment decision. Sufficiency can be defined as evidence which has demonstrated that the candidate can:

- Perform task skills.
- Perform task management skills.
- Contingency management skills.
- Perform according to specific workplace environments.
- Transfer skills to different situations.

The assessment system must enable assessors to document that the evidence presented for assessment really is the work of the candidate.

It is necessary for assessors to validate the current evidence included in the portfolio ensuring the competency of the candidate.
The system must be cost effective for both the establishments conducting the assessments and for candidates.

Assessment is based upon agreed benchmarks of skill and knowledge. These benchmarks are provided by the national competency standards which an industry agreed document is specifying the skills, knowledge and attitudes which are applied to various industry sectors / occupations.

Criterion referenced assessment assumes that the assessment decision is based upon a collection of evidence gathered over a period of time (Evidence based judgment) rather than on one event, such as a test or exam. A combination of formative and summative assessment shall be used in order to reach an assessment decision.

Evidence based judgment involves assessors using assessment materials consisting of:
- Outlines for candidates to guide them in collecting their evidence
- Self Assessment guide
- Test items and specifications
- Instructions to candidates
- Assessment guides for assessors
- Record keeping instruments for recording the formative and summative assessments results.

The assessment system shall be flexible enough to consider:
- Socio-economic background
- Religion
- Ethnicity
- Gender
- Language

This may involve making reasonable adjustments to assessment techniques for individual candidates as long as the national competency standards are not compromised.

Assessment shall take into account the limitations of industry in relation to administration of assessment such as:
- Availability of assessors.
- Workplace policies and procedures.
- The need for specialist tools, equipment and materials.
- Time constraints.
- The inability for some candidates to gather direct workplace evidence of competence.
- Candidates from geographically isolated locations.

In the preparation of assessment materials the needs of the intended target group shall be taken into account, especially in the areas of language, literacy and numeracy. Any technical language used shall reflect the technical language of the industry.
Assessment materials shall be produced for each unit of national competency standards.

The success will be decided based on competency in all the units clustering the package of the qualification in case of Level 1 – 4 and the required number of credits for levels 5 and 6.

5.1.3 Principles of Competency Based Assessment

In a competency based system, skills, knowledge and attitudes are assessed by using national competency standards as a benchmark for assessment. Formal testing and examinations are also ways of assessment. A competency based assessment system uses multiple sources of evidence upon which judgment is based whether candidate is competent or not. An assessment decision is based upon a combination of formative and summative assessments. Criterion-referenced assessment measures the performance of an individual against a set of standards. Competency-based assessment is criterion-based. Candidates are measured against standard criteria or benchmarks, such as National Competency Standards or learning outcomes. The purpose of the assessment is to determine whether or not a candidate can apply skills, knowledge and attitudes identified in national competency standards to the level of performance that is specified in the standards.

Usually a number of pieces of evidence are collected and submitted by a candidate to demonstrate how he / she can apply the skill, knowledge and attitudes. This is sometimes referred to as a “portfolio” and may include one or more of the following.

- Trainees record book.
- Test and exam results.
- Models.
- Testimonials from work supervisors.
- Evidence of successful completion of training courses.
- Verified work experience.
- Skills demonstrations.
- The results of direct observation by an assessor.
- Project reports, assignments carried out.
- Answers to written or oral questions.
In competency-based assessment candidates are generally assessed as competent or not yet competent. Results are not expressed as a percentile, a grade or a score.

The four guiding principles of competency-based assessment are validity, reliability, fairness and flexibility.

An assessment process is said to be **valid** when the assessment measures only the skills, knowledge and attitudes identified in the national competency standard.

An assessment process is **reliable** when there is consistency in results between assessors. That is, when two or more assessors give the same result based upon the same evidence.

**Fairness** refers to the transparency of the assessment system. Candidates shall be aware of how they shall be assessed, when and by whom and what the national competency standards are and what they will be assessed against.

**Flexibility** refers to reasonable adjustments in the administration of the assessment process.

Formative assessment is an on-going (continuous) assessment. They are the pieces of evidence a candidate collects over a period of time and included in the portfolio described earlier.

Summative assessment may be a decision of an assessor based upon a judgment of the formative assessment. Summative assessment refers to an assessment conducted collectively at the end of a unit or set of units. This can be administered through the decision of an assessor based upon a judgment of:

- Evidence through documented formative assessment.
- Through summative assessment demonstrated at a formal testing.
- A combination of the above.

In a competency based assessment system it is the combination of formative and summative assessment that provides the overall and final assessment result.

### 5.1.4 Practical Aspects on Conduct of Assessments

**Selecting the national assessors**

Trainees are assessed by assessors registered in the TVEC for the respective occupation (level 1 -4) or field of study (level 5 & 6), who had no involvement in the training process of the trainees to be assessed. Institutions shall select two registered assessors; one acting as the assessor and the other as the verifier. Both assessor and verifier shall be physically present for assessment of NVQ level 4 and above and whereas for assessments for NVQ level 3 and below, the verifier may check the assessment of assessor through documentary evidence and certify. Accredited private sector institutions shall obtain the approval of the TVEC
for the selected assessors. The NVQ level 5 and 6 qualifications may require the appointment of additional specialist assessors for particular areas.

**Planning ahead for the national assessment**

Single event competency based assessments for the award of NVQ Diplomas, conducted at the end of the courses, cannot be fair, valid or reliable; nor practical. It is essential that for NVQ level 5 and 6 training programmes, the assessors be selected early so that assessment can be carefully planned to take place periodically throughout the training programme. Assessments that need to take place in specific off-site situations will need to be carefully scheduled to fit within the course delivery.

For NVQ levels 1-4, assessments may be conducted at the end of the course.

**The Pre-assessment visit**

A pre-assessment planning meeting shall be held with all the selected assessors in the first weeks of the course so that dates for assessment events can be scheduled and required tools, equipment and facilities (on and off-site) identified.

**The final summative assessment events**

For programmes which involve off-site training as well as assessment, there could consequently be several summative assessment events. It is also possible that for some programmes, students may not achieve all the competencies at the first assessment and further assessments may be necessary. This can be arranged on subsequent visits from the assessors.

**Results to the TVEC**

The assessors will submit the results of their assessment to the institution for sending on to the TVEC. Summary of the assessments conducted will be prepared using the prescribed format and transmitted to the institution’s head office, or in the case of private institutions, to the TVEC.

**Awarding the National Vocational Qualifications**

National Vocational Qualifications are awarded through the TVEC based on submitted results. Institutions are provided with a template for the printing of a Record of Achievement for students who are successful in some but not all units in NVQ. All results are remitted to the TVEC national database.

**5.1.5 Curricula Based Continuous and Summative Assessments for NVQ Level 5 and Level 6 Diploma Programmes**

Continuous and summative assessments are to be based on the modules of the curricula and assess the achievement of learning outcomes and the knowledge. Assessment resources for continuous and summative assessments will be developed by the staff of the institution. In the case of CoTs, DTET will centrally manage.

Mode of assessment for each learning outcome should be in accordance with the assessment evidence matrix developed for the module. Staff of the institution is
responsible for the development of the module assessment evidence matrix which indicates the modes of assessment most suitable for assessing each learning outcome.

Training institution is responsible for the conduct of continuous and summative assessments. The records of all assessments should be kept by the institution for future references.

Assessment resources for the summative assessments developed by the staff of the institution should be moderated by external moderators appointed by the training provider with the approval of TVEC.

A minimum mark of 50% must be attained in the continuous assessments for a trainee to be eligible to face the summative assessment. Any trainee who does not satisfy this requirement should obtain the minimum mark of 50% in a subsequent assessment before appearing for the summative assessment.

A minimum mark of 50% must be attained in the summative assessments for a trainee to be qualified to face the competency based assessment for the award of the qualification. However the TVEC may impose higher qualifying marks on the recommendation of NITAC for summative assessment of areas that it considers necessary. Any trainee who does not satisfy this requirement should obtain qualifying marks, 50% or higher as recommended, in a subsequent assessment before appearing for the competency based assessment.

5.2 ASSESSMENT RESOURCES

Under the unified national TVET system of Sri Lanka, NAITA shall be responsible for the development and updating the assessment resources. Assessment resources for each unit may include:

- Evidence Matrix
- A description of a problem to be solved or a workplace application.
- An outline of the task/s to be completed in order to solve the problem or complete the application.
- The tools, equipment and materials made available and other assistance required (such as helpers, reference materials etc.).
- A justification as to why the problem was solved in the way it was, or how the application was carried out.
- Areas in which questions should be asked in order to assess the underpinning knowledge.

For each national competency standards unit, a number of workplace problem solving exercises (test items and specifications) shall be developed in consultation with industry. These shall be based upon real workplace issues.

Candidates shall be expected to solve the problems by giving practical demonstrations of the skills involved; demonstrating their understanding of why they are performing the skills in a particular manner and answering a series of questions relating to the underpinning knowledge as specified in the national competency standards.
Assessment tools are the evidence gathering instruments themselves. They shall consist of:

- An outline of the problem/s to be solved.
- A description of the task/s they need to perform.
- Any associated specifications.
- A scenario in which they will need to demonstrate their understating of the task/s performed.
- A list of the areas in which they will be asked questions.
- The Competency standards unit that is being assessed.

The assessment resources shall facilitate the maintenance of the principles of assessment.

An important part of record keeping is the reporting of the assessment results. Consistent with the principle of criterion referenced assessment there are only two possibilities **competent** or **not yet competent**.

This shall not preclude, the assessor provides feedback to the candidate. It can include the results of any formative assessments that were used in reaching the final assessment decision.

Where the qualification is a National Certificate or National Diploma, there may be some national requirements to satisfy to assure the consistency of assessment nationwide.

The “collecting of evidence” approach means that learners should have more than a single opportunity to demonstrate competence.

**For Levels 1 to 4 resources for assessors include:**

- Guide-lines for Competency based assessment.
- The set of assessment resources.
- Checklists to be used by assessors, when assessing the performance of the practical demonstration of skills, including the specifications of understanding methodology, principles etc.
- A set of questions to be used for the knowledge based assessment.

The respective establishments are responsible for the maintenance of a “Record of Achievement” of the candidates, which shall be conveyed to TVEC through the national database. Since competency based assessment involves the collection of formative and summative assessments, it is important to maintain assessment records.

(A record of Units that the student/trainee has completed.)

A final (summative) record keeping instrument shall also be required for each unit covered by the national competency standard.

These instruments shall be standardized in order to follow the same format of the Competency standards.

**For Levels 5 and 6 resources for assessors include:**
Every outcome or competence does not require a separate assessment activity. Assessment can often be integrated to provide evidence for several outcomes or competencies in one or several units of a qualification.

Assessment activities should be appropriate to the nature and objectives of the learning programme and the qualification it leads to. Assessment activities can often reflect and reinforce the way students have been learning.

### 5.3 ASSESSMENT RESOURCES DEVELOPMENT PROCESS

The term “Assessment Resources” is used to indicate the broader scope of competency based assessment when compared to more traditional assessment of learning outcomes. Whilst formal skills, knowledge and attitudes testing may be a part of the assessment process there shall also be an ongoing “evidence of competence” recorded, which shall contribute to a final decision on whether a candidate has demonstrated the skill, knowledge and attitudes specified in the competency standards.

An important principle is, that Assessment Resources shall be developed for each unit of the national competency standards. This allows for single unit assessment. Once all units that cluster a qualification have been successfully assessed, the candidate is eligible to receive a “National Vocational Qualification”.

The process used for developing assessment resources shall be very similar to the process used for developing national competency standards. Assessment Resources shall be produced once the competency standards have been endorsed and the qualifications packaging finalized.

The development of assessment resources in this manner shall require substantial on-going funding to sustain development and to continually update the assessment materials.

The “National Apprentice and Industrial Training Authority” (NAITA) shall be the lead agency for the development of assessment resources.

The development process of the assessment resources shall be as outlined below:

- Once the draft competency standards have been prepared to the stage of final NITAC validation, NAITA appoints an assessment resource person/team.
The assessment resource person/team in consultation with members of the Competency standards development group clarifies appropriate assessment methods for each unit, which is identified in the standard itself.

The assessment resource person/group develops draft assessment resources including,
- Evidence matrix
- Evidence gathering instruments

The final draft of the assessment resources is presented to the relevant NITAC for final approval.

Once approved by the NITAC the assessment resources are forwarded to the Tertiary and Vocational Education Commission (TVEC) for endorsement. A validation from the NITAC is required in order to ensure that the assessment resources are aligned to the requirements of the competency standard.

Modular Based Assessment for Levels 5 and 6

- Staff of the institution shall develop assessment evidence matrices for the respective modules based on the information and guidance given in the module descriptors.

- Assessment resources for formative (continuous) and summative assessments shall be developed by the staff of the institution.

- The training institution appoints moderators for summative assessments with the approval of TVEC.

- The assessment resources developed by the staff of the training institution are checked for their appropriateness, adequacy, correctness and suitability by the moderators and changes proposed if necessary.

5.4 ENDORSEMENT PROCESS OF ASSESSMENT RESOURCES For Levels 1 - 4

The Tertiary and Vocational Education Commission (TVEC) is the national authority responsible for the endorsement of Assessment Resources. The endorsing body may rely on the expertise of NAITA and the NITACs in recommending that assessment resources meet the requirements of the relevant competency standard. The endorsement is to ensure that the assessment resources meet the criteria and the development process specified in the NVQ Operations Manual. Accordingly, TVEC shall verify that the policies and procedure in the manual have been followed.

Following steps are adopted in the endorsement of Assessment Resources:
- NAITA confirms that the assessment resources have met the content and technical requirements of the competency standard based upon the validation of the relevant NITAC and requests the TVEC that the assessment resources be endorsed.

- The TVEC verifies that the assessment resources comply with the development procedure specified in the NVQ Operations Manual.

- The TVEC, endorse the assessment resources forwarded by NAITA, if not they are returned to NAITA with reasons.

- The TVEC informs NAITA of successful endorsement of assessment resources.

- The assessment resources shall be coded entered in the TVEC data base and made available to assessors in a confidential basis.

**Process for endorsement of Assessment Resources**

1. NAITA confirmation that Assessment Resources meet content and technical requirements of assessment resource guidelines. NAITA recommendation to TVEC

2. TVEC lists recommended assessment resources for commission meeting

3. Assessment resources endorsed by commission?
   - No
   - Yes

4. Endorsed assessment resources coded and placed in register by TVEC and arrangements made to provide them to assessors on confidential basis.

   - Management Information System (Basic information)
5.5 ASSESSORS

TVEC shall be responsible for maintaining a register of authorized assessors and for distributing information to training providers, delegated assessment centers and industry of the availability of qualified Assessors.

Assessors of the training centre where the trainee has undergone training shall not be involved in the Competency Based Assessments conducted for awarding National Vocational Qualification.

A data base of assessor details based on occupations shall be maintained by the TVEC.

The Univotec shall be responsible for conducting assessor training programs as and when necessary.

It is recommended that a professional body of assessors be formed that deals with matters such as recognition, code of ethics for assessors, professional development of assessors.

5.5.1 Assessor Qualifications

Through the unified national TVET system of Sri Lanka, TVEC shall be entrusted to select and appoint assessors. TVEC shall also be responsible to license and register the assessors and maintain the register of assessors with their authorized scope of assessing. Univotec shall be empowered to train the assessors.

Assessments shall be carried out by a panel of assessors including a “Licensed Assessor” who is competent in the industry sector / technology area. However, during the transition period, “Registered Assessors” may carryout assessments. There may be situations where a licensed assessor can function as an assessor checking competency within another technology area by joining with a competent person of the relevant technology area.

Following pre-qualifications have to be satisfied to be trained as an Assessor:

- Have at least three years verifiable practical and current work experience in the technology area being assessed
- Hold a recognized qualification accepted by the TVEC in the technology area being assessed which is at least one level above the level being assessed.

5.5.2 Assessor Training
Univotec is responsible for conducting assessor training programs as and when necessary.

After the successful completion of training, they will be registered as assessors for a nominated scope of assessment. The scope will specify the field, and the NVQ level within that field, for which they are registered to assess. Following initial registration and the satisfactory completion of 25 assessments, and an evaluation by the TVEC, they will be registered as licensed assessors.

Univotec is responsible for training resource persons/groups to develop assessment resources including,
- Evidence matrices
- Evidence gathering instruments

Univotec is also responsible for training staff of the training institutions to develop assessment resources for formative and summative assessments.

5.6 THE NATIONAL CONSISTENCY IN COMPETENCY BASED ASSESSMENTS

Consistency in assessment involves the achievement of comparable outcomes. An assessment process would be considered to deliver consistent outcomes if assessors assessing trainees against the same unit of competency in different contexts made comparable assessment results. Assessment of trainees must be fair, valid, and consistent and conform to competency based assessment policy.

Achieving consistency requires understanding what is being assessed, what evidence is needed and how the assessment decision be made. Consistency can only be achieved when assessors share a common understanding of the unit(s) of competency which is being assessed.

Options for maintaining consistency in assessments

The TVEC and industry partners shall have several options available for achieving and maintaining fair, valid, consistent assessment to the required standard within the national qualifications:

- The specialist may visit training providers, monitor assessments and provide training and advice.
- Samples of executed assessments may be submitted to the TVEC for scrutiny; leading to advice and further staff training as necessary.
- In-service training programmes may be convened to ensure the consistency of assessment.
The use of assessment resources developed by NAITA and endorsed by the TVEC shall assist in the standardization of interpretation of standards and constitute the consistency in assessment procedures.

**TVEC processes in the maintenance of consistency**

The TVEC shall establish policies and procedures to ensure consistency of assessment for national qualifications endorsed by the TVEC.

The TVEC shall request the Univotec to conduct in-service training on assessment consistency.

**The TVEC unit responsible for consistency in assessment**

The TVEC shall establish a unit with qualified staff to implement processes, procedures and activities in connection with the consistency in Assessment.

---

**5.7 RECOGNITION OF PRIOR LEARNING WITHIN TVET**

**Introduction**

Recognition of Prior Learning is a process that recognises a learner’s current competencies which may have been achieved through means that include any combination of formal or informal training and education, work experience or general life experience. Recognition of uncertified learning may be combined with any formal certification to enable assessment decisions to be made. The national vocational qualifications system shall recognize prior learning based on national competency standards and determine the extent to which an individual has achieved the required competencies for partial or total completion of a national vocational qualification. NVQSL Provides RPL only up to NVQ level 4.

**Principles of recognizing prior learning**

Recognition of prior learning shall be accessible to anyone with relevant competencies achieved through means mentioned earlier that can be validated against the national competency standards. In the absence of any formal training, the minimum industrial exposure requirement to become eligible for RPL is 18 months for NVQ level 2 and level 3 qualifications and that for level 4 further 24 months after obtaining NVQ level 2 or 3.

Prior learning can be acquired from:
- The workplace.
- Life experience.
- Self-directed study.
- Non-certificated study.
- Formal uncertified learning.
- Informal or undocumented understudy/mentoring schemes.
- In-service training.
- Distance education or open learning.
- Community-based education.
- Overseas education, training or experience.

**Authority for conducting RPL assessments**

TVEC shall be the authority for granting permission to institutions to conduct RPL assessments, if and when such national needs arise. Only establishments who have been formally accredited by TVEC may seek permission to conduct RPL. Each training institution conducting RPL assessments shall appoint an RPL Coordinator who will coordinate all RPL related activities.

An establishment that wishes to conduct RPL assessments shall apply to the TVEC with sufficient evidence of staffing, policies and procedures as well as the necessary infrastructure and resources. The application to the TVEC shall specify the scope of RPL assessments the institution is planning to conduct and provide documentary evidence of the following:

a) A written commitment to the principles of the recognition of prior learning.

b) Licensed assessors and administrators who have undergone appropriate training to deal fairly and sensitively with candidates.

c) That internal policies and systems allow timely and accurate decisions as well as reasonable/accessible fees.

d) That candidate support policies guarantee the right of appeal.

e) Willingness to join in partnership with local and regional establishments in order to provide candidates and worker pathways.

f) Information on any formal articulation and equivalency arrangements with other establishments.

NAITA and VTA have been granted authority to conduct RPL assessments.

**Staff Training**

The training and development opportunities in recognition of prior learning policy, principles and procedures shall be available to those involved in implementing the system.

Establishments are encouraged to offer staff development programs in assessment of recognition of prior learning. The program may contain the following:
• Analysis of skills, knowledge, attitudes and values.
• Matching skills, knowledge, attitudes and values to the criteria of specific competencies.
• Gathering and preparing relevant evidence.
• Identifying appropriate assessment methods.
• Assessing the application from candidate.
• Identifying further training needs.
• Educational or career planning.

**Public awareness**

Appropriate information to promote public awareness about the recognition of prior learning shall be made available.

**5.7.1 Assessments for Recognition of Prior Learning**

It is the task of the assessor, to match the evidence of the relevant prior experience to the performance criteria of the specified units of competency of the qualification for which recognition is being sought.

It is important that the assessment be carried out in a comfortable physical, cultural and psychological environment. This environment shall be conducive to participation and contribution by the candidate throughout the assessment process.

For NVQ Level 4 the RPL assessments should be done by a panel of assessors consisting of two assessors. The assessments should be conducted as per the criteria, guidelines and methodology specified by TVEC.

If the RPL assessments are conducted in training institutions those institutions should have accreditation obtained from TVEC for the relevant occupations.

Variety in the methods of assessment is encouraged. Demonstration, attestation, interview, or the evaluation of work samples or projects shall be commonly used. Attestation is a method of assessment, where the assessment decision is supported by a formal recommendation from a recognised group, having sufficient depth and breadth of knowledge and respect/esteem, to execute a fair, valid and consistent assessment.

**Procedure for Conducting RPL**

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide RPL information to prospective candidates</td>
<td>RPL Coordinator</td>
</tr>
<tr>
<td>2</td>
<td>Complete RPL application and forward to RPL Coordinator along with any supporting evidence/documents</td>
<td>RPL Candidate</td>
</tr>
<tr>
<td>3</td>
<td>Assign an assessor and a verifier</td>
<td>RPL Coordinator</td>
</tr>
<tr>
<td>4</td>
<td>Forward copy of RPL Application and other evidence to Assessor</td>
<td>RPL Coordinator</td>
</tr>
<tr>
<td>5</td>
<td>Contact student to commence RPL assessment process and</td>
<td>Assessor</td>
</tr>
</tbody>
</table>
prepare assessment plan

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Provide evidence of competence.</td>
<td>RPL Candidate</td>
</tr>
<tr>
<td>7</td>
<td>Assess student’s evidence against unit(s) requirements and record outcomes.</td>
<td>Assessor</td>
</tr>
<tr>
<td>8</td>
<td>Provide feedback to student on RPL assessment outcome. Obtain signed acknowledgement from candidate</td>
<td>Assessor</td>
</tr>
<tr>
<td>9</td>
<td>Return completed RPL Assessment record book to RPL Coordinator.</td>
<td>Assessor</td>
</tr>
<tr>
<td>10</td>
<td>Forward all related documents and records to the verifier</td>
<td>RPL coordinator</td>
</tr>
<tr>
<td>11</td>
<td>Review and verify the assessment decision and return to the RPL Coordinator</td>
<td>Verifier</td>
</tr>
<tr>
<td>12</td>
<td>Forward the duly completed form and formats to TVEC for issuing the Qualification</td>
<td>RPL coordinator</td>
</tr>
</tbody>
</table>

**Documentation and Record Keeping**

Documentation of the assessment, recommendations and any appeal shall be completed in respect of each candidate.

A file shall be kept by the establishment for each candidate. It shall include all relevant information including application form, the name of the assessor, the method(s) of assessment and rationale, and the assessor’s notes describing the assessment process and recommendations. The file shall contain a description of (or actual) evidence submitted.

It is the responsibility of the establishment concerned to maintain confidentiality and integrity of the above records.

**5.8 GUIDANCE**

After the assessment is complete and outcome has been determined, guidance shall be available from the provider or by referral to an organization with the appropriate services. Assistance is often necessary for making decisions relating to:

- Entering or continuing education and training.
- Identifying training or education entry and exit points.
- Identifying gap-filling courses.
- Exploring possible career paths.

**5.9 RE-ASSESSMENT AND APPEAL ACCESS**

If a candidate is found not yet competent in one or more of the units, an immediate feed back on the assessment results shall be given to the candidate with the specific areas on which he/she need further improvements, together with time lines for possible reassessment.

Candidates shall be informed of their right to appeal when they enter the process. The right to appeal is as follows:
• In case of a disagreement on the assessment result it shall be recorded in the candidate’s competency based assessment record book with due signatures of the candidate and the assessor/s.

• Appeal shall be forwarded in writing to the person in charge of Examinations/assessments with a copy to the Director General (DG) of TVEC.

• The respective organization verifies the assessment record with a representative of the DG TVEC.

• Based on the verification, the respective organization shall inform the candidate about unsuccessfulness or otherwise, and inform the candidate of the right to re-assessment with another assessor.

Appeals must be lodged within two weeks from the date of release of assessment results.

**Assessment Fees in Case of an Appeal**

There shall be an appeal fee which is to be decided by the DG TVEC. On scrutiny if the assessment process is found faulty the candidates appeal fee shall be refunded. The institution should arrange the trainee to be reassessed with no fees charged.

Funding for assessment shall be arranged by the respective organization / institution responsible for the conduct of the assessment. This shall apply to continuous assessments, summative assessments and competency based assessments.
6. AWARD OF NATIONAL VOCATIONAL QUALIFICATIONS

6.1 CRITERIA FOR THE USE OF TERMS `NATIONAL CERTIFICATE’, `NATIONAL DIPLOMA’ AND `BACHELORS DEGREE’

National Qualifications
The term “National” will be used for endorsed qualifications. National qualifications are available from registered training providers, who offer accredited courses. “National” certificates shall not be issued for new courses without the approval of the TVEC. Ongoing courses with “National” certificates and “National” diplomas will continue until such time the NVQSL is fully established.

National qualifications shall have internationally recognized characteristics. They shall:

- Have a clear purpose.
- Be internally coherent.
- Recognize broad transferable and generic skills as well as specialized industry and professional skills.
- Be internationally credible.
- Have clear indications of entry requirements wherever applicable.
- Specify quality assurance requirements for training delivery and assessment (unified and impartial).
- Provide an indication of the relationship to other qualifications wherever applicable.
- Specify clearly the competencies to be achieved for the award of the qualification.

6.2 TYPES OF QUALIFICATION

There are four types of NVQ qualifications.

a. National Certificate
b. National Diploma
c. Record of Achievement
d. Bachelors’ degree

a. National Certificate
National Certificates are awarded to those who are fully competent in a particular occupation at NVQ levels 1 to 4. The “National Certificate” has a listing of units of competencies achieved on the reverse side of the certificate. This will be helpful information for employers or for trainees seeking further studies. All certificates carry provision for the logo of the training provider or accredited establishment along with the logo of the TVEC and National emblem.
The NVQ level of the certificate is dependent on the level(s) of the unit(s) of competency in a qualification package. An occupation may have one or more qualification packages.

National Certificates are awarded jointly by TVEC and accredited training providers. All data of NVQ certificate holders are stored at the TVEC data base.

b. National Diploma

National Diplomas are awarded to those who are competent in a particular technology area at NVQ level 5 or 6. The units of competencies comprising a "National Diploma" are listed on the reverse side of the certificate. All certificates carry provision for the logo of the training provider or accredited establishment along with the logo of the TVEC and National emblem.

Competencies for National Diplomas are in two categories, viz. Core competencies and Elective competencies. Core competencies are compulsory while elective competencies can be selected by the trainee to fulfil the credit requirement for the qualification. NVQ level 5 needs 60 credits where as level 6 needs 120 credits. The details of the units of competence forming a qualification can be found in the corresponding competency standard.

Approval to conduct NVQ Level 5 and 6 programmes are awarded to training institutions by TVEC subject to following conditions:

- The curricula of the courses have been approved by TVEC
- The equipment needed for training are in required order and in required quality.
- The training institutions have qualified instructors.
- The training institutes have the necessary classroom and laboratory facilities.
- The training institutes possess adequate financial, physical and human resources to conduct NVQ Level 5 and 6 courses.
- The training institutes have a proven track record over a period acceptable to TVEC.

National Diplomas are awarded jointly by TVEC and approved training providers. All data of NVQ certificate holders are stored at the TVEC data base.

c. Record of Achievement

Records of Achievements are awarded for those who demonstrate competence in some but not all of the units of competence forming a National Certificate or National Diploma. Awarding body for Record of Achievements is the respective training provider who should be eligible to conduct NVQ courses. However, necessary data shall be transmitted and stored at the TVEC database.

Records of Achievements are useful as an individual reference for learners and employees who have yet to attain all the requirements to be awarded a National qualification.
d. Criteria for awarding National Certificates and National Diplomas.

- Training institution should be accredited with an approved QMS.
- Assessments should be conducted according to the National Competency Standard of the NVQ framework.
- The certificates should be printed under the guidance of the TVEC.
- The certificates should contain the signature of the Director General of the TVEC and a signature of a director or CEO of the training provider.

e. Bachelors’ degree

Bachelors’ degree at NVQ level 7 is awarded by Univotec. Development of curriculum, conduct of assessments and awarding certificates are under the purview of Univotec.

Admission, accreditation and Quality Assurance Council of the Univotec is chaired by the DG of the TVEC.

6.3 PROCESS FOR AWARDING NVQ QUALIFICATIONS

TVEC should receive accurate assessment data from approved training providers for printing of NVQ certificates. These data should be scrutinized by Director (NVQ) before they are transferred to the certificate printing room for printing of NVQ certificates. Accurate details of name, National Identity Card (NIC) number, qualification code and effective date of the NVQ certificate are critical. TVEC shall not proceed to issue NVQ certificates unless above information is provided. NIC number is the key data for traceability in future. However Passport number is accepted in place of NIC number for foreign students.

6.4 MAINTENANCE OF RECORDS AND VERIFICATIONS

Pre-printed certificates with adequate security measures shall be obtained from Government press and then printed with necessary details of the holder at the TVEC. Necessary stocks of pre-printed NVQ certificates may maintain at the TVEC. Certificate printing activity shall carry out in a well secured room with limited accessibility. Bi-annual audit shall conduct by the TVEC in order to verify stocks of materials and issue of certificates. A complete data base of certificate holders shall be maintained by the TVEC and three backup copies of the data should be updated as follows.

- A backup shall update soon after every operation of certificate printing and same to be kept with the officer’s custody.
- A backup kept with Director (NVQ) custody shall be updated fortnightly.
A backup under the custody of DG TVEC shall be kept outside the premises of TVEC and shall be updated monthly.

Records of certificate printing shall be kept at the TVEC for reference.

7 QUALITY ASSURANCE SYSTEM

7.1 PREAMBLE

The quality assurance policies and processes of the TVEC promote a high quality TVET sector in Sri Lanka, responsive to the requirements of industry, learners and other stakeholders. Quality assurance has the following components:

- Registration of TVET institutions
- Accreditation of courses
- Institutional monitoring
- Institutional quality audit

7.1.1 Registration of Institutions

All TVET institutions are required to meet the standard specified by the TVEC to achieve institutional registration to enter the TVET education and training market. They need to be properly established and organised with the explicit intention of offering education and training services. Minimum standards are specified in the Act.

7.1.2 Accreditation of courses

To obtain accreditation for a course a training institution needs to satisfy certain essential requirements. These include the ability/capability of the institution to deliver the training to a satisfactory level of quality and availability of resources needed.

The title of the course should be appropriate and should reflect the content and outcome correctly. The outcomes should be clear and meet the requirements of industry, the professional body, the community or other stakeholders. The qualification and its competencies will have been developed nationally for the NVQs or locally or internationally for the institution’s own courses, in consultation with the appropriate stakeholders. Assessment will be fair, valid, consistent and to the required standard. Student assessment will be conducted nationally for the NVQs; locally for the institution’s own courses; and in an international context for foreign qualifications. TVEC at present offer accreditation for courses leading to NVQs only.

7.1.3 Quality Management System
At the time of registration, or at least during the first year of operation, there must be in place a coherent quality management system within the institution, of policies and procedures, with mechanisms for evaluation that ensure the continued relevance, appropriateness and effectiveness of the education and training services offered. This QMS must be in place before any course accreditation applications for the NVQ 5 and 6 qualifications can be lodged with the TVEC.

7.1.4 Monitoring and Quality Audit

Once registered, with a robust quality management system installed, and with at least one course accredited, education institutions will undergo regular monitoring by the TVEC and quality audit, at the end of the first year, and at least every two years thereafter, to ensure that they are maintaining and enhancing standards through continuous improvement.

7.2 Registration of TVET Institutions

The Training provider registration policy of the TVEC is:

- Strictly adhere to the registration process defined by the Tertiary and Vocational Education Act, No. 20 of 1990 and subsequent amendment to the Act.
- Ensure that no person shall, establish, manage, run or control any institute for the provision of tertiary education and / or vocational education without being registered under the Tertiary and Vocational Education Act, No. 20 of 1990.
- Implement the provisions in the development plan published in the “Gazette of The Democratic Socialist Republic of Sri Lanka No. 887/8 – Thursday, September 07, 1995”, on the categories of persons and establishments providing tertiary education and / or vocational education as the case may be, for the purpose of registration.
- Process all applications for registration and submit a report with a recommendation to the Commission from the Director General for review and approval based on the following:
  
  a) The suitability of the institute including the facilities available, and the adequacy of the staff of the institute.
  
  b) The ability of the training institution to adequately provide tertiary education and / or vocational education.
  
  c) The training institution’s conformity with the development plans.

- The Commission shall register such institute, under such name and style.
- The Director General shall periodically publish in the Gazette, the list of the institutes registered and other particulars related to those institutes as prescribed.
Periodically review the progress of the registered institutions and re-register an institution prior to the expiry of the registration.

Ensure the training provider has established a “Quality Management System” acceptable to the TVEC.

Reference Documents:

- “Tertiary and Vocational Education Act, No. 20 of 1990”
- “Tertiary and Vocational Education (Amendment) Act, No.50 of 1999”

7.3 ACCREDITATION

7.3.1. Policy on Accreditation of Training Courses for the NVQ

TVEC is the authority responsible for the accreditation of training courses.

- The accreditation process of NVQ courses shall be based on course accreditation criteria within the “National Vocational Qualifications of Sri Lanka”.
- Institutions seeking to offer certificate courses at NVQ levels 1 – 4 of the NVQ framework should begin development of their generic QMS immediately after registration. Institutions wishing to offer National Diploma courses at NVQ levels 5 & 6 must have their QMS fully installed to the satisfaction of the TVEC before applying for accreditation.
- An application for accreditation shall be entertained for the following course accreditation categories:
  
  a) Courses that are designed to meet the competencies of national competency standards leading to “National Vocational Qualifications”.
  b) Courses that are designed to meet the competencies of one or more units from a national competency standard in a single learning area or range of learning areas leads to a “Record of Achievement”.

- Training institutes are expected to submit applications for each course in respect of each site at which the courses are conducted.
- Course accreditation shall be based on the “Criteria for Accreditation” decided and published by the TVEC.
- All applications for course accreditation shall be processed through the submission of a recommendation report to the Commission by the Director General for review and approval based on the following:
a Suitability of the establishment including the facilities available, and the adequacy of the staff of the establishment.
b Its ability to adequately provide technical and vocational education and training.
c Ability to deliver the full content of the course.
d Its conformity with the “National Vocational Qualifications of Sri Lanka”.

- Following the approval of accreditation of the course by the Commission, the Director General shall award course accreditation to such training institute under such course name specified by the Commission.
- Periodically monitor and audit the progress of the registered institutions delivering accredited courses as per the process for monitoring and auditing of the TVEC quality assurance policy.

7.4 MONITORING AND AUDITING

7.4.1 TVEC policy on monitoring registered establishments for training and assessment

It is the responsibility of the TVEC to ensure the quality assurance of the registered training providers and establishments for conducting competency based assessments. This responsibility shall be achieved through an ongoing monitoring process in order to ensure that the delivery processes meet or exceed the standards demonstrated upon initial registration and accreditation.

The policy on monitoring of registered establishments of the TVEC is:

- The TVEC shall regularly and consistently monitor the registered training providers, their accredited courses and establishments accredited to conduct competency based assessments in order to ensure the effectiveness of conducted training and assessments.
- Ensure compliance with requirements of the internal monitoring system.
- Ensure that the delivery processes continue to meet or exceed the standards of the following.
  a. Registration and guidance of trainees.
  b. Accreditation conditions.
  c. Delivery of training.
  d. Assessments and placement.
  e. Report results to stakeholders.
- Ensure that the customer complaints are resolved.
- Ensure that non compliances raised at audit reports are resolved.
- Expert TVEC staff and industry expert shall be used in monitoring processes.

7.4.2 TVEC policy on auditing of registered establishments for training and assessment
It is the responsibility of the TVEC to ensure the quality assurance systems of the registered Training Providers and establishments for conducting competency based assessment are established and maintained.

This is achieved through scheduled audits & internal audits.

**The Audit Policy of TVEC is**

- Continuing registration and accreditation shall not be granted to the training provider/agency until all non compliances found at audits are corrected to the satisfaction of the TVEC within a specified timeframe.
- The TVEC shall conduct scheduled audits at the end of the first year of operation, and every two years thereafter, on every training provider.
- TVEC retains the right to conduct special audits where there is evidence of serious or ongoing concerns on quality and stability of the accredited institutions.
- The TVEC reserves the right to suspend or cancel the registration or accreditation based on the outcome of audits.
- TVEC shall ensure qualified auditors as per ISO 19011: 2002 clause 7 competences, & evaluation of auditors.

### 7.5 POLICY ON ACCREDITATION OF ESTABLISHMENTS TO CONDUCT COMPETENCY BASED ASSESSMENTS

TVEC is the authority responsible to accredit establishments in order to conduct competency based assessments.

The policy of the TVEC on accreditation of establishments to conduct CBT assessments is:

- Offer assessment services to employers and their employees and, to trainees undertaking work experience and, who wish to have competencies gained in the workplace assessed and recognized.
- Accredit establishments which comply with the following:
  a. A "Quality Management System" is established.
  b. There is an agreement to participate in the consistency assessment process as specified by the TVEC.
  c. There is a sound mechanism for the selection, training, monitoring and support for assessors.
  d. There is an agreement to transfer results to the TVEC database.
  e. A Memorandum of cooperation has been signed between the accredited establishment and the TVEC to confirm the above.
- Permit to use the services of licensed assessors, who have acquired expertise in the area in which they will be assessing.
- Assess competencies directly at the workplace to meet competencies of national competency standards based qualifications.
- Periodically monitor and audit the progress of the accredited establishments which perform workplace assessments in accordance with the process for monitoring and auditing of TVEC quality assurance policy.
7.6 POLICY ON EXTENSION OF ACCREDITATION OF TRAINING PROVIDERS AND ESTABLISHMENTS TO ASSESS PRIOR LEARNING.

TVEC is the authority responsible for granting permission to accredited training providers and establishments to assess recognition of prior learning if and when national needs arise for such permission. NAITA and VTA are the institutions authorised at present for RPL assessments.

The TVEC policies on extension of accreditation of training providers and agencies to assess recognition of prior learning are:

- Application for extension of accreditation shall be entertained only from training providers or establishments that have gained successful audits by the TVEC.
- Extend the accreditation of training providers and establishments which comply with the following in order to recognize prior learning.
  a. Established “Quality Management System”.
  b. Participate in the consistency of assessments process as specified by the TVEC.
  c. Utilize the services of licensed assessors who have acquired expertise in the area in which they will be assessing.
  d. Establish a mechanism for the selection, monitoring and supporting of trained assessors.
- Assess competencies at the workplace or at the accredited training establishments or agency to meet competencies of a national competency standard based qualification.
- Periodically monitor and audit the progress of the accredited agencies performing the workplace assessments as per the TVEC policy on quality assurance and process for monitoring and auditing.

8. QUALITY MANAGEMENT SYSTEM

8.1 QUALITY MANAGEMENT SYSTEM POLICY AND SCOPE

TVEC is responsible for quality management of TVET sector. The quality management policies and processes of the TVEC promote a high quality TVET sector in Sri Lanka, responsive to the requirements of industry, learners and other stakeholders. Quality assurance has the following components:

- Registration of TVET institutions
- Accreditation of courses
- Quality Management System
- Institutional quality audits
8.2 FEATURES OF THE QUALITY MANAGEMENT SYSTEM FOR A TRAINING PROVIDER

Scope of the QMS

The scope is to ensure a coherent “Quality Management System,” based on the ISO 9001:2008 quality management system and as per ISO IWA 2:2007 guidelines for the application of ISO 9001:2008 in education, is maintained by the training providers within the Technical and Vocational Education & Training sector. The quality management system shall ensure that the provider has the capability to establish and maintain an environment fit for delivering education and training to specified standard and ensure continuous improvement of the system.

“Adaptation of a process approach when developing the Quality Management System”

Process approach

Quality management is related to matching the organization’s input systems, processes and outputs to their purpose. Quality management implies that the mechanisms and procedures by which the validity and reliability of the certified competences are ensured and are in place. Validity means that the assessment evaluates, what it aims to assess. Reliability means that the assessment based on evidence produces the same result on different occasions with different assessors. Validity and reliability shall ensure the acceptance of the certificate or diploma by individuals.

At the institutional level, an effective and efficient process-driven “Quality Management System”, which provides quality education and training programs, shall be established.
Figure 6: Process Approach of QMS

Expectations from the Provider

A quality training provider is an effective provider of education and training, offering a sound and stable learning environment that meets all legal requirements. A quality provider shall have goals and objectives that are appropriate and measurable with a vision in achieving these goals. To maintain accreditation, the provider is expected to have appropriate means in order to achieve these goals and objectives and to meet the expectations and satisfaction of the trainee through the provider’s quality management system.

The training provider’s quality management system shall describe all policies and procedures needed to deliver education and learning activities as given below.

A Purpose & Goals

- The purpose and goals must be clearly defined in a written statement approved by the governing body.
- The purpose and goals shall relate primarily to education and training processes and shall be measurable. These goals may be the same goals as defined in the strategic plan.

B Quality Management System

General Requirements

The Following six activities are to be identified, documented and implemented:

1. Identify the processes needed for the QMS in the organization
2. Determine the sequence and interaction of these processes
3. Determine the criteria & method needed to ensure that both operation and control of these processes are effective
4. Ensure the availability of resources and information needed for these processes including monitoring of processes.
5. Monitor, measure and analyze the processes.
6. Implement actions necessary to achieve planned results and continual improvements of these processes
There shall be evidence of a coherent quality management system incorporating organizational structures, responsibilities, procedures and resources for setting & implementing quality policies.

The quality management system shall ensure that the training provider has the capability to establish and maintain an environment fit for delivering education and training to specified standards.

The quality management system shall ensure that the training provider has adequate and appropriate good governance and management to achieve its goals and objectives.

The documentation shall show:

- The scope of the “Quality Management System” shall encompass the training provider’s current and intended delivery of education and training, including any local, national & overseas courses within and outside the "National Vocational Qualification Framework”.

- All delivery of education and training at permanent, regular or occasional delivery sites shall be covered by the quality management system.

- The documentation shall include a quality manual with scope, mission, vision and a policy statement and interaction of its educational and support services.

- The manual will include responsibility and authority with clearly defined organization structure.

- Manual will indicate the Management Representative and its responsibilities.

- In addition to the documented quality manual, the establishment shall document procedures and work instructions to the identified processes.

- The establishment shall identify the compulsory records and other records necessary to maintain the quality management system.

- As per the quality policy the establishment shall identify key process indicators as quality objectives and indicate plans to achieve these targets within a reasonable time frame.

- The establishment shall monitor the status of the above plans and quality objectives.

The quality management system shall be in accordance to ISO 9001:2008 and as per guidelines IWA 2: 2007 include the coverage of the following processes, and documented as quality procedures:

1. Process for control of documents
2. Process for control of records
3. Process for management review meetings
4. Process for training
5. Process for machine maintenance
6. Process for building maintenance & safety
7. Process for finance management - optional
8. Process for career guidance & counselling - optional
9. Process for selection & admission of students
11. Process for purchasing
12. Process for evaluation of suppliers
13. Process for control of training delivery service provision
14. Process for receiving, storing & issuing of academic documents & learner property
15. Process for assessment of staff, study plan etc
16. Process for learner complaints & feed back
17. Process for implementing suggestion box
18. Process for internal quality audits
19. Process for monitoring & measuring educational services
20. Process for control of non conformances
21. Process for corrective actions
22. Process for preventive actions
23. Process for franchise programs – optional for franchise programs

Refer to the Quality Manual for detailed description of the above processes.

8.3 THE IMPLEMENTATION AND OPERATION OF A QUALITY MANAGEMENT SYSTEM IN TRAINING CENTERS

Steering Committee

The first step is to identify and nominate members for the steering committee. Director/CEO should chair the committee,

Management Representative

The training institution should nominate a person as the Management Representative, who will be responsible to coordinate all activities related to QMS..

Audit Coordinator

The training institution shall appoint an Audit Coordinator and an audit team. Audit Coordinator will be a member of the steering committee.

Audit coordinator and the team to be trained in quality management system auditing, they should be familiar with ISO 19011:2002 Guidelines for quality and/or environmental management system auditing

Awareness Program
All employees should have a basic knowledge of the quality management system. At least three hour awareness program to be conducted covering the following subjects:-

- Standardization
- Basic concepts of quality
- Process control (P-D-C-A Cycle)
- Clauses in ISO 9001:2008
- Benefits of QMS

**Identification of key processes and other processes – see 4.1 of the standard**

The committee should study the existing processes of the institute and identify them and the interaction between the processes.

In addition to these key processes identify:-

- a) Compulsory processes needed as per ISO standards
- b) Other processes needed by the institute

**Procedure documentation**

For all these three type of processes namely key processes, compulsory processes and institute needed processes identify and document the following:-

- a) Objective & scope of the process
- b) Responsibility of the process
- c) The operation and control of the process

The procedure will indicate any work instructions, forms, guidelines, check sheets, plans etc needed for the implementation of the process.

This procedure documentation can be done by the individual process owner or by a group of steering committee members.

**Agree on document format and document numbering**

The steering committee members should agree on the procedure and other document formats. The numbering method of forms, lists etc. are to be agreed upon.

**Quality Policy & Quality Objectives**

The committee has to agree upon a suitable quality policy for the institute. It should be appropriate to the institute and should be understood by all employees.

Top management should establish quality objectives needed to meet requirements for services which are established at relevant functions and levels.

**Organization structure & responsibility**
Discuss and agree on the organization structure of the institute and document responsibilities of each job title.

**Quality Manual**


Mention the relevant procedures in the quality manual.

**Internal Auditing**

The identified audit team will audit the quality management system. Any non-conformities are to be rectified by the audited department.

**Management Review meetings**

After one round of auditing a management review meeting is to be conducted as per ISO 9001:2008 requirements.

**Trial Assessment**

After two rounds of auditing the institute should submit the application with the quality manual to TVEC. As per their comments conduct amendments and request them to conduct a trial audit.

**Final Assessment**

After rectifying the audit findings of the TVEC at the trial assessment stage, the institute should invite the TVEC for a final assessment.
9 IMPLEMENTATION OF THE NVQSL

9.1 ROLES AND RESPONSIBILITIES OF TVET NATIONAL AGENCIES AND REGISTERED TRAINING PROVIDERS OF THE PRIVATE SECTOR

9.1.1. Tertiary and Vocational Education Commission (TVEC)

The TVEC is the national authority for the implementation of NVQSL, and the following are the operational functions supporting the NVQSL framework.

- **Policy development, communications and research on NVQ**
  - Management of national communication strategies.
  - Monitoring the implementation of the NVQSL.
  - Development of policies.
  - Observe national and international NVQ trends.
  - Promote international recognition for NVQSL.
  - Assess the impact of the NVQSL towards national development.
  - Liaise with industry and professional bodies to promote workplace assessment and certification.
  - Develop strategic partnership with national trade associations.
  - Respond to enquiries regarding NVQSL
  - Inform NAITA for Development of competency standards.

- **Endorsement**
  - Endorsement of competency standards.
  - Endorsement of CBT curricula.
  - Endorsement of assessment resources.

- **Registration**
  - Registration of training providers.
  - Promote adoption of quality management system by training providers.
  - Maintenance of registered status of training providers.
  - Gazette the list of registered training providers annually

- **Quality Management System**
  - Certification of the adequacy of the scope of the QMS of training providers

- **Accreditation**
  - Accreditation of courses leading to National Vocational Qualifications.
  - Accreditation of courses designed to meet the competencies of one or more units, which are not leading to a particular NVQ level.
  - Accreditation of agencies for workplace assessment.
  - Accreditation of agencies to carry out recognition of prior learning.
• **Monitoring and Audit**
  - Surveillance monitoring of all registrations and accreditations.
  - Monitoring CBT implementation and consistency of assessment.
  - Unscheduled audits.
  - Maintenance of registration and accreditation.
  - Response to issues from trainees and stakeholders.

• **Assessment Consistency**
  - Audit of CBT assessment
  - Maintain the consistency of competency based assessment.
  - Appoint assessors
  - Maintain the register of assessors
  - Monitor accredited providers and workplace establishments.
  - Periodic review of assessors by TVEC.
  - Review and update training programmes for assessors.

• **Certification**
  - Maintain a database for NVQ certificate holders
  - Allocate secure certificate numbers
  - Ensure that the assessment results are being submitted regularly and verify the validity.
  - Manage the implementation arrangements for all endorsed qualifications.
  - Authorize the award of National Vocational Qualifications and record of achievements

• **Social Marketing, Publications, Website and linkages with the stakeholders**
  - Disseminate NVQ information and regulatory documents to stakeholders.
  - Publish endorsed materials.
  - Keep website data updated.
  - The TVEC shall convene a NVQ steering group for the operations of NVQSL.
  - The TVEC shall convene periodic review meetings with the accredited Training providers for the operation of NVQSL.
  - The TVEC shall link with industry and professional groups/ bodies to secure their support for further development of NVQSL.
9.1.2 National Apprentice and Industrial Training Authority (NAITA)

The NAITA is the lead organization for the following activities in the implementation of NVQSL.

- **National Competency standards**
  - NAITA shall convene the industry advisory groups to develop the competency standards for the industry sector / occupations identified by TVEC.
  - NAITA shall package the units of national competency standards in to “National Vocational Qualifications”, which meet the sector / occupational requirements.
  - NAITA shall ensure that developed competency standards are validated by the “National Industrial Training Advisory Committees” (NITACs) and submitted to the TVEC for endorsement.

- **Competency Based Assessment Resources**
  - NAITA shall convene industry advisory groups to develop the assessment resources to assess the candidates’ performance against the validated competency standards.
  - NAITA shall ensure that developed assessment resources are validated by the NITACs and submitted to TVEC for endorsement.

- **Validation of curriculum**
  - NAITA shall Coordinate and expedite the validation of CBT curricula by NITACs as developed by the Univotec.
  -- NAITA shall submit the validated CBT curricula to the TVEC for endorsement.

- **Implementation of Competency Based Training (CBT)**
  - NAITA shall be responsible for the implementation of CBT programs at the training centers under its control.
  - NAITA shall obtain accreditation from TVEC for the training programmes conducted at the training centers under its control.
  - NAITA shall register training centers under its control with TVEC.

- **Conducting competency based assessments**
  - NAITA shall be responsible for competency based assessments using the services of licensed or registered assessors.

- **Industry placement of trainees**
- NAITA shall make arrangement for the industry placement of trainees who are following competency based training programs.

9.1.3 University of Vocational Technology (Univotec)

The Univotec is the lead organization for the following activities in the implementation of NVQSL.

- **Development of CBT Curricula**
  - Univotec shall convene industry advisory groups / instructors / trainers to develop the CBT curricula based on the endorsed national competency standards.
  - Univotec shall ensure that developed CBT curricula are submitted to NAITA through TVEC for validation.
  - Univotec shall ensure that CBT curriculum developers assist the NITACs in the process of validation.
  - Univotec shall ensure periodic review of the CBT curriculum.

- **Staff Development**
  - Univotec shall conduct staff development programs for trainers in the TVET sector in relation to CBT methodology.
  - Univotec shall conduct staff development programs for administrators and staff in the TVET sector related to NVQ system.
  - Univotec shall conduct training programmes to develop competency based assessors.
  - Univotec shall ensure periodic review of the training programmes.

- **Development of learning resources**
  - Univotec shall develop appropriate learning resources in respect of each endorsed curricula.

- **Implementing Learning Resource Development Center (LRDC)**
  - Univotec shall be responsible for the management of the activities of the Learning Resource Development Center.

- **Coordinating Learning Resource Utilization Centers (LRUC)**
  - LRDC shall coordinate the dissemination of teaching – learning material through Learning Resource Utilization Centers island wide in the distance learning mode education programmes.

9.1.4 Vocational Training Authority of Sri Lanka (VTA)

- **Implementation of Competency Based Training (CBT)**
- VTA shall be responsible for the implementation of CBT programs at the training centers under its control.
- VTA shall obtain accreditation from TVEC for the training programmes conducted at the training centers under its control.
- VTA shall register training centers under its control with TVEC.

**Conducting Competency Based Assessments**

- VTA shall be responsible for organizing and conducting competency based assessments using the services of licensed or registered assessors

**Implementation of career guidance and counselling activities**

- VTA shall be the lead agency responsible for the implementation and coordination of the career guidance and counselling activities

**Implementation of Self Employment Promotion Initiatives**

- VTA shall be responsible for the implementation of the Self Employment Promotion Initiatives (SEPI) activities.

**Implementation of entrepreneurship programs**

- VTA shall be responsible for the implementation of entrepreneurship development programs.

9.1.5 **Department of Technical Education and Training (DTET)**

**Implementation of Competency Based Training (CBT)**

- DTET shall be responsible for the implementation of CBT programs in levels 1 - 6
- DTET shall obtain accreditation from TVEC for the training programmes conducted at the training centers under its control.
- DTET shall register training centers under its control with TVEC.

**Conducting Competency Based Assessment**

- DTET shall be responsible for organizing and conducting competency based assessments using the services of licensed or registered assessors

**Implementation of career guidance and counselling activities**

- DTET shall be responsible for the implementation and coordination of the career guidance and counselling activities

**Implementation of Self Employment Promotion Initiatives**
- DTET shall be responsible for the implementation of the Self Employment Promotion Initiatives (SEPI) activities.

**Implementation of entrepreneurship programs**

- DTET shall be responsible for the implementation of entrepreneurship development programs.

### 9.1.6 National Youth Services Council (NYSC)

**Implementation of Competency Based Training (CBT)**

- NYSC shall be responsible for the implementation of CBT programs at the training centers under its control.
- NYSC shall obtain accreditation from TVEC for the training programmes conducted at the training centers under its control.
- NYSC shall register training centers under its control with TVEC.

**Conducting Competency Based Assessment**

- NYSC shall be responsible for organizing and conducting competency based assessments using the services of licensed or registered assessors.

**Implementation of career guidance and counselling activities**

- NYSC shall be responsible for the implementation and coordination of the career guidance and counselling activities.

**Implementation of Self Employment Promotion Initiatives**

- NYSC shall be responsible for the implementation of the Self Employment Promotion Initiatives (SEPI) activities.

**Implementation of entrepreneurship programs**

- NYSC shall be responsible for the implementation of entrepreneurship development programs.

### 9.1.7 Registered Training Providers of the Private Sector

**Implementation of Competency Based Training (CBT)**

- Registered training institutions of the private sector shall obtain accreditation from TVEC for the training programmes conducted at the training institution.

**Conducting Competency Based Assessment**
- Registered training institutions of the private sector shall be responsible for organizing and conducting competency based assessments using the services of licensed or registered assessors

**Implementation of career guidance and counselling activities**

- Registered training institutions of the private sector shall be responsible for the implementation of career guidance and counselling activities

**Implementation of Self Employment Promotion Initiatives**

- Registered training institutions of the private sector shall be responsible for the implementation of the Self Employment Promotion Initiatives (SEPI) activities.

**Implementation of entrepreneurship programs**

- Registered training institutions of the private sector shall be responsible for the implementation of entrepreneurship development programs.

### 9.2 REGULATORY PROCESSES OF THE TERTIARY AND VOCATIONAL EDUCATION COMMISSION

The TVEC has adopted the following regulatory process to support the delivery of training, competency assessments and certification of vocational qualifications in Sri Lanka.

- Endorsement of competency standards, assessment resources and CBT curricula.
- Registration of training providers.
- Ensure establishment and implementation of Quality Management Systems in TVET sector
- Course accreditation for training providers.
- Accreditation of establishments for competency based assessment.
- Accreditation of establishments to carryout the recognition of prior learning.
- Monitor the registration and accreditation
- Audit of registration and accreditation.
- Audit certification process

Endorsement of national competency standards, competency based assessment resources and CBT curricula is the process undertaken by the TVEC to ensure that the national competency standards (the individual units and the national vocational qualifications packages), the competency based assessment resources and the CBT curricula meets the standards specified by the TVEC and comply with the guidelines of the NVQSL.
Registration of training providers is the process undertaken by the TVEC to ensure that the training providers meet the requirements of legislation. The establishment of quality management system shall regularise the registrations.

Course accreditation for training providers is undertaken by the TVEC to ensure that courses conducted by registered training providers meet the accreditation standards. The establishment of Quality Management System shall regularize the accreditation.

Accreditation of agencies for competency based assessment is the process through which the TVEC shall allow establishments to conduct assessment in the workplace directly against the competencies of the competency standards and to award qualifications to successful candidates.

Accreditation of agencies to carry out the recognition of prior learning shall be allowed for training establishment who have been successfully audited by the TVEC.

Monitoring of registration and accreditation refers to the process by which TVEC ensures the registered and accredited agencies continue to comply with the accepted standards.

Audit of registration and accreditation refers to the formal process to be undertaken on a scheduled cycle by the TVEC in order to verify that quality is being maintained or enhanced.

9.3 PROCEDURES FOR THE IMPLEMENTATION OF NVQ FRAMEWORK BY THE TRAINING PROVIDER

The following is the step by step approach in the implementation of NVQSL by the training provider.

1 The potential training provider shall ensure that the respective trainers are aware of the national competency standards in the respective industry sectors / occupations. If the national competency standards are not available, the trainers shall be aware of at least the accredited standards published by the TVEC.

2 The training providers shall use the curricula on the following basis.

   a The training providers shall use the CBT curricula based on the national competency standards as endorsed by the TVEC.

   b The training provider may use its own curricula, provided that the TVEC has approved that it complies with the national competency standards.

   c The curricula for industry sectors / trades for which national competency standards are not available; they shall be referred to TVEC for development of standards.
The accreditation certificate for NVQ recognized curricula shall be submitted to TVEC for possible recognition.

3 The training provider shall ensure the establishment of a “Quality Management System”.

4 The training provider shall ensure the registration of the training center with TVEC.

5 The training provider shall ensure the accreditation of courses.

6 The training provider shall report achievements of trainees to TVEC through the MIS of the TVEC.

7 The trainees who have completed the institutional training may be placed in the industry for on the job training through NAITA.

9.4 MANAGEMENT OF THE NVQ SYSTEM BY TRAINING CENTRES

Training providers shall be requested to appoint an NVQ officer from the senior management. In the case of the National Apprentice & Industrial Training Authority (NAITA), Vocational Training Authority (VTA), Department of Technical Education & Training (DTET) and National Youth Services Council (NYSC) it is expected to be a full-time appointment at least initially. The appointee shall be responsible for all aspects of the NVQ framework for all training centres within the agency. The Officer shall be responsible for management and coordination of the following areas of activities.

1 Management of NVQ
- NVQSL Policies, processes and resources such as national competency standards, curricula and assessment resources etc.
- Competency Based Assessment.
- QMS Activities.
- Internal & external NVQ staff development programmes.
- Inter-Agency Steering group meetings.

2 QMS Manual and operations
- Liaison with QMS officer.

3 Management of accreditations
- Course accreditation process.
- Accreditation submissions to TVEC and follow up.

4 Preparation for audit
- Completion of TVEC format for self-review.
- Arrangements for TVEC audit team visit.
- Follow up of audit reports and resolution of non-compliances.

5 Use of competency standards
- Advice and train staff in the use of competency standards.
- Communicate revisions of competency standards to relevant staff.
6 Use of CBT Curricula
- Be aware of the mandatory industrial training components in the courses.
- Be aware of industry components in courses, including any competency acquisition and ensure assessment in the workplace.
- Organise training on CBT methodology.

7 Use of assessment resources
- Ensure that relevant unit assessment resources are supplied by NAITA.

8 Participation in assessment consistency programmes
- Ensure modalities for assessment consistency.
- Ensure staff participation in workshops as required by TVEC.
- Follow-up activities.

9 Course development and course modification
- Assist staff preparing new courses for accreditation.
- Assist course modification processes.

10 Unit Completion Record & Certification
- Secure record of unit achievement.
- Secure record of qualifications awarded.
- Issue “Records of Achievement”, “National certificates and “Diplomas” to trainees.
- Maintain database for requirements of the award of “National Certificate” from the courses accredited.
- Integrate workplace assessment with on-course assessment.
- Regular submission to TVEC of all trainees NVQ achievement and all certification.
- Ensure the use of secure certificate numbers allocated by the TVEC.
- Data back – up in case of loss.

9.5 TVEC DATABASE AND WEBSITE TO SUPPORT THE NVQ FRAMEWORK

9.5.1 Classification and Coding:

- The complete competency standards package.
- Competency standards units.
- National Vocational Qualifications.
- Assessment resources.
- CBT curriculum.

(i) For NVQ Level 1 – 4 occupations

The ILO “International Standard Industrial Classification” of all economic activity, as amended by the Department of Census and Statistics, 2001, Sri Lanka, shall be utilised for the classification of occupations.
NAITA shall determine the classification through the competency standards development process. Competency standards submitted by NAITA to TVEC for endorsement shall carry the official classification. Univotec shall classify the CBT curriculum using the identical ILO terminology.

When the endorsed competency standard and CBT curriculum are entered into the TVEC database, the occupational classification shall provide a central reference point for the location and tracking of all data. Qualification titles shall be derived from the occupation.

The NVQSL shall use the ILO sector coding system ‘International Standard Industrial Classification of all economic activities’ (ISIC) as shown below:

**Competency standards Code**: D15S001
- Sector letter and two digits followed by prefix S and three digits which identifies the occupation.

**Competency standards Unit Code**: D15S001U01
- Competency standard code followed by prefix U and two digits indicating the number of the unit.

**Assessment Resource Code**: D15S001U01A
- Competency standard unit code followed by letter A.

**National Vocational Qualification Code**: D15S001Q1L1
- Competency standard code followed by prefix Q and qualification package number followed by letter L and a digit indicating the level assigned to the qualification.

(ii) **For NVQ Level 5 & 6 Industry Sectors**

A similar coding system shall be used that reflect the industry sector.

**Competency standards Code**: D15T001
- Sector letter and two digits followed by prefix ‘T’ and three digits which identify the occupation.

However, there are six competency units common for all National Competency Standards, called Employability units and they are coded as, EMPU01, EMPU02, EMPU03, EMPU04, EMPU05, EMPU06

**Competency standards Unit Code**: D15T001U01
- Competency standard code followed by prefix U and two digits indicating the number of the unit.

**Assessment Resource Code**: D15T001U01A
- Competency standard unit code followed by letter A.

Training Providers and assessing agencies seeking accreditation shall use these codes, which shall be assigned through the development process by NAITA and Univotec.
The classification and codes shall be used by all TVEC staff teams, managing the NVQ, through to final certification. Training providers shall also use the codes to track activities and results of trainees.

9.5.2 Inclusion of NVQ Information in the TVEC Website

The TVEC website shall contain the following:

1. All units and new national vocational qualifications (including the qualifications cover sheet) with all endorsed assessment and CBT resources.

2. All accredited providers with full details of their course accreditations.

3. All NVQ policies and an outline of the NVQ framework.

4. All recognized trade associations and NITACs.

5. All agencies accredited to authorise assessors.

6. All providers and agencies accredited to assess prior learning.

7. Detailed information for organizations wishing to become registered and accredited providers of education services.

8. Detailed information for trade associations wishing to be recognized by TVEC.

9. A schedule of all resources available to education providers to support the introduction of CBT.

10. Information for learners on national certification: “National Certificates”, “Diplomas” and the “Record of Achievements”.

9.6 ADDITIONAL NVQ COMPONENTS IN THE TVEC DATABASE

- Registered training providers
- Establishments accredited to authorise assessors
- Assessor registry based on occupations
- Providers and agencies accredited to assess prior learning
- NITACs
- Recognised trade associations
- Results by unit from providers and agencies
- Results by national qualifications awarded
- National qualifications and records of achievement awarded
- Accredited courses
- Accredited international qualifications

Supplementary notes:

1 The course accreditation database shall distinguish among national and local qualifications and courses based on competency standards and those not based on competency standards.
2 The database of registered providers shall enable tracking of their accredited courses and all of the endorsed units and qualifications which providers are authorised to assess and award. This is a vital resource for the maintenance of the validity and credibility of national certification in Sri Lanka.

3 Applications for endorsement shall only be accepted from recognised bodies.

4 Unit and qualification results shall only be accepted from accredited providers of education services and agencies accredited to authorise assessors.

5 The database of results shall enable tracking and verification of qualification completion and the awarding of qualifications and records of achievement by the TVEC.

6 The database shall accommodate old, and as well as, revised versions of units and qualifications until revised units and qualifications gains full validity.

7 The TVEC intranet will enable TVEC work teams to be informed on the following:

- The accreditation team shall know that applications can be expected and can verify the status and combinations of endorsed units and packages.
- Accreditation will trigger action by the assessment consistency team.
- The consistency of assessment team shall use the database of accreditations to link providers and agencies to its services and to track performance of providers and agencies in their national assessment standards and their use of NAITA assessment resources.
- The TVEC intranet shall enable combined tracking of all accredited providers and agencies so that institutional profiles are able to be built up leading to a monitoring visit or, if necessary, to an unscheduled audit.
- The certification team shall be able to verify the legitimacy of results submitted and track completion of qualifications.
- The TVEC newsletter editor will include summary information on new endorsements in the newsletter.
- The TVEC website shall capture all data to enhance stakeholders access endorsed materials.

8 Providers, workplace assessors and other stakeholders will be able to follow up from the notification of official endorsement in order to secure access to the full set of endorsed units, qualifications, assessment resources and CBT curriculum.
10. APPENDICES

10.1 GLOSSARY OF TERMS

Accreditation: Status awarded when an institution is judged capable of delivering a course leading to the award of a national vocational qualification

Assessment: Process of collecting evidence and making judgements as to whether a person can perform according to the knowledge, skills and attitudes specified in the national competency standard

Assessment guide: A component of a competency unit used to help teachers, students and assessors understand how, and under what conditions, assessment will be carried out

Assessment resources: Materials for assessors to assist in judging evidence of competence

Assessors: Persons authorised to conduct national competency-based assessments to determine if the competencies specified in the units have been acquired and to award unit and qualifications completion; assessors are initially registered; and may be licensed after completion of 25 assessments and meeting the requirements of the TVEC assessment standard

Audit: A systematic, independent and documented process to determine whether the certified quality management system, the accredited teaching and learning, and assessment services, comply with planned arrangements, whether these arrangements are implemented effectively, and are suitable to achieve goals and objectives

Bachelor’s degree: Awarded after satisfactory completion of, and achievement in, a course that provides a systematic, research-based introduction to a coherent body of knowledge, its underlying principles and concepts, associated usages and applications, and analytical and problem-solving techniques
**Certificate:** Document which signifies that a qualification has been awarded (see also Diploma and Bachelor’s Degree)

**Certification (of QMS):** Status awarded to an institution when the QMS has been assessed as conforming to ISO, or other, specified standards

**Cognitive skills:** The basic mental abilities used to think, study, and learn and include mental processes used to analyze sounds and images, recall information from memory, make associations between different pieces of information, and maintain concentration on particular tasks.

**Consistency of Assessment:** Promoting fair and valid assessment, to the required standard

**Competence:** The possession by workers of what they are expected to know and to be able to do together with the capacity to apply that skill and knowledge in new situations and environments

**Competency-based Training:** A flexible learner-centred approach to training based on the national competency standards

**Credit:** A numerical value assigned to a competency unit and national vocational qualification that represents the estimated time needed for a typical learner to demonstrate that all specified competencies have been acquired

**Curriculum:** Specification of how knowledge, skill and attitudes from the competency standards can be transferred through structured education and training

**Descriptor:** Component of a national competency standard; provides further information about a unit in terms of context and parameters
| **Diploma:** | Qualification made up of at least 1500 learning hours with its advanced learning broadly equivalent to NVQ level 5/6 descriptor. |
| **Element of competence:** | Component of a national competency standard specifying learning outcomes; the building blocks of individual units; collectively the elements constitute the title of the unit |
| **Employability Competencies:** | Foundation skills, portable across all industries, developed to enable employees at all levels to better adapt to new job demands, work challenges and changing work environments |
| **Endorsement:** | The formal process by TVEC of giving official recognition to competency standards, qualifications, curriculum and assessment resources |
| **Generic skills:** | Competencies common to an industry sector and often forming the core of several related qualifications |
| **In plant training:** | Training in a real working environment (usually in industry) that allows the trainee to gain hands on experience. |
| **International benchmarking:** | Aligning standards to commonly accepted international norms |
| **Monitoring:** | On-going surveillance to verify that the delivery processes continue to meet or exceed the standard demonstrated upon initial registration and accreditation |
| **National Certificate** | Qualification awarded at levels 1-4 of the national vocational qualifications framework |
| **National Diploma** | Qualification awarded at levels 5 and 6 of the national vocational qualifications framework |
| **National qualification:** | The education and training prerequisites identified nationally by industry for employment or to enter a course at a higher level |
| **National competency** | The nationally identified knowledge, skills and |
standard: attitudes required for effective workplace performance

National Vocational Sri Lanka’s system for national technical and vocational Qualifications Framework: qualifications

Performance criteria: Component of a national competency standard which specify the critical evidence required to meet the competencies in the elements. Collectively the performance criteria provide the standards against which the elements are assessed.

Qualification: The education and training prerequisites for entry to employment or a course at a higher level

Quality assurance: The processes identified by a regulatory body to ensure that education providers or organisations are meeting or exceeding specified quality standards

Quality Management System: An integral part of the management system of a training provider or organisation that focuses upon all the processes used to ensure that the training institution or organisation has adequate and appropriate good governance and management to achieve its goals and objectives; and to satisfy the expectations and requirements of its stakeholders, including the TVEC

Range statement: Provides clarification of a competency standard; sets out the contexts and limits for work performance and the range of information, tools and equipment required for that work performance; may apply to all competencies in a unit, to one or several elements or to one or several performance criteria

Recognition of prior learning: Process of awarding credit for competencies achieved outside of formal accredited training

Registration: Permission for an education institution to be established and to teach, assess and award qualifications which are not national vocational qualifications
**Surveillance audit**  
An independent assessment, based on institutional self-review reports followed by an institutional visit if required, to determine whether the certified QMS is being maintained and improved.

**Unit:**  
Component of a competency standard; a coherent set of the competencies specified in a full national competency standard.

**Validation:**  
Process of confirming that a national competency standard, CBT curriculum, and assessment resources meet the requirements of industry or relevant professional bodies.

**Verifier**  
Second assessor who checks that the competency-based assessment has been carried out fairly, validly, consistently and to the specified industry standard.

### 10.2 TERMS OF REFERENCE FOR THE INTER-AGENCY STEERING GROUP FOR THE IMPLEMENTATION OF THE NATIONAL VOCATIONAL QUALIFICATIONS FRAMEWORK IN SRI LANKA

**A. Introduction:**

Sri Lanka has a new unified national system for Technical and Vocational Education and Training. A key feature of the new system is the National Vocational Qualifications Framework. The National Vocational Qualifications Framework is now being implemented with the assistance of 04 national training providers: VTA, NAITA, DTET, and NYSC and under the leadership of the Director General of the Tertiary and Vocational Education Commission (TVEC).

The National Vocational Qualifications Framework will include all qualifications which have been quality assured by the TVEC and benchmarked to international standards, representing the skills of the high performance workplace.

**B. Responsible lead Agency:**

TVEC has been named as the lead agency for the implementation of NVQ system.

**C. Major Objectives of the NVQ Framework:**

(i) To develop an internationally competitive workforce by improving the quality and relevance of skills training;
(ii) To achieve high quality and consistency in all aspects of training, assessment and the awarding of certificates;
(iii) To reduce the present skills mismatch and youth unemployment;
(iv) To unify TVET in Sri Lanka through the implementation of competency standards and CBT curricula and to assist all implementing training providers and workplace assessment agencies to deliver training and assessment to an internationally recognised standard.

D. **Composition of the National Committee**

1. Director General, TVEC (Chairperson)
2. Director General, Univotec
3. Director General, DTET
4. Director (Academic Affairs), DTET
5. Director (Planning and Research), DTET
6. Chairman, NAITA
7. Director, (Training), NAITA
8. Director, (Planning and Development), NAITA
9. Chairman, VTA
10. Director (Training), VTA
11. Chairman, NYSC
12. Director (Development), NYSC
13. Deputy Director General, TVEC
14. Director, (Accreditation and Quality Assurance), TVEC
15. Director (Information Systems), TVEC
16. Director (NVQ), TVEC
17. Deputy Director (NVQ), TVEC (Secretary to the Committee)
18. NVQ Officer NAITA
19. NVQ Officer NYSC
20. NVQ Officer DTET
21. NVQ Officer VTA
22. NVQ Officer Univotec

In addition the following members will also attend to the Committee meetings to support and fulfill the requirements of the programme until the project is completed:

23. Project Director, TEDP
24. Project Manager (NVQ) – TEDP

E. **Meetings:**

The committee will meet once in 03 months. During the project implementation period and until the system is established properly it will meet once a month.
F. **Main responsibilities of the Inter-Agency Steering Group:**

The Inter-Agency Steering Group will

a) Coordinate and monitor the progress of the implementation of the NVQ Framework for all TVET in Sri Lanka;

b) Identify major implementation issues, constraints and problems faced by the NVQ implementing training providers and identify solutions in order to ensure an effective implementation of the NVQ system;

c) Submit a quarterly report to the Project Director, TEDP, giving detailed progress on implementation, issues, problems and recommendations to resolve the problems for the effective and smooth implementation of the NVQ system;

d) Provide policy guidelines and support to institutionalise the NVQ system in participating training providers;

e) Monitor and regularly review all aspects of the NVQ Framework with a view to modification of policies and implementation, and new policy development as necessary
10.3 FRAMEWORK LEVEL DESCRIPTORS

INTRODUCTION

This document consolidates previous work on the development of new level descriptors for the Sri Lankan National Vocational Qualifications Framework. The document is adapted, with permission from the New Zealand Qualifications Authority. Its plan is relatively straightforward. Each section relating to a particular level contains:

- existing descriptors from sources relating to a range of proposed and established frameworks
- a discussion of some other relevant descriptors; and
- new descriptors for the level.

The purpose of the descriptors is to provide a means by which the units of endorsed standards (and the qualifications aggregated from those) may be assigned with confidence and consistency to levels of what is essentially a conventional framework. The method is, therefore, based in pragmatism, although an attempt has been made to maintain a decent correspondence with philosophy.

The basic assumptions made are:

- Units of endorsed standards, and the qualifications derived from those, may be assigned to levels according to their incremental complexity of knowledge, skills and attributes; tasks and procedures; and accountability. Complexity of knowledge, skills and attributes is determined by the mental and physical processes, and the knowledge base, that must be utilised to achieve a standard and to apply its learning outcomes.

- Complexity of tasks and procedures is determined by the nature of the processes that must be performed successfully to achieve the learning outcomes of a standard repeatedly and consistently.

- Complexity of accountability is determined by the degree of autonomy that is customarily associated with the application of the learning outcomes of a standard.

USING THE GUIDE

STEP 1

Consider the intention of the unit - what occupation, activity or learning process is the person qualified to undertake when the learning outcomes, and those related to them at the same level, have been achieved? Check the answer against all the criteria for that level.

STEP 2
If STEP 1 does not provide a satisfactory result, consider the range of levels within which the standard falls. Engage the collective professional expertise of the standards-setting group in debating and identifying the particular level to which it should be assigned. Check the answer against all the criteria for that level.

STEP 3

If STEP 2 also fails to resolve the issue, use the method detailed in the APPENDIX 10.4

New standards-setting groups and writers should consider applying all three steps to the first few units they produce.

References:

Perry, William G “Authorities know, and if we work hard, read everything, and learn Right Answers, all will be well”, quoted in “Different Worlds in the Same Classroom” from Ramsden et al “Improving Learning”, Kogan Page Ltd 1988

Professor John Edwards, of James Cook University, Queensland, Australia is the author and co-author of a number of publications on the Scale of Cognitive Demand, on which discussions reflected in this document were based.

LEVEL ONE

EXAMPLES OF DESCRIPTORS AT LEVEL 1

KNOWLEDGE, SKILLS AND ATTIRIBUTES

Knowledge: Recall in a narrow range of areas
Practical skills: Basic practical skills
Problem solving: Not critical
Information management: Receive and pass on messages and information

TASKS AND PROCEDURES

Contexts: Closely defined - highly structured and self-referenced; managing single tasks.
Processes: Limited in range - repetitive and familiar - established and predictable - perform a sequence of routine tasks given clear direction.
Roles and functions: Limited range of roles.
 ACCOUNTABILITY

Autonomy: Directed activity - under close supervision
Output: Externally monitored
Quality: Externally monitored

LEVEL TWO

EXAMPLES OF DESCRIPTORS AT LEVEL 2

KNOWLEDGE, SKILLS AND ATTRIBUTES

Knowledge: Range of knowledge applied.
Practical skills: Range of skills applied.
Problem solving: Known solutions to familiar problems.
Information management: Assess and record information from various sources, readily available information.

TASKS AND PROCEDURES

Contexts: Foundation of competencies ... in a limited range of predictable and structured contexts.
Processes: Clear choice of routine responses; able to prioritise tasks by selecting from known solutions.
Roles and functions: Coordination may be involved if working with a team.

ACCOUNTABILITY

Autonomy: Some discretion and judgment about possible actions.
Output: With some responsibility for quantity.
Quality: With some responsibility for quality - under general supervision and quality control.

- Level 2 has greater complexity of knowledge, skills and attributes; task management and procedures; and accountability than Level 1.
- The descriptors above identify those characteristics which are found at Level 2 and not at Level 1.

Knowledge, skills and attributes

Terms employed currently also include basic theoretical knowledge - understanding of process - developed practical skills - knowledgeable applications - standard answers from independent thought - comprehension of a range of simple cognitive problems - known processes - readily available information.
The implication is that the level requires a knowledge base without which the tasks and procedures cannot be undertaken, but that it consists of a discrete and limited set of data and known responses - a table of Right Answers, as it were.

**Tasks and procedures**

These are also characterised by, according to existing definitions, predictability with variation - a small range of variety - a defined range of roles and contexts - a clear choice of actions with limited scope - established or known routines and procedures. Some discretion and judgment, limited complexity and limited variation.

The problem of relative, as opposed to level-specific statements is immediately apparent. The essential differences between this level and Level 1 appear to be in the admission of a limited range of complexity and choice.

**Accountability**

Included in the definitions are, in addition, general supervision - some individual discretion - no financial control - routine guidance with intermittent checking - (greater) individual responsibility and autonomy - and self-directed activity.

Implied is that the person is able to operate independently in familiar contexts and take some responsibility for the tasks and procedures, but continues to require external direction and quality control.

**LEVEL THREE**

**EXAMPLES OF DESCRIPTORS AT LEVEL 3**

**KNOWLEDGE, SKILLS AND ATTRIBUTES**

Knowledge: Knowledge with depth in some areas - some relevant theoretical knowledge.

Practical skills: A broad range of skills.

Problem solving: A range of known responses to familiar problems

Information management: Interpretation of available information.

**TASKS AND PROCEDURES**

Processes: A significant choice of procedures prioritizing of multiple tasks

**ACCOUNTABILITY**
Autonomy: Directed activity with some autonomy - under general supervision
Output: Achieving outcomes within time constraints
Quality: External quality checking

- Level 3 has greater complexity of knowledge, skills and attributes; task management and procedures; and accountability than Levels 1 and 2.
- The descriptors above identify those characteristics which are found at Level 3 and not at Levels 1 and 2.

Knowledge, skills and attributes

Other key phrases in the existing definitions are theoretical knowledge and understanding, - well developed practical skills (conveying the idea of progression) - complexity in the extent and choice of actions - some discretion and (limited) judgment - resolution of specific problems - uncertainties and different opinions - comprehension and comparison of different ideas.

The major perception is that the person has progressed from providing well-rehearsed responses to given situations, to thinking about and selecting appropriate responses to less familiar input.

Tasks and procedures

Other terms used to characterise tasks and procedures include: predictable with variation - common tasks with some complexity - small range of variety - some depth in a broad range of skills - selection of equipment, work organisation and services - known routines, methods and procedures - predictable routines with wide variation - prioritizing tasks to achieve planned outcomes.

The increase in complexity relates more to variety of skills and their purpose than to any change in the intrinsic nature of the skills. The individual knows more and can apply what is known across a greater range of activities.

Accountability

Existing definitions extend accountability to include little supervision - significant individual responsibility - works with others - effective networking - limited guidance with checking related to overall progress - technical skills and leadership - some responsibility for others - responsibility for own outputs with external quality monitoring.

There is a focus on individual accountability for outputs within a managed environment, which accords with the discretion and judgment elements within learning.
LEVEL FOUR

EXAMPLES OF DESCRIPTORS AT LEVEL 4

KNOWLEDGE, SKILLS AND ATTRIBUTES

Knowledge: More complex range of competencies, knowledge and understanding.
            Informed judgment.
Practical skills: Wide range of technical or scholastic skills
Problem solving: Apply solutions to a defined range of unpredictable problems. A range of sometimes innovative responses to concrete but often unfamiliar problems.
Information management: Analytical interpretation of information

TASKS AND PROCEDURES

Contexts: Variety of familiar and unfamiliar contexts.
Processes: Considerable choice of procedures; prioritizing tasks to optimise output.
Roles and functions: Some discretion and judgment for both self and others in planning.

ACCOUNTABILITY

Autonomy: Under broad guidance and evaluation
Output: Take responsibility for own outputs
Quality: Specified quality standards

- Level 4 has greater complexity of knowledge, skills and attributes; tasks and procedures; and accountability than Levels 1-3.
- The descriptors above identify those characteristics which are found at Level 4 and not at Levels 1-3.

Knowledge, skills and attributes

Existing definitions add substantial application of new knowledge and understanding to new areas - knowledge with depth - evaluate and analyse - develop criteria and procedures - comprehension and comparison of principles underlying concrete ideas - low level analysis to support judgment - readily available information.

The key factor appears to be that the person is moving towards generating responses and away from selecting routine responses from a given range. This involves some understanding of theoretical concepts and the ability to analyse or extrapolate, though at a relatively low level.

Tasks and procedures

Other key phrases used in the existing definitions are complex - non-routine - broad range of variety - substantial use of practical skills - wide range of tasks
and roles – prioritizing tasks for optimum performance - complexity in the range and choice of actions - broad range of varied (work) activities - wide variety of contexts.

Increased complexity at this level appears to be defined in terms of the range of skills and activities, rather than of any increased difficulty in the activities undertaken.

**Accountability**

At this level, people are expected to become fully self-directed and, in some areas, accept a leadership role. Concepts listed elsewhere include completes programme without direct supervision - self-directed - full responsibility for quality standards - control of amount and quality of output - supervisory role/competence - planning and selection of equipment, work, organisation, etc - only general guidance - teams guided - leadership - limited organisation of others.

These are logical levels of accountability, for example, an entry level tertiary student, a qualified craftsperson or a senior employee in a process industry.

**LEVEL FIVE**

**EXAMPLES OF DESCRIPTORS AT LEVEL  5**

**KNOWLEDGE, SKILLS AND ATTRIBUTES**

Knowledge: Broad knowledge base incorporating theoretical concepts, with substantial depth in some areas.

Practical skills: Wide range of specialised skills.

Problem solving: Apply solutions to a defined range of unpredictable problems. A range of sometimes innovative responses to concrete but often unfamiliar problems.

Information Management: Evaluate information, using it to forecast for planning or research purposes.

**TASKS AND PROCEDURES**

Contexts: Variety of routine and non-routine contexts.

Processes: Transfer and apply creative skills to a range of situations

Roles and functions: Judgment required in planning and selecting equipment, services, techniques and work organisation for self and others

**ACCOUNTABILITY**

Autonomy: Self-directed and sometimes directive activity - within broad general guidelines or functions

Output: Take responsibility for own outputs
Quality: Specified quality standards

- Level 5 has greater complexity of knowledge, skills and attributes; tasks and procedures; and accountability than Levels 1-4.
- The descriptors above identify those characteristics which are found at Level 5 and not at Levels 1-4.

Knowledge, skills and attributes

The characteristic of cognitive activity at this level is the requirement that judgment is made on a basis of information that is not always useable in its raw form. It is necessary to analyse, and to compare the results of analysis with at least a simple theoretical model, to arrive at a viable method or process for completing the activity.

Tasks and procedures

Other key phrases used in the existing definitions are range of technical and other skills - varied and highly specific contexts - highly technical contexts - creative and routine activities.

Increased complexity at this level involves a shift towards either very varied methods and procedures or those that are specialised and technical. The student in full-time tertiary education, for example, will be focusing subsequently on a major topic of study. In industry, learning may be contributing to an advanced trade or technical certification. In either case the outcomes are not necessarily predictable or pre-determined. The work or learning process involves resolving appropriate responses to a variety of information and in multiple contexts.

Accountability

At this level, people are expected to be fully self-directed and responsible for all outcomes of a process, and the leadership role is likely to be extended. Definitions include self-directed application - competencies are normally used independently - applied under broad guidance - the work of others may be supervised or teams guided - prescribed responsibility under general guidance for specified outputs in work and learning, including quality standards and/or the work and learning of others.

The difference between level 4 and level 5 is more to be inferred than positively determined from these existing descriptors. There is an implication that the outputs of the process are less specific and that there is accountability for determining the nature and quality of the output within more loosely prescribed specifications.
LEVEL SIX

EXAMPLES OF DESCRIPTORS AT LEVEL 6

KNOWLEDGE, SKILLS AND ATTRIBUTES

Knowledge: Generate ideas through the analysis of information and concepts at an abstract level.
Practical skills: Command of wide ranging, highly specialised technical, creative or conceptual skills.
Problem solving: The formulation of appropriate responses to resolve both concrete and abstract problems.
Information management: Reformating and evaluation of a wide range of information.

TASKS AND PROCEDURES

Roles and functions: Diagnose, design and execute judgments across a broad range of technical, management, research or scholastic functions. Significant judgment in planning, designing, technical and supervisory functions related to products, services, operations or processes.

ACCOUNTABILITY

Autonomy: Complete accountability for determining and achieving personal and/ or group outcomes.

- Level 6 has greater complexity of knowledge, skills and attributes; tasks and procedures; and accountability than Levels 1-5.
- The descriptors above identify those characteristics which are found at Level 6 and not at Levels 1-5.

Knowledge, skills and attributes

There is greater emphasis on the knowledge base at this level, and some learning may focus exclusively on the acquisition of knowledge. This is supported by other descriptors: development of knowledge with substantial in-depth use of theoretical and applied knowledge to provide solutions from a wide range of alternatives - complex and unpredictable problems - analysis of information and concepts at an abstract level.

Tasks and procedures

Essential differences between this and previous levels are found in the emphasis above on judgment and in such other descriptors as mastery of a specialised area with a range of skills and command of a specialised area.

This indicates a move from wide versatility within the context of the operation to a relatively high degree of specialisation in some or all of its aspects. An
illustration may be found in the workplace, where the skilled worker builds on an industry background to focus on an area of high technology, or in tertiary education, where the academic student moves from the generic studies of a discipline to a specialist ‘major’.

**Accountability**

It is likely that at this level accountability will be defined more in terms of a function than a task, and that it may be implicit in that function. It is the area of the job description rather than the job list. This is reflected in the autonomy described above and in prescribed responsibility and accountability within broad parameters for defined activities - applied under limited guidance in line with a broad plan, budget or strategy. In general education, students acquire the ability to negotiate themes and topics under general guidance and to take personal responsibility for short term work planning and delivery of ‘outputs’.

**LEVEL SEVEN**

**EXAMPLES OF DESCRIPTORS AT LEVEL 7**

**KNOWLEDGE, SKILLS AND ATTRIBUTES**

Knowledge: Systematic and coherent body of knowledge - review, consolidate, extend and apply the knowledge and techniques learned.

Practical skills: Command of highly specialised technical or scholastic and basic research skills across a major discipline - academic skills and attributes necessary to comprehend and evaluate new information, concepts and evidence from a range of sources.

**TASKS AND PROCEDURES**

Processes: Transfer and apply creative skills to a range of situations

Roles and functions: Significant high level judgment required in management functions, including resourcing.

- Level 7 has greater complexity of knowledge, skills and attributes; tasks and procedures; and accountability than Levels 1-6.
- The descriptors above identify those characteristics which are found at Level 7 and not at Levels 1-6.

**Knowledge, skills and attributes**

Learning here focuses on a command of knowledge and creative judgment. These attributes are amplified in the self-directed development and mastery of broad and/or specialised areas of knowledge - significant high level judgment - creation of solutions to given or contextual problems - creation of ideas, including those
that are new to the learner, through analysis and transformation of information at an abstract level.

**Tasks and procedures**

It is clear that at this level the tasks and procedures have a high level of complexity requiring the exercise of significant judgment, as is also evidenced by a range of skills – major broad and/or highly specialised activities in a wide range of specialised contexts - complex and variable contexts.

Distinguishing between the complexity of this and the flanking levels is not easy however, because complexity varies from learning area to learning area and within learning areas. Knowledge, skills and attributes, and accountability are likely to be more reliable indicators.

**Accountability**

There are fewer existing descriptors at this level, presumably because complete personal accountability is expected from Level 6 onwards. Other descriptors used at the level are normally used independently and are non-routine - applied in accordance with a broad plan, budget or strategy - broad-ranging accountability for the structure, management and output of the work of others - full responsibility and accountability for all aspects of work and learning including planning, resourcing, quality standards and/or secondary responsibility for the work and learning of others.

These could be applied, for example, to a newly qualified professional or a graduate in an academic field.

**10.4 ASSIGNING LEVELS BY THE ELIMINATION OF OUTLIERS**

If it proves difficult to assign a level by direct determination, a useful approach is to eliminate those levels that a competency standard unit or qualification does not fit (the outliers). The process suggested below progressively identifies and excludes the outliers, leaving a focused choice of two levels which can be considered in detail.

Construct the following diagram.

```
1  2  3  4  5  6  7
```

Beginning with 7, circle those levels into which the unit does not fit. Mark the next consecutive level downwards with a question mark.

Beginning with 1, repeat the process in the reverse direction.
Select the two outer levels (indicated by question marks). Determine which of the two the unit fits least well and eliminate it.

If more than two levels remain, add a question mark next to the level you have just eliminated.

Repeat the process until there are two levels remaining. If no firm decision can be reached, eliminate the level with the question mark attached to it.

The competency standard unit is allocated to this level.

10.5 RELEVANT INTERNATIONAL WEBSITES

Australia
Department of Education, Science and Training
www.dest.gov.au
Australian Qualifications Framework
www.aqf.edu.au
National Training Information Service
www.ntis.gov.au
Australian Universities Quality Agency
www.auqa.edu.au

Basque (region of Spain)
Basque Vocational Training Plan
www.euskadi.net

Botswana
Botswana Training Authority
www.bota.org.bw

European Union
European Qualifications Framework
http://ec.europa.eu/education/policies/educ/eqf/
index_en.html
The Bologna Process
http://ec.europa.eu/education/policies/educ/bologna/
bologna_en.html
European Association for Quality Assurance in Higher Education
www.enqa.net

Fiji
Training and Productivity Authority of Fiji
www.tpa.fj

Hong Kong SAR, China
Hong Kong Qualifications Framework
Hong Kong Education and Manpower Bureau  
www.hkqf.gov.hk

Ireland  
National Qualifications Authority of Ireland  
www.nqai.ie

Jamaica  
National Training Agency  
www.heart-nta.org  
National Qualifications Register  
www.nqrjamaica.org

Malaysia  
Malaysian Qualifications Agency  
www.mqa.gov.my  
National Vocational Training Council (NVTC)  
www.nvtc.gov.my

Maldives  
Maldives Accreditation Board  
www.employment.gov.mv

Malta  
Malta Qualifications Council  
www.mqc.govt.mt

Mexico  
Council for the Normalization and Certification of Competency Standards  
www.conocer.org.mx

Namibia  
Namibia Qualifications Authority  
www.op.gov.na (go to Higher Education)

New Zealand  
New Zealand Qualifications Authority  
www.nzqa.govt.nz  
KiwiQuals  
www.kiwiquals.govt.nz  
Industry Training Federation  
www.itf.org.nz  
Tertiary Education Commission  
www.tec.govt.nz

Philippines  
Technical Education and Skills Development Authority  
www.tesda.gov.ph  
Commission on Higher Education  
www.ched.gov.ph
<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National Commission for Academic Accreditation and Assessment</td>
<td><a href="http://www.ncaaa.org.sa">www.ncaaa.org.sa</a></td>
</tr>
<tr>
<td>Scotland</td>
<td>Scottish Qualifications Authority</td>
<td><a href="http://www.sqa.org.uk">www.sqa.org.uk</a></td>
</tr>
<tr>
<td></td>
<td>Scottish Credit and Qualifications Framework</td>
<td><a href="http://www.scqf.org.uk">www.scqf.org.uk</a></td>
</tr>
<tr>
<td>South Africa</td>
<td>South African Qualifications Authority</td>
<td><a href="http://www.saqa.org.za">www.saqa.org.za</a></td>
</tr>
<tr>
<td>UK (except Scotland)</td>
<td>Qualifications and Curriculum Authority</td>
<td><a href="http://www.qca.org.uk/qualifications">www.qca.org.uk/qualifications</a></td>
</tr>
<tr>
<td></td>
<td>Sector Skills Development Agency</td>
<td><a href="http://www.ssd.org.uk">www.ssd.org.uk</a></td>
</tr>
<tr>
<td>Vanuatu</td>
<td>Vanuatu National Training Council</td>
<td><a href="http://www.vntcvanuatu.com">www.vntcvanuatu.com</a></td>
</tr>
<tr>
<td></td>
<td>International Network for Quality Assurance Agencies in Higher Education</td>
<td><a href="http://www.inqaahe.org">www.inqaahe.org</a></td>
</tr>
</tbody>
</table>