



Technical and Vocational Education and Training (TVET) Council



**Occupational Standards
of Competence**

Stevedoring Operations - Equipment Operator

Level 2

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Qualification Overview

NVQB

in

Stevedoring Operations - Equipment Operator

Level 2

NVQB in Stevedoring Operations – Equipment Operator Level 2

Qualification Overview

The qualification is designed to develop and improve the technical skills of operators in the stevedoring industry. Candidates at this level must have an understanding of the operations within the Barbados Port Inc., such as preparing and transferring cargo, checking and assessing the operational capability of equipment, handling dangerous goods and hazardous substances and operating light and heavy forklifts. The qualification may also assist persons seeking entry into the manufacturing sector who have to operate forklift trucks and machinery.

Like all NVQs this qualification is competence based. This means that it is linked to the candidates' ability to competently perform a range of tasks connected with their work. Candidates must plan a programme of development and assessment with their assessor and compile a portfolio of evidence to prove that they are competent in their work role.

Who is this qualification for?

The NVQB in Stevedoring Operations –Equipment Operator is aimed at persons employed as equipment operators in the Barbados Port Inc. The qualification is designed for candidates at operator level who have responsibility for operating forklift equipment. This list is not exhaustive and only serves to illustrate the breadth of the qualification.

Jobs within the occupational area

Forklift drivers
Stevedores
Lifting equipment operators

DRAFT NATIONAL VOCATIONAL QUALIFICATION STRUCTURE

STEVEDORING OPERATIONS – EQUIPMENT OPERATOR – LEVEL 2

The qualification is made up of six (6) mandatory units. To achieve a full award, candidates must complete **all** six (6) mandatory units.

Mandatory units (All must be completed)	<u>CODES</u>
1. Ensure your own actions reduce risks to safety and health	U18103
1.1 Identify the hazards and evaluate the risks in your workplace	
1.2 Reduce the risks to safety and health in your workplace	
2. Handle dangerous goods and hazardous substances	U75402
2.1 Identify requirements	
2.2 Follow safety and emergency procedures	
2.3 Handle dangerous goods and hazardous substances	
3. Determine mass, area and quantify dimensions	U75502
3.1 Identify types of loads	
3.2 Estimate loads for transportation or storage	
4. Prepare and transfer cargo	U75602
4.1 Prepare for transfer of cargo	
4.2 Check lifting equipment and securing devices	
4.3 Transfer cargo	
5. Check and assess the operational capability of equipment	U75702
5.1 Inspect and assess equipment	
5.2 Test the operational capability of equipment	
5.3 Identify and assess faults	
5.4 Record and report results of inspection and testing	
6. Operate a forklift	U75802
6.1 Inspect and assess forklift	
6.2 Drive forklift	
6.3 Operate forklift to handle loads	
6.4 Monitor site conditions	
6.5 Monitor and maintain forklift performance	

U18103

Ensure your own actions reduce risks to safety and health

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to reduce risks to safety and health in the workplace. It covers identifying hazards, evaluating risks and ensuring that candidates examine their own actions to prevent or minimize risks to safety and health.

The unit is for everyone in work, whether paid, unpaid, full-time or part-time. It does not require the candidate to undertake a full risk assessment but to have an appreciation of the significant risks in the workplace, knowing how to identify them and what actions to take.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|--|---|
| 1. Identify hazards and evaluate risks | 1.1 Correctly name and locate the persons responsible for safety and health in the workplace according to organizational procedures. |
| | 1.2 Identify organizational policies relevant to working practices. |
| | 1.3 Identify working practices and hazards in the workplace which may be harmful to yourself or others. |
| | 1.4 Evaluate which potentially harmful working practices and hazards in the workplace that are of the highest risk to yourself or others. |
| | 1.5 Report those hazards which present a high risk to persons responsible for safety and health in the workplace |
| | 1.6 Deal with hazards that present low risks in accordance with organizational policies and legal requirements. |

2. Reduce risks to safety and health
 - 2.1 Carry out working practices in accordance with legal requirements and **organizational policies**, while ensuring the safety and health of yourself and others.
 - 2.2 Identify and follow up-to-date **organizational policies** for your own role.
 - 2.3 Rectify safety and health **risks** within your capability and the scope of your own job role.
 - 2.4 Pass on any suggestions for reducing **risks** to safety and health within your job role to the responsible persons.
 - 2.5 Demonstrate personal conduct that does not endanger the safety and health of yourself or others.
 - 2.6 Use equipment, materials, **agents and products** correctly and safely in accordance with **organizational policies**, and suppliers' manufacturers' instructions.
 - 2.7 Report any differences between **organizational policies** and suppliers' or manufacturers' instructions according to organizational procedures.

RANGE STATEMENT

All range statements must be assessed:

1. Organizational policies:

- Health and safety
- Fire
- Evacuation

2. Hazards:

- Physical
- Environmental
- Chemical
- Administrative

3. Risk:

- Faulty machinery or equipment
- Use of biological agents or substances
- Non-compliant administrative and industrial working practices
- Unsafe behavior
- Accidents
- Environmental factors

4. Agents and products:

- Chemical
- Biological

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. Who are the persons responsible for safety and health in the workplace and the organizational procedures for contacting them.
2. What are the organizational policies relevant to safe working practices.
3. What are your personal responsibilities in relation to maintaining safety and health in your work role and within the workplace.
4. How to rectify safety and health risks within your capability and the scope of your own job role.
5. How to identify working practices and hazards in the workplace which may be harmful to yourself or others.
6. What are the particular safety and health risks which may be present in your own job role and the precautions you must take.
7. Why it is important to remain alert to the presence of hazards in the whole workplace.
8. How to evaluate which potentially harmful working practices and hazards in the workplace may be of the highest risk to yourself or others
9. What are the organizational procedures for reporting potentially harmful working practices and hazards which represent a risk to yourself or others.
10. What are the organizational procedures for dealing with hazards that present low risks.
11. Why it is important to promptly deal with or report risks.
12. How to carry out working practices in accordance with legal requirements and organizational procedures.
13. How to identify and follow up-to-date procedures in your own work role.
14. How to rectify safety and health risks within your capability and the scope of your own job role.
15. What are the suppliers' and manufacturers' instructions for the safe use of equipment, materials and products.
16. How to report any differences among organizational policies, suppliers' and manufacturers' instructions according to organizational procedures.
17. How to pass on suggestions for reducing risks to safety and health within your job role to the responsible persons.
18. How to demonstrate personal conduct that does not endanger the safety and health of yourself or others. persons.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** the performance criteria, range and underpinning knowledge **on more than one occasion**. This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Products of work
- Observation
- Written/ oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used** except in exceptional circumstances where natural work evidence is unlikely to occur.

U75402

Handle dangerous goods or hazardous substances

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to handle dangerous goods and hazardous substances.

It includes identifying the requirements for working with dangerous goods and/or hazardous substances, confirming site incident procedures, selecting handling techniques, and handling and storing dangerous goods and hazardous substances.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | | | |
|----|--|-----|--|
| 1. | Identify requirements | 1.1 | Identify dangerous goods and hazardous substances from relevant documentation . |
| | | 1.2 | Correctly identify and apply storage requirements for dangerous goods and hazardous substances according to the labelling. |
| | | 1.3 | Identify and use legislative requirements for dangerous goods and hazardous substances in planning work activities. |
| | | 1.4 | Observe handling procedures for different classes and characteristics of goods. |
| | | 1.5 | Seek confirmation from relevant persons where dangerous goods and hazardous substances are not appropriately marked. |
| 2. | Follow safety and emergency procedures | 2.1 | Identify and confirm safety procedures with relevant persons . |
| | | 2.2 | Select and wear personal protective equipment according to organizational procedures. |
| | | 2.3 | Clearly identify and follow emergency reporting procedures. |

- 2.4 Select and operate **emergency equipment** appropriately according to the manufacturer's guidelines.
- 3. Handle dangerous goods and hazardous substances
 - 3.1 Select **handling equipment** according to identified requirements and procedures.
 - 3.2 Check **handling equipment** carefully for conformity according to organizational procedures and manufacturers' guidelines.
 - 3.3 Use appropriate handling techniques in accordance with labelling when working with dangerous goods and hazardous substances.

RANGE STATEMENT

All range statements must be assessed:

1. Dangerous goods and hazardous substances:

- Corrosive substances
- Flammable substances
- Explosives
- Spontaneously combustible substances
- Toxic substances
- Oxidizing
- Water-reactive substances

2. Relevant documentation:

- Classification labels
- Manifests
- Materials data sheets

3. Relevant persons:

- Supervisory Staff
- Clerical Officer

4. Personal protective equipment (PPE):

- Gloves
- Safety headwear
- Safety footwear
- Reflective vest
- Safety mask
- Protective clothing
- Breathing apparatus
- Safety goggles

5. Handling equipment:

- Clamp attachment
- Telescoping forklift boom
- Fixed length forklift boom

6. Emergency equipment:

- Fire extinguisher
- Eye wash station
- Fire hoses

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are dangerous goods and hazardous substances and how they are identified.
2. What are the storage requirements for dangerous goods and hazardous substances and how they are applied.
3. What are the legislative requirements for dangerous goods and hazardous substances.
4. What are the organizational handling and safety procedures for dangerous goods and hazardous substances.
5. How and from whom to seek confirmation when dangerous goods and hazardous substances are not appropriately marked.
6. What is personal protective equipment (PPE), where it is located and how it should be checked and worn.
7. What are the organizational emergency reporting procedures.
8. What is handling and safety equipment and how it should be selected, checked and operated.
9. What is emergency equipment and how it should be located and operated.
10. What are appropriate handling techniques and how they are applied to dangerous goods and hazardous substances.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** of the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on one occasion**. This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used** except in exceptional circumstances where natural work evidence is unlikely to occur.

U75502**Determine mass, area and quantify dimensions**

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to determine mass and area and quantify dimensions in the stevedoring industry.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|---|--|
| 1. Identify types of loads | <ul style="list-style-type: none"> 1.1 Read relevant documentation to be processed and note the requirements. 1.2 Identify the type of cargo to be processed. 1.3 Complete appropriate documentation accurately according to workplace requirements. |
| 2. Estimate loads for transportation or storage | <ul style="list-style-type: none"> 2.1 Total the weight of individual items to estimate the load. 2.2 Identify allowable load limits for transport or storage systems. 2.3 Identify shapes, loads, balance characteristics, dimensions and mass. 2.4 Estimate the area required for storage according to the dimensions of cargo. 2.5 Calculate the total weight of individual loads for transport or storage system. 2.6 Restrict loads to the allowable range. 2.7 Spread the load to ensure safe weighting on transport or storage systems. |

RANGE STATEMENT

All range statements must be assessed:

1. Relevant documentation:

- Ship plan
- Manifest
- Area floor plan

2. Transport or storage systems:

- Pallets
- Trucks
- Platforms
- Containers
- Trailers

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What is the relevant documentation and how it is referenced and processed.
2. What are the types of cargo and how they are processed.
3. What is the appropriate workplace documentation and how this should be completed.
4. What are transport and storage systems.
5. How to total the weight of individual items to estimate loads.
6. How to estimate loads for transport and storage.
7. What are the allowable limits for transport and storage systems and how these are identified.
8. How to identify shapes, load, balance characteristics, dimensions and mass.
9. How to estimate area required for storage.
10. What is the allowable range for loads and how it is restricted.
11. How to spread loads on transport and storage systems.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** of the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on one occasion**. This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used** except in exceptional circumstances where natural work evidence is unlikely to occur.

U75602**Prepare and transfer cargo**

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to prepare and transfer cargo.

It includes calculating the Safe Working Load (SWL) or Working Load Limit (WLL) of lifting equipment and loads.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|---|---|
| 1. Prepare for transfer of cargo | <ul style="list-style-type: none"> 1.1 Identify and wear personal protective equipment correctly according to the task. 1.2 Prepare and maintain the work area in accordance with organizational and safety requirements. 1.3 Identify load characteristics to determine special handling requirements. 1.4 Establish the pathway for load transfer consistent with organizational procedures, noting obstacles and any particular safety precautions. 1.5 Calculate the Safe Working Load (SWL) or Working Load Limit (WLL) using standardized formulae for different types of lifting equipment and securing devices. 1.6 Check cargo and report any damage to relevant personnel. |
| 2. Check lifting equipment and securing devices | <ul style="list-style-type: none"> 2.1 Check lifting equipment and securing devices for conformity with organizational health and safety requirements. 2.2 Check securing devices to ensure that they comply with load requirements and are correctly attached. 2.3 Report unsafe work practices and faulty equipment in accordance with organizational procedures. |

3. Transfer cargo
 - 3.1 Lift and steady the load according to standard operating procedures.
 - 3.2 Transfer and set down the load, ensuring no injury to personnel or damage to equipment and cargo.
 - 3.3 Release **securing devices** from the load safely, ensuring no injury to personnel or damage to equipment and cargo.
 - 3.4 Identify and report damaged cargo according to organizational procedures.

RANGE STATEMENT

All range statements must be assessed:

1. Personal protective equipment (PPE):

- Gloves
- Safety headwear
- Safety footwear
- Reflective vests
- Safety masks
- Protective clothing
- Breathing apparatus
- Reflector vests
- Safety eyewear

2. Lifting equipment:

- Light forklift
- Heavy forklift
- Telescopic extended jib
- Extension blades
- Paper clamp
- Mounted carpet boom
- Coil lifting ram
- Chains/wire/ropes with assorted lifting attachments

3. Securing devices:

- Fibre ropes
- Wire ropes
- Chains
- Webbing slings
- Turnbuckles
- Straps

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the organizational and safety requirements relating to preparing and transferring cargo.
2. What is personal protective equipment (PPE), where it is located and how it is checked and worn.
3. How to prepare and maintain the work area for transferring cargo.
4. What are load characteristics and special handling requirements and how they are identified and determined.
5. How to detect and report unsafe work practices and faulty equipment.
6. What are Safe Working Loads (SWL) and Work Load Limits (WLL) and how they are calculated.
7. What is lifting equipment and how it is checked.
8. What are securing devices and how they are checked.
9. How are securing devices attached and released from the load.
10. How to lift, steady and transfer loads.
11. How to identify and report damaged cargo.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** of the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on one occasion**. This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used** except in exceptional circumstances where natural work evidence is unlikely to occur.

U75702

Check and assess the operational capability of equipment

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to check and assess the operational capability of equipment, to ensure that all specified safety requirements are met and that the vehicle is operational in accordance with the requirements of the workplace and relevant authorities.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|--|---|
| 1. Inspect and assess equipment | 1.1 Inspect equipment prior to start-up in accordance with pre-operational functional safety check procedures.

1.2 Check components of equipment in accordance with pre-operational functional safety check procedures.

1.3 Carry out inspection procedures according to the manufacturer's specifications and organizational procedures. |
| 2. Test the operational capability of equipment | 2.1 Test equipment and components after start-up in accordance with the manufacturer's specifications.

2.2 Follow testing procedures according to the manufacturer's specifications and organizational procedures.

2.3 Check warning systems for operational effectiveness. |
| 3. Identify and assess faults | 3.1 Identify faults and assess their potential effect on the operation of the equipment.

3.2 Report faults that may affect the safe operation of the equipment to the appropriate personnel for rectification. |
| 4. Record and report results of inspection and testing | 4.1 Report the results of inspection and testing accurately in accordance with regulatory requirements and organizational procedures. |

- 4.2 Keep clear, concise and unambiguous records in accordance with organizational procedures.
- 4.3 Make clear reference to any items that may affect the future safety of the equipment.

RANGE STATEMENT

All range statements must be assessed:

1. Warning systems:

- Instruments
- Gauges
- Alarms (auditory and visual)

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the pre-operational functional safety check procedures.
2. What are the manufacturer's specifications and the organizational procedures relating to inspection, testing and safety.
3. How to inspect and test equipment and check its components.
4. What are warning systems and how they are checked.
5. What are faults and how they are identified and assessed.
6. How and to whom are faults reported.
7. What are the regulatory requirements relating to reporting results of inspection and testing.
8. How are results of inspection and testing reported.
9. How records are kept.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** of the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on one occasion for each category of equipment**. This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used** except in exceptional circumstances where natural work evidence is unlikely to occur.

U75802

Operate a forklift

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to operate a forklift to perform operations, to ensure that all specified safety requirements are met and that the vehicle is operating in compliance with the requirements of the workplace and relevant authorities.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|--------------------------------|--|
| 1. Inspect and assess forklift | <ul style="list-style-type: none"> 1.1 Check the condition of the forklift for compliance with organizational requirements regarding safety, warning systems, the manufacturer's specifications and the nature of the load-shifting task. 1.2 Check attachments to ensure the appropriate adjustment and operation in accordance with the manufacturer's specifications. 1.3 Adjust mirrors, seats and seatbelts for safe operation by the driver. 1.4 Report faults or damage to the appropriate authority in accordance with organizational procedures. |
| 2. Drive a forklift | <ul style="list-style-type: none"> 2.1 Start, steer, manoeuvre, position and stop the forklift in accordance with regulations and the manufacturer's instructions. 2.2 Manage the engine power to ensure efficiency and performance and to minimize engine and gear damage. 2.3 Identify and avoid or control operational hazards by applying defensive driving and appropriate hazard control techniques. 2.4 Drive the forklift in reverse, maintaining visibility and achieving accurate positioning. 2.5 Park, shut down and secure the forklift in accordance with the manufacturer's |

- specifications and organizational procedures.
3. Operate a forklift to handle loads
 - 3.1 Plan the lifting task to be undertaken and select the correct lifting truck and attachments.
 - 3.2 Lift, carry, lower and set down the load in accordance with occupational health and safety legislation, the manufacturer's specifications and organizational procedures.
 4. Monitor site conditions
 - 4.1 Identify **hazards** and traffic flow and make appropriate adjustments when selecting the most efficient route.
 - 4.2 Assess site conditions to enable safe operation and ensure that no injury to persons or damage to property, equipment, loads or facilities occurs.
 5. Monitor and maintain forklift performance
 - 5.1 Monitor the performance and efficiency of vehicle operation during use.
 - 5.2 Report defective performance and malfunctions to relevant personnel.

RANGE STATEMENT

All range statements must be assessed:

1. Warning systems:

- Instruments
- Gauges
- Alarms (auditory and visual)

2. Attachments:

- Mounted carpet boom
- Paper clamps
- Telescopic extended jib

3. Hazards:

- Dangerous or hazardous substances
- Movement of equipment, goods and materials
- Slippery operating surfaces
- Faulty brakes
- Workplace obstacles
- Damaged loads and pallets
- Personnel in work area

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the organizational requirements and manufacturer's specifications relating to inspection, assessment and safety of forklifts.
2. What are warning systems and how they are checked.
3. How to check the condition of the forklift.
4. What are the attachments of the forklift and how they are attached and checked.
5. Why and how are the mirrors, seats and seatbelts checked to ensure safe operation by the driver.
6. Why and how are logbooks checked.
7. What is the appropriate documentation and how it is completed.
8. How to start, steer, manoeuvre, position and stop a forklift.
9. How to manage engine power to ensure efficiency and performance to minimize damage.
10. What are hazards and how they are identified and avoided or controlled.
11. What are defensive driving and hazard control techniques and how they are applied.
12. How to safely and accurately drive a forklift in reverse.
13. How to park, shut down and secure a forklift.
14. How to plan lifting tasks and select the correct lifting truck and attachments.
15. How to lift, carry, lower and set down a load.
16. How to identify traffic flow and make adjustments when selecting routes.
17. How to assess site conditions for safe operation.
18. How to monitor performance and efficiency of vehicle.
19. How to detect defective performance and malfunctions and how to report them.
20. Why and how are forklift records maintained.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** of the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on one occasion on both light and heavy forklifts**. This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used** except in exceptional circumstances where natural work evidence is unlikely to occur.

Level

2

Glossary of Terms

Assessment methods

The methods which can be used to determine competence in performance and underpinning knowledge.

Assessors

The Assessor's role is to determine whether evidence presented by a candidate for assessment within the programme meets the required standard of competence in the relevant unit or element. The assessor needs to be competent to assess to national standards in the area under assessment.

Approved centre

Organization/centre approved by the TVET Council to offer full National Vocational Qualifications (NVQs).

Case studies

In situations where it is difficult for workplace assessment to take place, case studies can offer the candidate an opportunity to demonstrate potential competence.

A case study is a description of an actual or imaginary situation presented in some detail. The way the case study is presented will vary depending upon the qualification, but the most usual methods are written, video or audio taped.

The main advantage of a case study is the amount of evidence of underpinning knowledge it can generate and the specific nature of the evidence produced.

Competence

In the context of vocational qualifications, competence means the ability to carry out prescribed activities to nationally predetermined standards in an occupation. The definition embraces cognitive, practical and behavioural skills, underpinning knowledge and understanding and the ability to react appropriately in contingency situations.

Element

An element is a description of an action, behaviour or outcome which a person should be able to demonstrate.

Explanation of NVQ levels

NVQs cover five (5) levels of competence, from entry level (Level 1) through to senior management (Level 5).

Level

2

Glossary of Terms

Level 1 – Entry level

Recognizes competence in a range of varied work activities performed in a variety of contexts. Most work activities are simple and routine. Collaboration with others through work groups or teams may often be a requirement. Substantial supervision is required especially during the early months evolving into more autonomy with time.

Level 2 – Skilled occupations

Recognizes competence in a broad range of diverse work activities performed in a variety of contexts. Some of these may be complex and non-routine and involve some responsibility and autonomy. Collaboration with others through work groups or teams and the guidance of others may be required.

Level 3 – Technician and supervisory occupations

Recognizes competence in a broad range of complex, technical or professional work activities performed in a wide variety of contexts, with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources are often a requirement. The individual is capable of self-directed application and exhibits problem solving, planning, designing and supervisory capabilities.

Level 4 – Technical specialist and middle management occupations

Recognizes competence involving the application of a range of fundamental principles and complex techniques across a wide and unpredictable variety of contexts. Requires very substantial personal autonomy and often significant responsibility for the work of others, the allocation of resources, as well as personal accountability for analysis, diagnosis, design, planning, execution and evaluation.

Level 5 – Chartered, professional and senior management occupations

Recognizes the ability to exercise personal professional responsibility for the design, development or improvement of a product, process, system or service. Recognizes technical and management competencies at the highest level and includes those who have occupied positions of the highest responsibility and made outstanding contributions to the promotion and practice of their occupation.

External Verifier

The External Verifier is trained and appointed by the TVET Council and is competent to approve and ensure an approved centre's quality of provision.

Internal Verifier

The Internal Verifier acts in a supporting role for Assessors to ensure the consistent quality of assessment and competence. He or she needs to be competent to assess to national standards in the area under assessment.

Level

2

Glossary of Terms

NVQs

National Vocational Qualifications (NVQs) are work-based qualifications that assess an individual's competence in a work situation and certify that the individual can perform the work role to the standards expected in employment.

NVQs are based on national occupational standards of competence drawn up by standards-setting bodies known as Industry Lead Bodies. The standards describe the level and breadth of performance expected of persons working in the industry or sector which the NVQ covers.

NVQ Coordinator

The NVQ Coordinator is the contact person within each approved centre offering NVQs, who has overall responsibility for the operation and administration of the NVQ system.

Observation

Observation of candidates carrying out their job in the workplace is the assessment method recommended in the vast majority of units and elements. Observation of staff carrying out their duties is something that most supervisors and managers do every day.

Performance criteria

Performance criteria indicate the requirements for the successful achievement of an element. They are descriptions of what the Assessor would expect to see in competent performance.

Product of work

The product of work may be items produced during the normal course of work, such as reports, menus, promotional literature, training plans, etc., which can be used for evidentiary purposes.

Questioning

Questioning is one of the most appropriate ways to collect evidence to assess a candidate's underpinning knowledge and understanding.

Questioning can also be used to assess a candidate in those areas of work listed in the range which cannot be assessed by observation. Guidance on when this assessment method can be used is given in the assessment guidance of each individual element.

As an assessment method, questioning ensures that the Assessor has all of the evidence about a candidate's performance. It also allows the Assessor to clarify situations.

Level

2

Glossary of Terms

Range statements

The range puts the element of competence into context. A range statement describes the range of situations to which an element and its performance criteria should be applied.

Range statements are prescriptive; therefore, each category must be assessed.

Role plays

Role plays are simulations where the candidates are asked to act out a situation in the way they consider 'real' people would behave. By using role-play situations to assess candidates, assessors are able to collect evidence and make a judgement about how the candidates are most likely to perform in a similar workplace situation. This may be necessary if the range specified includes a situation in which the candidates are unlikely to find themselves in the normal course of their work, or where the candidates need to develop competence before being judged competent, for example, in a disciplinary situation.

Simulations

Where possible, assessment should always be carried out by observing **natural performance** in the workplace. **Simulated performance**, however, can be used where specified to collect evidence about an aspect of candidates' work which occurs infrequently or is potentially hazardous; for example, dealing with fires.

By designing the simulated situation, briefing the candidates and observing their performance, the Assessor will be able to elicit evidence which will help him/her judge how candidates are **most likely** to perform in real life.

Supplementary evidence

Supplementary evidence can be used to confirm and support performance evidence. Types of supplementary evidence include witness testimonies, reports, journals or diaries, records of activities, personal statements and simulation. (See note in glossary.)

Underpinning knowledge

Underpinning knowledge indicates the knowledge that is **essential** for a candidate to possess in order to successfully achieve an element and prove total competence.

Units

A unit of competence describes one or more than one activity which forms a significant part of a candidate's work. Units are accredited separately but, in combination, can make up a vocational qualification. There are two categories of units:

Mandatory units: These are core to a qualification and must be completed.

Optional units: Candidates must choose the required number of individual units, specified in the qualification structure, to achieve the qualification.

Work-based projects

Work-based projects are a useful way for the Assessor to collect evidence to support any decision made about a candidate's performance. They are particularly appropriate in determining the level of a candidate's underpinning knowledge and understanding where it may be insufficient to rely only on questioning or observation.

A project often involves the identification of a solution to a specific problem identified by the Assessor and/or the candidate (such as looking at ways to redress a recent drop in sales), or may be a structured programme of work built around a central situation or idea (such as the introduction of a new job rostering process).