**Guidelines
for
Competency Based
Assessment and Certification System**

*March 2011*

Department of Occupational Standards
Ministry of Labour and Human Resources
Thimphu, Bhutan.

**TITLE:** Guidelines for competency based assessment and certification system
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**Ministry of Labour and Human Resources**
*'Building Quality Workforce for Productive Employment'*

## FOREWORD

The Department of Occupational Standards of the Ministry of Labour and Human Resources has the mandate to develop high quality skilled workforce to drive and sustain economic growth through setting of occupational skills standards and regulating the quality of Technical and Vocational Education & Training in the kingdom. Bhutan has introduced competency based training in the Technical and Vocational Training Institutes. This brings with it a key requirement of using competency based assessment.

Competency based assessment is the next step after the development of the Occupational Skills Standards in the Bhutan Vocational Qualifications Framework (BVQF) and its implementation. Competence assessed and certified with this system will ensure that employees or vocational graduates can perform a job to the standard specified; and that they possess and acquire the desired skills, knowledge and attitude required by the industries and employers.

Human resource development of skilled workers can take place in an institute or outside of formal training program or on the job; and assessment is a critical link in the ongoing cycle of the implementation of the BVQF and towards skilled human resource development. Assessment must be directly linked to and developed from the Occupational Skills Standards.

Key choices needs to be made with regard to the approach and type of assessments. Assessments must be both valid and reliable. This guideline was developed by the Department of Occupational Standards to streamline the assessment and certification system in the technical and vocational training institutes with the introduction of competency based training.

For the successful implementation of the competency based assessment system, the support and cooperation from the employers and training providers are crucial. Acknowledging the valuable contribution made by experts from industries and training providers in the development of the Occupational Skills Standards; I anticipate such continued support in the implementation of the components of the competency based assessment system: during the assessment resources development; its validation and endorsement; and assessment processes.

I look forward to the participation of the industry and employers in the implementation of this competency based assessment system leading to the completion of the ongoing BVQF cycle and towards a quality assured skilled workforce in the near future.

Tashi Delek!

Dorji Wangdi
**Minister**

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## 1.0 Preface

Traditionally, Bhutan has used testing to determine in Technical, Vocational Education and Training (TVET) whether or not a person should receive a qualification. The concept of testing implies that assessment is a single event, like an exam or formal test. The concept of assessment is broader. Assessment may include formal tests or examinations. However Competence Based Assessment (CBA) also implies that there may be other methods of assessing competence. The reason why Bhutan is has chosen to use the term assessment is to signify that there may be a number of ways in which a person is able to demonstrate their competence. The discussion of the principles of competency based assessment should clarify what is meant by assessment and how it differs from trade testing.

The present system of assessment has shown deficiencies in terms of:
- Lack of assessment uniformity among training providers;
- That no external assessors from industry have been involved either in the development of assessment resources or in the practical execution of assessment;
- That the present assessment system is based on fixed timing, usually at the end of each semester.

The purpose of this Competency Based Assessment and Certification System Guidelines is to:
- Explain some of the major principles behind the competency based assessment system in Bhutan;
- Outline how assessment resources should be developed;
- Outline how national certificates based upon the Bhutan Vocational Qualifications Framework (BVQF) should be prepared and issued;
- Explain the registration process for Assessors and accredited Assessors.

This guideline can be used by employers who need a method for assessing and certifying qualifications and for training providers that need to improve assessment programs as they implement competency based training.

Director
Department of Occupational Standards
Ministry of Labour and Human Resources

## 2.0  Introducing Competency Based Assessment

## 2.1 Competency Based Training

The Technical and Vocational Education and Training (TVET) sector in Bhutan has adopted the Competency Based Training (CBT) model. A CBT model will better meet the current and new skill needs of the nation. CBT involves close links with industry to identify the skills, knowledge and attitudes required for competent workplace performance. These skills, knowledge and attitudes are specified by industry in the "National Occupational Skill Standards (NOSS)".

In turn, the demonstration of the skills, knowledge and attitudes provides "evidence" that a person can perform a job to the standard specified by industry. Competency Based Assessment is the process of showing that a person can perform according to the NOSS.

## 2.2 Competency Based Assessment

Competency Based Assessment involves collecting evidence in order to prove that a person can perform against the elements of competence and performance criteria as stated in the National Occupational Skill Standards. In traditional assessment, a person takes a single test or examination. In competency based assessment, there are a number of activities to determine whether a person has demonstrated competency.  An individual can be assessed during their training, at the end of their training, or without even undertaking any formal training (Recognition of Prior Learning).

The important principles of Competency Based Assessment are:

- Validity;
- Fairness;
- Sufficiency;
- Authenticity;
- Currency;
- Cost effectiveness;
- Flexibility;
- Reliability.

### 2.2.1 Validity

A competency based assessment system must be based upon clear benchmarks. For an assessment to be valid, the assessment methods and the resources has to reflect the skills, knowledge, attitude and the standard of performance as benchmarked by the National Occupational Skills Standards.

### 2.2.2 Fairness

The assessment system must be transparent. Trainee/candidates shall be aware of how they will be assessed, when and by whom, what the National Skill Standards are and what they will be assessed against.

### 2.2.3 Sufficiency

Assessors must collect sufficient evidence of competence from trainee/candidates so that the assessors can reach an assessment decision. Sufficiency shall be defined as collecting enough evidence to determine that the trainee/candidate can:

- Perform task skills;
- Perform task management skills;
- Perform contingency management skills;
- Perform according to specific workplace environments.

### 2.2.4 Authenticity

Authenticity means that the work provided for assessment is really the work of the trainee/candidate.

### 2.2.5 Currency

Currency means that the work presented for assessment is most recent.

### 2.2.6 Cost effective

The system must be cost effective for both the institutions and for trainee/candidates. Costs to be considered include:

- Materials for assessments;
- Assessor's fees;
- Fees for the assessment center including any calculated overhead;
- Remuneration to support staff, if any;
- Trainee/candidate's time;
- Assessor's time;
- Time taken to reach an assessment decision.

### 2.2.7 Flexibility

The assessment system shall be flexible enough not to disadvantage trainee/candidates on grounds of:

- Physical or intellectual disability;
- Socio-economic background;
- Religion;
- Ethnicity;
- Gender;
- Age.

This shall involve making reasonable adjustments to assessment techniques for individual trainee/candidates. Trainee/candidates still supply the same evidence of competence, but it may be gathered in different ways.

### 2.2.8 Reliability

The assessment outcomes should be consistent and accurate. That is, the assessment could provide similar outcomes for trainee/candidates with equal competence at different times or places, regardless of the assessor conducting the assessment.

## 2.3 Criterion Referenced Assessment

Competency based assessment is based upon agreed benchmarks of skill and knowledge. These benchmarks are provided by the National Occupational Skill Standards. The Standards provide the actual skills and knowledge that will be assessed and also identify suitable methods for assessing the skill and knowledge.

## 2.4 Evidence Based Judgement

Criterion referenced assessment assumes that the assessment decision is based upon a collection of evidence, not one event such as a test or exam. A combination of methods should be used to reach an assessment decision. The judgement is based upon a collection of evidence and measured against the National Occupational Skill Standards. Using evidence based judgement model means that assessment resource developers will need to develop assessment materials consisting of:

- Outlines for trainee/candidates to assist them in collecting their evidence;
- Specifications for practical tasks to be completed;
- Instructions to trainee/candidates;
- Marking or assessment guides for assessors;
- Record keeping instruments for recording of summative assessments.

## 2.5 Appropriate to industry and training context

Assessment needs to take into account the needs of industry and the context of training. This means that assessment materials must be practical and take into account specific workplace and training needs such as:

- Workplace policies and procedures;
- The need for special equipment;
- Time constraints;
- The inability of some trainee/candidates to gather direct workplace evidence of competence;

- Trainee/candidates from geographically isolated locations.

## 2.6 User friendly

In the preparation of assessment materials the needs of the intended target group should be taken into account, especially in the areas of language, literacy and numeracy. Any technical language used shall reflect the technical language of the workplace.

## 3.0 National Assessment and Certification System

### 3.1 Assessment Resources

Assessment resources shall be produced for each Occupational Skill Standard of an occupation/trade.

For each Occupational Skill Standards, workplace problem solving exercises or work application project shall be developed by industry practitioners. The problems or project will be based upon real workplace issues. Trainee/candidates are 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;

- Answering a series of questions relating to the underpinning knowledge in the Occupational Skill Standards;

- In production/manufacturing occupations problem solving shall be replaced by asking trainee/candidates to perform a particular application.

### 3.1.1  Trainee/candidates' Resources

Trainee/candidates' resources are the evidence gathering instruments themselves. They shall consist of:

- An outline of the problem/s to be solved or project/s to be completed;

- 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 about which they will be asked questions;

- The Occupational Skill Standards that are being assessed.

### 3.1.2 Assessor Resources

Resources for assessors include:

- The set of trainee/candidates resources;

- Evidence Matrix;

- Checklists for assessors to use when assessing the trainee/candidates performances in the practical demonstration of skills, the demonstration of understanding and the knowledge based questions;

- A set of questions to be used for the knowledge based assessment. The assessor resources help to achieve consistency in assessment by ensuring that all trainee/candidates are assessed in the same way.

### 3.1.3 Assessment Record Sheet

A final (summative) record keeping instrument shall be required for each Occupational Skill Standard. These instruments shall be standardized so that they follow the same format for all of the Standards.

### 3.1.4 Assessment reports

An important part of record keeping is the reporting of assessment results. A competency based assessment model generally does not include grading. However, there will be an appropriate system of awarding marks/grades as an interim measure in the initial phase of transition from a marks based assessment system to a competence based assessment system. Consistent with the principle of criterion referenced assessment there are only two grades – Competent or Not Yet Competent. This shall not preclude the assessor from providing feedback to the trainee/candidates and can be included in the trainee/candidate's documentation for assessment. This shall include suggestions for further training or work experience if the trainee/candidate is not yet competent.

## 3.2 Procedures for Developing Assessment Resources

Development of assessment resources shall begin once Occupational Skill Standards have been approved by the Department of Occupational Standards (DOS). Although any person or organization may develop resources, the institutional responsibility lies with the Department of Occupational Standards.

### 3.2.1  Technical experts

Assessment resources for the occupation shall be developed based on NOSS with the assistance of technical experts from the industries. The assessment resource development team shall be approved by the Director of Department of Occupational Standards. The assessment resources developers (technical experts) have to maintain confidentiality of the resources developed. This will be ensured by a legal contract signed between the department and the assessment resource developer.

### 3.2.2  Evidence Matrix

Evidence matrix is array of performance criteria versus types of evidence. For every occupational skills standard of the occupation, an evidence matrix shall be developed. This matrix shall be the guide to predetermine the evidence gathering source. In the present situation, only the following evidence sources will be used during assessment:

### a. Written Test

Short answer type questions will be used to assess the knowledge and understanding pertaining to competencies. Questions and Model answers are provided for each element of competence; but the assessors shall not restrict themselves only to these questions. The short answers are available for each unit to maintain the consistency of assessments.

### b. Practical Test

Practical tests will be used to assess the skill competencies in the workplace situations. The practical tests are available with the appropriate check lists for assessments.

The practical test covers the units of competence as a whole or part thereof. However, the assessors shall not restrict themselves to these practical tests only.

### c. Oral Questioning

Oral questioning will be used to assess the knowledge and understanding pertaining to competencies. Questions and Model answers are provided for each element of competence to maintain the consistency of assessments.

### d. Trainee Log Book

The trainee Progress Record Book/Log Book will provide evidence of achievement of competencies pertaining to each unit in the training centre and/or in the workplace. The Assessment Resource Book provides guidelines for the assessment at which the relevant references to such task are exercises already completed by the trainee/candidate during the training.

### e. Supervisor's Report

The assessor may request the trainee/candidate to provide a report from the workplace supervisor or the trainee/candidate on his/her own may produce a report from the workplace supervisor in support of competencies achieved during the training and/or workplace experience.

### 3.2.3  Workplace related

Assessment resources shall be based around real workplace problems that need to be solved or workplace applications. Trainee/candidates shall need to justify what they are doing and they shall need to answer questions relating to underpinning knowledge. Assessors shall have a demonstration checklist by which to assess the practical demonstrations of problem solving. They shall have a list of "theory" points that the trainee/candidates will need to explain in their justifications. They shall have a list of areas in which questions for underpinning knowledge must be asked. The assessment materials shall contain records of assessments and sufficient space for feedback comments to the trainee/candidates.

The assessment materials shall contain records of assessments and sufficient space for feedback comments to the not yet competent trainee/candidates.

## 3.3 Validation and endorsement of assessment resources

The assessment resources produced by assessment resource developers shall undergo a validation process carried out by the relevant panel of trade experts, but facilitated by the responsible assessment resource facilitator. The resources shall not be endorsed by the Department of Occupational Standards until the panel of trade experts provides a recommendation that the resources have been independently validated.

Since the Occupational Skills Standards have been already validated for their content by the concerned Technical Advisory Committees, the assessment resources will generally not be put through a content validation process.

### 3.3.1 Validation questions

The assessment resources shall, however require independent validation to ensure that they meet the benchmarks provided by the Occupational Skill Standards. Validation shall cover the following questions:

1. Is the problem or event clearly and simply stated?
2. Is the problem or event a practical workplace issue?
3. Do the critical questions cover the key underpinning knowledge in the standard?
4. Does the assessor checklist cover the key performance criteria in the standard?
5. Do the candidate's resources relate to the unit of competency, address essential skills and knowledge, dimensions of competency and employability skills?
6. Are the knowledge (remembering or recall of data) questions written from the point of view of a "knowledgeable client"?
7. Are the learning domain levels as submitted by the developers?

8. Will the assessment resources produce consistent outcomes when applied by a range of assessors in a range of contexts?

9. In your judgment, do the assessment resources hereby validated meets the requirements for assessing and to enable judgments to be made about whether competency has been attained by a candidate?

### 3.3.2 Validation process

The assessment resource development teams shall submit completed assessment resources to the Department of Occupational Standards. The Assessment and Certification Division of the department will then facilitate a validation workshop using sector specific trade experts. The panel of trade experts shall review the resources and confirm that the validation questions are answered in the positive. The experts can seek expertise from within the trade or occupation as required and shall consult with the resource developers where further information or explanation is required.

Once the panel members have validated the assessment resources they are submitted to the Department of Occupational Standards for formal endorsement.

### 3.3.3 Endorsement Process

The Department of Occupational Standards as the national authority responsible for the regulation of technical and vocational education and training shall approve the assessment resources. The Assessment and Certification Division shall submit the validated assessment resources for final approval to the Department of Occupational Standards. The role of the Department will be to confirm that appropriate process were used to develop the resources, confirm that the resources are suitable for the qualification level in which the Occupational Skill Standards are packaged, and, if so, formally approve the resources. Should the Department of Occupational Standards have any concerns with the resources presented for approval, these concerns shall be expressed in writing to the sector specific trade experts with a request to further review the resources.

## 3.4 The assessment resources and their components

The following looks at these resources in terms of the characteristics of high quality assessment materials.

### Clearly linked to the Occupational Skill Standards

- The problems identified are checked against the elements of competence of the Occupational Skill Standards to ensure that they are included;
- The questions pick up the underpinning knowledge in the Occupational Skill Standards;
- The justifications for procedures show that the trainee/candidate understands what he/she is doing.

### Based on real life practical skills and relevant to the workplace

- The problems to be solved are derived from real workplace issues;
- By justifying what they are doing it is like explaining to a customer or client why a job needs to be done and how it will be done.

### Easy for assessors to assess

The use of simple checklists shall ensure easy assessment.

### Assess the key skills and knowledge in the Occupational Skill Standards

- The problems identified are checked against the elements of competence in the Occupational Skill Standards to ensure that they are included;
- The questions pick up the underpinning knowledge in the Standards;

- The justifications for procedures show that the trainee/candidate understands what they are doing.

**The trainee/candidates must provide evidence that proves the trainee/candidate is able to:**

| Complete practical tasks | The problem solving shall require a practical demonstration of the solution. |
|---|---|
| **Manage more than one task at a time** | The practical demonstration shall involve organizing tasks. |
| **Use underpinning knowledge to solve problems** | The explanation of how and why a job was done shall provide evidence for the underpinning knowledge |
| **Work within regulations and follow various workplace guidelines (like policies and procedures) and standards** | Questions relating to safety and other regulations shall be asked. The practical demonstration shall include all safety aspects of the job. The practical demonstration shall involve various workplace standards. |

### 3.4.1  What is a problem?

Obviously a problem is not knowing what to do or not knowing when the consequences of an action will cause harm. When applied to a workplace, a problem could involve:

- Fixing a broken part;
- The consequences of using incorrect materials or equipment;
- Fixing a job that has gone wrong;
- Not having the right parts for a job.

### 3.4.2 What is a workplace application?

An application is usually relevant to manufacturing or processing types within different occupations. Here the issue is often being able to make a specific type of product or use a machine or process.
So instead of identifying a problem to be solved, the assessment resources shall describe the application.

For each of the Occupational Skill Standards a number of "problems" or applications shall be developed. The problems shall be:

- Relevant to workplace applications;
- Simply stated;
- Include the skills identified in the elements of competence.

### 3.4.3 Assessment Resources

The assessment resources for each occupational skill standards shall consist of:

- A description of a problem to be solved or of 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 for how the application was carried out;
- Areas in which questions should be asked to test underpinning knowledge.

Below is a complete example of an assessment resource for auto mechanic.

**The Problem (An example)**

Defective petrol fuel system

**What do you need to do?**

- You must identify the defect in the fuel system and rectify the problem;

- You must correct written answer related to petrol fuel system;

- You must answer orally some critical questions about petrol fuel system and its components.

**What assistance will you get?**

- Manual handling assistance will be made available to you upon your request;

- A copy of the assessor/s practical skill's checklist is included;

- All the relevant reference materials, tools, materials and equipment that you need.

You will be given 3 hours to complete the assessment.

**How will you be judged as competent?**

Your success in this assessment will depend upon:

- Choosing the best solution to the problem;

- Demonstrating the practical skills, including the way you use tools and equipment;

- Demonstrating your adherence to any standards, norms, specifications;

- Answering all critical questions correctly about fuel system;

- The quality of your final job;

- The way you cooperate with/lead any other people involved in this work.

To be successful, your job must demonstrate all the items on the assessor/s checklist and the quality of the final product must be approved by the assessor/s.

**Four components of competency**

The section about "What you need to do" enables the trainee/candidate to demonstrate the key skills described in the elements of competency by completing the task indicated.

The knowledge that underpins the performance criteria shall be demonstrated by the trainee/candidate when they provide their justification about why the first job was unsuccessful and why they approached the job in the way they chose the second time.

The critical questions shall enable the trainee/candidate to demonstrate their underpinning knowledge and shall be based upon the underpinning knowledge described in the assessment guide.

In the section "How you will be assessed as competent" the whole of the Occupational Skill Standards is included – performing a task (task skill), organizing work (task management), solving a problem (contingency management) and knowledge of standards, norms regulations etc (job role/work environment)

The assessor resource or checklist ensures that the performance criteria of the Skill Standards are met. This is an example of the assessor resource:

**Assessor Checklist for Practical Test**

| Occupational Skills Standard Title: | Engine Auxiliary System (Petrol Fuel System) | | |
|---|---|---|---|
| OSS Code: | 7231-M3-02-L2 | | |
| **Problem:** Defective Petrol Fuel System<br>**Task:** Repair defective petrol fuel system. | **Psychomotor (Practical) domain level:** P2 | | |
| **Trainee/candidate's Name:** | | | |
| **Place of Assessment:** | **Date of Assessment:** | | |
| **A. During the demonstration of skills did the trainee/candidate do the following:** | **YES/ No** | **Marks** | **Remarks** |
| 1. Follow all the safety procedures | | **1** | |
| 2. Use appropriate safety gears | | **1** | |
| 3. Select and use appropriate tools | | **1** | |
| 4. Park vehicle safely | | **1** | |
| 5. Identify the fault in the following process and recommend repair action; | | | |
| • Inspect fuel filter for clogging and leakage | | **1** | |
| • Inspect fuel pipes for leakage or damage | | **1** | |
| • Inspect fuel pump for proper functioning. | | **1** | |
| 6. Replace the defective parts and carry out necessary rectifications * | | **2** | |
| **B. Is the job outcome correct in the following areas?** | | | |
| 1. Starting problem eliminated | | **2** | |
| 2. Excessive Fuel consumption rectified | | **2** | |
| 3. Erratic engine rectified | | **2** | |
| **Total Marks obtained:** | | | |
| **The Trainee/candidate's performance was:** | **Satisfactory:** | | |
| | **Not Satisfactory:** | | |
| **Assessor's Name:** | **Signature:** | | |

**Note: * Most critical step**

**Oral questions to support an observation**

| Occupational Skills Standard Title: | Engine Auxiliary System (Petrol Fuel System) | | |
|---|---|---|---|
| OSS Code: | 7231-M3-02-L2 | | |

**Problem:** Defective Petrol Fuel System
**Task:** Repair defective petrol fuel system.

**Trainee/candidates' Name:**

| Place of Assessment: | | Date of Assessment: | | |
|---|---|---|---|---|

| Questions (and its domain level) to be answered by the trainee / candidate: | | Key Answer | Yes/No | Marks |
|---|---|---|---|---|
| 1 | What is the function of fuel pump? **(C2)** | To supply fuel to carburettor | | **2** |
| 2 | What is the function of carburettor? **(C2)** | To supply correct amount of fuel and air mixture in the system(engine) | | **2** |
| 3 | What is the function of fuel filter? **(C2)** | To remove foreign (dirt) particles from the fuel. | | **2** |
| 4 | What is the function of float? **(C2)** | To maintain the level of fuel in the carburettor | | **2** |
| 5 | Name the components of petrol fuel system **(C1)** | Fuel tank, fuel filter, fuel pump, carburettor, air cleaner, fuel gauge | | **6** |
| 6 | What will happen if air filter is clogged? **(C3)** | More fuel consumption and engine starting problem | | **2** |
| 7 | How many types of carburettors are used in petrol fuel system? **(C1)** | Down Draft Carburettor, Up Draft Carburettor, Side Draft Carburettor, Semi Down Draft Carburettor | | **4** |
| | | Total Marks obtained: | | |
| The trainee/candidates' answer to questions were: | | Satisfactory: | | |
| | | Unsatisfactory: | | |
| Name of Assessor: | | Signature of Assessor: | | |

**Written Question:**

| Occupational Skills Standard Title: | Engine Auxiliary System (Petrol Fuel System) | | |
|---|---|---|---|
| OSS Code: | 7231-M3-02-L2 | | |
| Name of Trainee/candidate: | | | |
| Place of Assessment: | Date of Assessment: | | |
| Questions (and its domain level) to be answered by the trainee / candidate: | Answer | YES/NO | Marks |
| **1. Carburettor is used in (C1):**<br>A. Diesel engine.<br>B. Petrol engine<br>C. Steam engine<br>D. CI engine | B | | **1** |
| **2. Petrol engine is called(C1):**<br>A. CI engine<br>B. SI engine<br>C. Steam engine<br>D. Diesel engine | A | | **1** |
| **3. Mechanical fuel pump is (C1)**<br>A. Plunger type<br>B. Diaphragm type<br>C. Reciprocating type<br>D. Eccentric type | B | | **1** |
| **4. Firing order for 4 cylinder engine is(C2):**<br>A. 1-2-3-4<br>B. 1-3-4-2<br>C. 1-4-2-3<br>D. 1-4-3-2 | B | | **2** |
| **5.** Engine block is made of **(C1)**......................... | Cast Iron | | **1** |
| **6.** Fuel pump is driven by **(C1)**---------------- | Camshaft | | **1** |
| **7.** Function of carburettor is to**(C2)**........................ | To supply correct amount of fuel air mixture at the correct time intervals) | | **2** |

| | | | |
|---|---|---|---|
| **8.** What is the purpose of volume control screw in carburettor? **(C2)** | To control correct amount of fuel supply during idling | | **2** |
| **9.** State the function of float in the carburettor? **(C2)** | To maintain correct level of fuel in the carburettor | | **2** |
| **10.** State the working principle of mechanical fuel filter. **(C1)** | Suction and pumping | | **2** |
| **Total marks obtained:** | | | |
| **The trainee/candidate's answer to question were:** | **Satisfactory:** | | |
| | **Unsatisfactory:** | | |
| **Name of the Assessor:** | **Signature of Assessor:** | | |

## 4.0  Assessor Requirements and Registration

### 4.1 Background

Bhutan has introduced competency based training. This brings with it a key requirement of using competency based assessment. To ensure the credibility and robustness of the system, a method of registering competent accredited assessors is therefore required.

### 4.2 Conducting assessment

To conduct an assessment, a person must be trained and registered as Assessor. Trained and registered assessors can assess trainee/candidates with assistance of teachers, who have a higher level of qualifications than the subject to be assessed.  The Registered Assessor has the authority and the responsibility to make the final informed judgment based on the quality and sufficiency of the evidence collected.

### 4.3 Structure

There shall be two levels of Assessors:
1.  Trained and Registered Assessors
2.  Accredited Assessors

## 4.4 Registration Process for external assessors

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┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│  Technical   │ ──▶ │  Assessor    │ ──▶ │ Applies for  │ ──────────┐
│  Specialist  │     │  Training    │     │ Registration │           │
│              │     │  Undertaken  │     │              │           ▼
└──────────────┘     └──────────────┘     └──────────────┘     ┌──────────────┐
                                                               │  Evidence    │
                                                               │  Assessed    │
                                                               │              │
                                                               └──────────────┘
                                                                      │
                                                                      ▼
                                                               ┌──────────────┐
                                                               │ Trained and  │
                                                               │ Registered   │
                                                               │ Assessor     │
                                                               └──────────────┘
                                                                      │
                                                                      ▼
┌──────────────┐     ┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│  Accredited  │ ◀── │ Evidence and │ ◀── │  Assemble    │ ◀── │  Apply for   │
│  Assessor    │     │ Experience   │     │  Evidence of │     │ accreditation│
│              │     │ Assessed     │     │  Competence  │     │              │
└──────────────┘     └──────────────┘     └──────────────┘     └──────────────┘
```
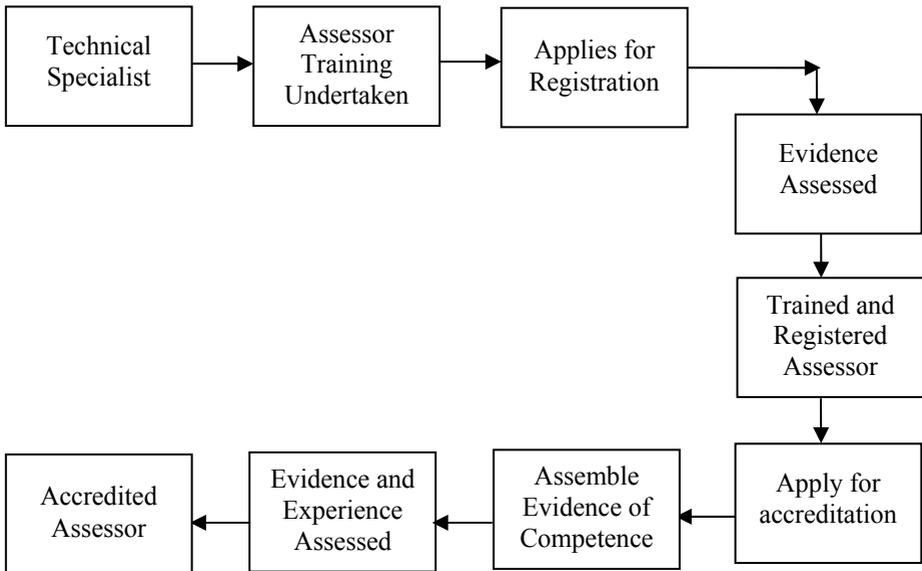
## 4.5 Requirements

To become a Registered Assessor, an individual must be able to provide sufficient evidence that he/she meets the conditions required for Assessors. They must also sign the Code of Conduct for assessors as attached in the Annexure 3 to indicate their intention to abide by them. A suitable person to become a Registered Assessor shall be expected to posses technical expertise and experience in the field, have good interpersonal skills, be observant and have an analytical mind and a desire to help people have their competencies recognized.

## 4.6 Evidence guidelines for registered assessors

An applicant to become a Registered Assessor has the responsibility of assembling sufficient, valid and authentic evidence to demonstrate their competency. A typical portfolio of evidence might include:

- Successful completion of an appropriate competency assessor training course, or evidence of equivalent underpinning knowledge;

- Completion of relevant learner guides. Evidence of equivalent learning shall also be accepted;

- Completion of a small number of actual assessments which have been peer reviewed (or reviewed by assessor selection panel). The assessments shall all be in the one technical area, but must show use of a variety of relevant evidence gathering techniques. The number of assessments will be expected to be at least two. Other evidence of equivalent competence shall be considered;

- An observation of one or more assessments shall be required, particularly if the evidence submitted is not sufficient, or to check authenticity.

All evidence submitted must be in a form which can be readily audited by the person(s) who shall certify competency. The authenticity of the evidence must be able to be established easily. Evidence shall be retained by the accredited assessment center and Department of Occupational Standards for a period of five years to allow for auditing. The record of assessment and the awarding of the qualification shall be retained for life.

## 4.7 Accredited Assessor

The Accredited Assessor scope shall include all aspects of the Registered Assessor scope. In addition, they shall be expected to work across two or more technical areas (although they may only possess technical competence in one). They shall have authority and responsibility to:

- Train and assess Registered Assessors;

- Review assessments and Assessment Instruments and Assessor Checklists and recommend improvements;

- Review the competency assessment system and recommend improvements;

- Recommend improvements to the occupational skill standards based on their use in assessment;

- They shall also be able to work in a context where Assessment Instruments and Assessor Checklists are not established and will be expected to contribute to the establishment of Assessment Instruments and Assessor Checklists.

## 4.8 Evidence guidelines for accredited assessor

An applicant to become an Accredited Assessor has the responsibility of providing sufficient, valid and authentic evidence to demonstrate their competency. A typical portfolio of evidence shall include:

- Work as a Registered Assessor showing breadth and depth of application of the assessment competency;

- Successful completion of an appropriate accredited assessor training course, or evidence of equivalent underpinning knowledge;

- Review of assessments undertaken by an applicant to become a Registered Assessor;

- Mentoring of applicants to become Registered Assessors or of new Registered Assessors;

- Formal training of applicants to become Registered Assessor;

- Completion of a moderate number of actual assessments which have been peer reviewed (or reviewed by as accredited Assessor). The assessments must be in at least two technical areas, and must show use of a wide variety of relevant evidence gathering techniques. The number of assessments shall be expected to be more than seven;

- Other equivalent evidence of competency may be acceptable.

All evidence submitted must be in a form which can be readily audited by the person(s) who will certify competency. The authenticity of the evidence must be able to be established easily.

Evidence should be retained by the accredited assessment center for a period of five years to allow for auditing. The record of assessment and the awarding of the qualification should be retained for life.

## 4.9 Technical competence

Ideally technical competence will be determined by a qualification or other certificate of competency against the relevant occupational skill standards under the BVQF. The assessor has to be a level higher than the trainee/candidate being assessed; in the absence of which it is also permissible to use the services of an assessor who are of same qualification level as the trainee/candidate but with a minimum of four years experience in that relevant field. This will not always be practical, particularly when introducing competency based assessment. Where this is not practical it is permissible to use a person who is generally recognized by the industry as a technical expert. Appropriate evidence of this industry recognition shall be sought by the Assessor. This evidence need not be of the same standard as is required for the awarding of a qualification.

## 4.10  Maintenance of Records of Registered Assessors

The Department of Occupational Standards shall initially be responsible for maintaining a data base of Registered Assessors through the management information system. The Department of Occupational Standards shall also be the initial body accrediting Registered Assessors and as such they must maintain the management information system in order to retain evidence of Assessor competence. In time, The Department of Occupational Standards may wish to delegate these responsibilities to suitably accredited organizations. Typical information to be included in the data base shall include:

**Record of Registered Assessor**

| Name: | Qualifications |
|---|---|
| Contact details | Summary of evidence |
| Assessor training dates | Date of assessor registration |
| Area of technical expertise/speciality | Other information |
| Experience | |

Evidence(s) shall be attached

### 4.11 Assessor qualifications

**Assessor training**

The person who conducts the assessment and makes the assessment decision shall need to complete the registered assessors' training course. The registered assessors training course will cover the following areas:

- Components of occupational skill standards;

- Competency based assessment principles;

- Criterion referenced assessment;

- Formative and summative assessment;

- Consistency in assessment decision making;

- Questioning skills;

- Providing feedback;

- Completing checklists;

- Preparing assessment resources;

- On-the-job and institutional assessment.

The assessor training course shall be directed by the Department of Occupational Standards.

## 4.12  Validity of the registration

A registered assessor has to conduct at least 2 assessments in a year; otherwise they will have to undergo a refresher course.

## 5.0 Certification

As part of the Bhutan Vocational Qualifications Framework (BVQF), certification is provided for each Occupational Skill Standard demonstrated. Formal qualifications are issued once the required package of standards has been demonstrated. The respective training provider who facilitated the competency based assessment will inform the assessment results to the department of Occupational Standards who is responsible for awarding the national qualification.

Assessment undertaken via a recognition process for workers with existing skill and knowledge shall be also administered by the Department of Occupational Standards. Similarly, any direct workplace assessment shall be directly administered by the Department of Occupational Standards or by any agency recommended and approved by the department.

For single occupational skill standard assessments, a skills log book shall be stamped by the training provider accredited by the Department of Occupational Standards in order to verify that the occupational skill standards has been successfully demonstrated by the trainee/candidate. The Department of Occupational Standards shall then issue a formal qualification under the BVQF once packages of occupational skill standards which form a qualification have been successfully demonstrated. For trainee/candidates wanting a formal record of achievement against individual occupational skill standard, they shall apply to the Department of Occupational Standards or accredited training provider, which shall generate appropriate statements.

## 5.1 Result sheet

Once a trainee/candidate has been assessed as competent by an accredited training provider or by a qualified assessor in the workplace, a result sheet is forwarded to the Department of Occupational Standards or to the accredited training provider's certification unit. The result sheet shall contain the:

- Trainee's/candidate's name.
- Trainee's/candidate's Citizenship Identity Card number.
- Trainee's/candidate's date of birth.
- Trainee's/candidate's Gender.

- Trainee's/candidate's Permanent home address (Village, Gewog, Dzongkhag).

- Name of the institution or workplace where assessment was conducted.

- Assessor's name and signature.

- HOD's name and signature.

- Head of the training provider's name and signature.

- Code number and title of the occupational skill standard.

- Trainee's/candidate's details of marks obtained.

Accredited training providers and the Department of Occupational Standards are responsible for maintaining records of successful assessments. The Department of Occupational Standards is responsible for the issue of National Certificates once a trainee/candidate qualifies for an award.

## 5.2 Certificates

Certificates for BVQF awards shall contain the following information:

- Royal Crest of the Royal Government of Bhutan.

- Ministry of Labour and Human Resources/DOS Logo approved for the purpose, if any.

- Industry logo if qualifications achieved within the industry or at a workplace.

- Logo and number of accredited training provider where assessment has taken place, if qualifications are achieved at a training institution.

- Code number and name of the qualification/Certificate No.

- Trainees/candidates full name and Citizenship ID No and date of birth.

- A list of the Occupational Skill Standard titles that make up the qualification (on the back of the certificate).

If assessment is undertaken by an accredited provider, the provider must supply the Department of Occupational Standards with training provider/company logo if these are to be desired on the certificate.

## 6.0 Appeal Access

There will be a process for appeals by the trainee/candidates who wish to challenge the assessment results in place and an opportunity to be reassessed. The appeal process is as follows:

- The disagreement with the results should be made to the department of occupational standards in writing with supplementary information;

- The department of occupational standards will verify the assessment records;

- Based on the verification, the department shall inform the trainee/candidate about the success or otherwise, and inform the trainee/candidate about the right to re-assessment with another assessor;

- There will be a reasonable non-refundable appeal fee in order to discourage frivolous appeals. In case of re-assessment, an additional assessment fee will also be charged (as approved by the government from time to time).

**References**

1. Department of Training and Workforce Development. 2010. *Guidelines for assessing competence in VET* 3rd Edition. East Perth.

2. National apprentice and Industrial Training Authority. *Guidelines for Competency Based Assessments.* Colombo 5.

**ANNEXURES**

## 1. Evidence Matrix

| Evidence Matrix | | | | | | |
|---|---|---|---|---|---|---|
| **Occupation: Plumber** | | | | | | |
| **OSS Title:  Prepare pipes for laying or installation** | | | | | | |
| **Code:7126-M1-02-L1** | | | | | | |
| **Elements and Performance Criteria** | **Written test** | **Practical test** | **Oral questions** | **Supervisor report** | **Trainee logbook** | **scope** |
| **1** | | | | | | |
| 1.1 | | | √ | | | |
| 1.2 | √ | | √ | | | |
| 1.3 | √ | √ | | | | |
| **2** | | | | | | |
| 2.1 | | √ | | | | |
| 2.2 | √ | | √ | | √ | |
| 2.3 | | | | | √ | |
| 2.4 | √ | | √ | | | |
| **3** | | | | | | |
| 3.1 | | √ | √ | | | |
| 3.2 | | √ | | | | |
| 3.3 | √ | | √ | | | |

## 2. Assessment Resources

### *2.1.Trainee/candidate Resource*

| | |
|---|---|
| **Occupational Skills Standard Title** | |
| **OSS Code** | |
| **Time Duration** | |
| **Problem or Project:**<br><br>Provide a practical workplace problem or activity to be solved or performed that will gather all the evidences of skills required in the Occupational Skills Standard | |

**Introduction: (What do you need to do?)**

One or two sentences description of the task on the problem or project. Outline briefly the oral or written answers required:

- You will be asked series of oral questions to support demonstration……..
- You will be given written questions to …..

Oral questions shall be of the following types:
- Close ended
- Probing
- Leading

Written questions shall be of the following types:
- Multiple response
- True or false
- Matching
- Completion
- Short answer

**Observation: (How will you be assessed as Competent?)**

Your performance will be observed based on the following:

- •Demonstrating the practical skills, including the way you use tools and equipment

- Demonstrating your adherence to any standards, norms and specifications

- Answering all critical questions correctly about (…………………………..)

- The quality of your (…………………………..) work?

- The final outcome of your (…………………………..) Work?

- The way you cooperate with any other people involved in this work

**Materials and Equipments (What assistance will you get?)**

All relevant reference material, tools, materials and equipment that the trainee/candidate needs.

**The trainee/candidates' overall Result:**

**Competent** ☐     **Not Yet Competent** ☐

## 2.2 Assessor Resources

### 2.2.1 Observation Checklist

| | | | |
|---|---|---|---|
| **Occupational Skills Standard Title:** | | | |
| **OSS Code:** | | | |
| **Problem/Project:** | **Psychomotor (Practical) domain level:** | | |
| **Trainee/candidate's Name:** | | | |
| **Place of Assessment:** | **Date of Assessment:** | | |
| **A. During the demonstration of skills did the trainee/candidate do *the* following:** | **YES/NO** | **Marks** | **Remarks** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| **B. Is the job outcome correct in the following areas?** | | | |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| **Total marks obtained:** | | | |
| **The Trainee/candidate's performance was:** | **Satisfactory:** | | |
| | **Not Satisfactory:** | | |
| **Assessor's Name:** | **Signature:** | | |

## 2.2.2 Oral questions checklist

| Occupational Skills Standard Title: | | | |
|---|---|---|---|
| **OSS Code:** | | | |
| **Problem/Project:** | | | |
| **Trainee/candidate's Name:** | | | |
| **Place of Assessment:** | **Date of Assessment:** | | |
| **Questions (and its domain level) to be answered by the trainee / candidate:** | **Key Answer** | **YES/NO** | **Marks** |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| **Total Marks Obtained:** | | | |
| **The trainee/candidate's answer to questions were:** | **Satisfactory:** | | |
| | **Unsatisfactory:** | | |
| **Name of Assessor:** | **Signature of Assessor:** | | |

### 2.2.3 Written Question Checklist:

| Occupational Skills Standard Title: | | | |
|---|---|---|---|
| **OSS Code:** | | | |
| **Problem/Project:** | | | |
| **Name of the Trainee/candidate:** | | | |
| **Place of Assessment:** | **Date of Assessment:** | | |
| **Questions to be answered by the trainee/candidate:** | **Answer** | **YES/NO** | **Marks** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| **Total marks obtained:** | | | |
| **The trainee/candidate's answer to question were:** | **Satisfactory:** | | |
| | **Unsatisfactory:** | | |
| **Name of the Assessor:** | **Signature of Assessor:** | | |

## 2.2.4  Assessment Report:

| | | | |
|---|---|---|---|
| **Occupational Title:** | | | |
| **National Certificate Level:** | | | |
| **Name of the Trainee/candidate:** | | | |
| **Place of Assessment:** | | **Date of Assessment:** | |
| **The Trainee/candidate's over all marks (percentage) obtained:** | **Practical (80%):** | | **Overall Percentage (100%):** |
| | **Theory (20%):** | | |
| **The Trainee/candidate's overall result:** | **Competent (Greater than 60% with competence in the most critical tasks/steps):** | | |
| | **Not Yet Competent (Less than 60%):** | | |

| |
|---|
| **Feedback to Trainee/candidate:** <br> (Provide feedback to the trainee/candidate on how they could improve – especially if they are Not Yet Competent) |

| | | |
|---|---|---|
| **I am satisfied with the way assessment was conducted:** <br> (Please include reasons if not satisfied) <br><br><br> **Trainee/candidate Name:** <br><br> **Signature:** <br><br> **Date:** | **YES** | **NO** |

| |
|---|
| **Assessor Name:** <br><br> **Signature:** <br><br> **Training Provider:**               **Date:** |

## 3. Code of conduct for registered assessors

### Introduction

Training providers have to ensure that they have quality assessment systems in place and that such systems include a Code of Conduct for registered assessors against which the credibility of assessment decisions with regard to occupational skill standards and qualifications within the Bhutan vocational qualifications framework can be monitored.

### Code of conduct

All registered assessors must be familiar with the Assessors' Code of Conduct. Assessors are required to conduct themselves with integrity in a responsible, respectful and ethical manner when interacting with trainee/candidates as well as others involved in the assessment process. Corrective action will be taken against assessors who fail to conduct themselves in accordance with this Code of Conduct. In order to avoid disciplinary action assessors must adhere to the Code of Conduct.

Practicing assessors must be registered with Department of Occupational Standards, Ministry of Labour and Human Resources which will ensure that assessors will have the necessary training and are in possession of the appropriate assessor qualifications.

The primary role of assessors is to assess trainee/candidates' performance and/or related knowledge in a range of tasks and to ensure that the competence/knowledge and attitude demonstrated meets the requirements of the occupational skill standards.

Assessors must therefore have occupational and contextual expertise in the competence areas to be assessed. In addition assessment expertise, inter-personal skills and planning skills are essential requirements. Furthermore, assessors will have to:

Adhere to all the principles of assessment as set out in the guidelines for assessment. The principles are:

- Validity; fairness; sufficiency; integration into work or learning; authenticity; currency; cost effective; Flexibility; and Reliability;

- Adhere to principles of confidentiality;

- Follow assessment guidance given by Assessment and Certification Division, Department of Occupational Standards, Ministry of Labour and Human Resources;

- Liaise with colleague assessors and internal verifiers/moderators to implement the requirements of the assessment system;

- Adhere to the evidence requirements of Assessment and Certificate Division's assessment resource material in order to ensure that valid, consistent and reliable assessment is maintained, with special reference to:

  a. Plan and review assessment with trainee/candidates and reach agreement with trainee/candidates on place, time and method of assessment;

  b. Advice trainee/candidates on issues related to the collection of evidence for assessment.

- Identify and meet special assessment needs of trainee/candidates regarding, amongst others language, illiteracy and disabilities;

- Practice good interpersonal skills when dealing with trainee/candidates;

- Communicate effectively, using non-abusive language;

- Provide information, guidance and advice on access and equal opportunities for new trainee/candidates and others concerned in the assessment process;

- Ensure that barriers to assessments are not directly created through lengthy timescales and inappropriate assessment methods used in assessment processes;

- Ensure that no discrimination of whatever kind is practiced as far as ethnic origin, appearance, likes/dislikes, sexual orientation, age, pregnancy, marital status, family responsibility, social groups, HIV

status, conscience, political opinion, culture, language and birth, harassment is concerned;

- Brief trainee/candidates fully on the assessment process;

- Inform trainee/candidates about their options in the event of unhappiness with assessment procedures or assessor decisions with regard to the organisations appeals policy and procedures;

- Ensure that an appropriate range of assessment methods and instruments are used to collect trainee/candidates' evidence;

- Provide trainee/candidates and other relevant parties with prompt, accurate and constructive feedback;

- Maintain records of trainee/candidates' achievements by completing the required documentation;

- Arrange, where necessary re-training and re-assessment;

- Review good and bad assessment practices with special reference to assessment design and process, and weaknesses in assessment arising from poor quality of occupational skill standards or qualifications. Take steps to rectify weaknesses;

- After assessments ensure that evidence gathered from trainee/candidates are stored in portfolios of evidence and captured on the MoLHR TVET - MIS database system and accordance with the verification requirement and that these documents are verified by internal verifiers according to quality assurance requirements.

**Misconduct**

**Conduct of the assessors during the assessment process**

Assessors are obliged to refrain from misconduct during the assessment process, and where instances of misconduct occur, the Department of Occupational Standards and the training provider are authorised to take disciplinary / corrective action.

**Procedural Fairness**

Where instances of misconduct occur the Training provider / assessment center must ensure that there is substantive as well as procedural fairness, i.e. there must be a valid reason and a fair procedure in place when disciplinary action is taken.

**Substantive Fairness**

To ensure substantive fairness the training provider / assessment center must be certain, before reporting to the Department of Occupational Standards, that there is a valid reason for taking disciplinary action against the assessor.

**Procedural Fairness**

The training provider / assessment center must have fair assessment policies and procedures in place for grievance, disciplinary action and appeals, which will provide for investigations to be conducted by assessment specialists provided by the Department of Occupational Standards.