



Technical and Vocational Education and Training (TVET) Council



Occupational Standards of Competence

Energy Advisory Level 2

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Qualification Overview

NVQB

in

Energy Assessment

Level 2

Qualification Overview

The need to address the growing global trend for decreasing energy consumption, as well as the introduction of incentives from governments and financial entities for energy-saving interventions, has prompted the need for qualifications in renewable energy. The NVQB Energy Advisory is a competence-based qualification aimed at professionals working in the renewable energy sector, particularly those with responsibility for assessing energy efficiency in residential buildings. Candidates should possess basic mathematical and computer skills, and be able to effectively communicate with others.

Who is the qualification for?

The qualification is specifically designed for persons who provide energy usage/conservation advice to customers. It may be used in conjunction with the sales and installation of other renewable energy methods such as wind or PV (solar).

Jobs within the occupational area

Relevant occupations include:

- Photovoltaic installation project managers
- Photovoltaic electrical installers
- Electrical technicians

This list is not exhaustive and only serves to illustrate the breadth of the qualification.

Where could it be used?

These competencies are for persons who are likely to be in roles where, for example, their duties include:

- Planning and designing of photovoltaic electrical systems
- Planning and designing a cost reduction or energy conservation programme

A07102 – APPROVED NATIONAL VOCATIONAL QUALIFICATION STRUCTURE

ENERGY ADVISORY LEVEL 2

To achieve the full qualification, candidates must complete all five (5) mandatory units.

<u>MANDATORY UNITS (all must be completed)</u>	<u>CODES</u>
1. Contribute to safety and security on the worksite	UA03202
1.1 Follow occupational safety and health procedures	
1.2 Identify hazards and risks	
1.3 Maintain documentation	
2. Prepare for energy assessment	UA03302
2.1 Plan the assessment	
2.2 Gather data and information	
3. Conduct energy assessment	UA03402
3.1 Communicate information to customers	
3.2 Conduct energy assessment	
4. Perform measurements and calculations	UA03502
4.1 Locate and obtain data	
4.2 Perform calculations	
5. Prepare and present energy assessment report	UA03602
5.1 Review information to prepare report	
5.2 Prepare and present report	

UA03202

Contribute to safety and security on the worksite

Unit Descriptor

This unit describes the knowledge, skills and attitudes required to contribute to safety and security on the worksite by working in a safe manner while adhering to occupational health and safety.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|---|---|
| 1. Follow occupational safety and health procedures | 1.1 Follow and adhere to occupational safety and health according to company procedures. |
| | 1.2 Adhere to occupational safety and health requirements when working at heights on elevated surfaces , using access equipment and in small spaces. |
| | 1.3 Select and use appropriate personal protective equipment according to industry and company requirements. |
| | 1.4 Check personal protective equipment to ensure it is operational and safe to use according to company procedures. |
| 2. Identify hazards and risks | 2.1 Assess area to identify potential hazards and risks. |
| | 2.2 Report potential hazards and risks to the appropriate person in accordance with company procedures. |
| | 2.3 Minimize hazards and risks within the limits of your responsibility. |
| | 2.4 Confirm that lock out and tag out procedures are followed to ensure the safety of electric and gas appliances. |
| 3. Maintain documentation | 3.1 Complete relevant documentation in accordance with company and occupational safety and health requirements. |

- 3.2 Locate and retain **plans, drawings or specifications** for existing appliances.
- 3.3 Document test results which show variants from operational procedures.

RANGE STATEMENT

All range statements must be assessed:

1. Elevated surfaces:

- Roof surfaces (various types)
- Mounting structures (independent)
- Scaffolding
- Support structures

2. Personal protective equipment:

- Overalls/coveralls, safety harnesses
- Gloves
- Boots/shoes
- Hard hat, helmets
- Goggles,
- Ear muffs
- Respirators

3. Hazards:

- Space limitations
- Weather conditions
- Surfaces
- Vegetation
- Utilities

4. Plans/drawings:

- Axonometric
- Cross section
- Details
- Elevations
- Isometrics
- Schematics
- Sections

5. Specifications:

- Containment support
- System voltage and power
- Operational and short circuit current
- System frequency
- Safety
- Testing
- Cable
- Mechanical and electrical system protection
- Workmanship

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the occupational health and safety requirements for the worksite, working at heights on elevated surfaces and in small spaces.
2. What is meant by 'working at heights' on elevated surfaces.
3. What are the different types of access equipment and working platforms.
4. What are the industry and organizational requirements for selecting and using personal protective equipment and how to do so.
5. How to check equipment to ensure that it is operational and safe to use.
6. How to assess the site to identify potential hazards and risks and why this is important.
7. What are the organizational procedures for reporting potential hazards and risks and to whom they should be reported.
8. How to minimize hazards and risks within the limits of your responsibility.
9. What are lock out and tag out procedures and how to confirm that procedures are followed to ensure the safety of electric and gas appliances.
10. What are the company and occupational health and safety requirements for completing safety documentation.
11. Why it is important to locate and retain plans, drawings or specifications for existing appliances.
12. What are the different types of plans, drawings and specifications.
13. How to document test results which show variants from operational procedures.

EVIDENCE GUIDE

For assessment purposes

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of 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:

- Observation
- Written/oral questioning
- 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.

UA03302

Prepare for energy assessment

Unit Descriptor

This unit describes the knowledge, skills and attitudes required to make the necessary preparations to conduct an energy assessment. It includes confirming the scope of work, schedule and access requirements as well as gathering data and information relating to energy consumption.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|--------------------------------|---|
| 1. Plan the assessment | <ul style="list-style-type: none"> 1.1 Confirm specifications for the scope of work according to company procedures. 1.2 Obtain necessary information from building drawings, specifications and other documents to facilitate the assessment. 1.3 Identify the location of utility services from building plans, drawings or specifications. 1.4 Plan the assessment within required time-frame and confirm availability with stakeholders. 1.5 Identify potential hazards in conducting the assessment and manage risks within the limits of your authority. 1.6 Determine required access to restricted areas and confirm with stakeholders. 1.7 Identify required tools and equipment for the site inspection and confirm their availability on the day of the assessment. |
| 2. Gather data and information | <ul style="list-style-type: none"> 2.1 Confirm the property address and description from the owner according to company requirements. 2.2 Determine the dimensions of the property using authorized methods according to company procedures. |

- 2.3 Obtain or create a sketch of the floor plan showing the location of energy consuming devices, fenestrations or utility entrance point.
- 2.4 Identify energy sources and manage the safety concerns of the property within the limits of your authority.
- 2.5 Determine initial customer **survey questions** from the assessment of the property and scope of work.
- 2.6 Analyze responses to ensure customer needs are addressed.

RANGE STATEMENT

All range statements must be assessed:

1. Stakeholders:

- Customers
- Authority having jurisdiction (AHJ)
- Installation and engineering team
- Procurement personnel
- Utility company
- Relevant government authorities
- Fire service

2. Survey questions:

- Energy costs
- Temperature variation
- Length of residency
- Reconstruction/re-modelling
- Odours in the property
- Personal/family habits/needs/characteristics

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. How to confirm specifications for the scope of work.
2. How to obtain necessary information from building drawings, specifications and other documents to facilitate the assessment.
3. How to identify the location of utility services from building plans, drawings or specifications.
4. Why it is important to plan the assessment within the required timeframe and confirm the availability of stakeholders and how to do so.
5. Why it is important to identify potential hazards in conducting the assessment and manage risks within the limits of your authority and how to do so.
6. How to determine required access to restricted areas and confirm with stakeholders.
7. Why it is important to identify the required tools and equipment for the site inspection and confirm their availability on the day of the assessment.
8. What are the authorized methods for determining the dimensions of the property.
9. How to obtain or create a sketch of the floor plan showing the location of energy consuming devices, fenestrations or the utility entrance point.
10. How to identify energy sources and manage safety concerns within the limits of your authority.
11. How to determine customer survey questions from the assessment of the property and scope of work.
12. How to analyze responses to ensure customer needs are addressed.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of 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:

- 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.

UA03402

Conduct energy assessment

Unit Descriptor

This unit describes the knowledge, skills and attitudes required to make the necessary preparations to conduct an energy assessment. It includes confirming the scope of work, schedule and access requirements as well as gathering data and information relating to energy consumption.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|---|--|
| 1. Communicate information to customers | <ul style="list-style-type: none"> 1.1 Communicate with customers in a way that makes them feel valued and respected. 1.2 Communicate feedback accurately from the initial survey to customers. 1.3 Provide advice to customers about required changes based on the initial survey report. 1.4 Confirm that the scope of work remains unchanged. 1.5 Explain the scope of work to customers and how it will impact on them and their property. 1.6 Agree on the outcomes of the scope of work and the required timelines. 1.7 Review the Customer Power Bill and its features to customers. 1.8 Maintain communication with customers to ensure they are kept informed and reassured. 1.9 Respond promptly and positively to customers' questions and comments. |
| 2. Conduct energy assessment | <ul style="list-style-type: none"> 2.1 Examine energy consuming devices to determine energy usage by examining label. 2.2 Test energy consuming devices with appropriate equipment where there is no label to determine energy usage. |

- 2.3 Examine the interior and exterior of the building to locate energy losses.
- 2.4 Determine the construction of the building to estimate the R-Value in walls and ceilings.
- 2.5 Examine the capacity for existing renewable energy sources such as photovoltaic or thermal solar.
- 2.6 Document observations in logs according to company procedures.

RANGE STATEMENT

All range statements must be assessed:

1. Energy consuming devices:

- Appliances
- Media devices
- Temperature/climate control devices
- Alarm systems
- Water heaters

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What is effective communication.
2. How to communicate with customers in a way that makes them feel valued and respected.
3. How to communicate feedback from the initial survey to customers and provide advice about required changes.
4. Why it is important to maintain effective communication with customers to ensure that they are kept informed and reassured and how to do so.
5. Why it is important to respond promptly and positively to customers' questions and comments and how to do so.
6. How to confirm the scope of work, agreed timelines and explain the impact on customers and their property.
7. What is the Customer Power Bill and how to review its features to customers.
8. How to read appliance labels.
9. What are the different types of energy consuming devices, how to identify and examine them for energy usage.
10. How to determine typical consumption numbers for energy consuming devices.
11. How to determine the performance of energy consuming devices.
12. What equipment should be used to test energy consuming devices without labels and how it should be used.
13. How to examine the interior and exterior of the building to locate energy losses i.e. using infra-red test devices.
14. How to determine the construction of the building to estimate the R-Value in walls and ceilings.
15. How to examine the capacity for existing renewable sources such as photovoltaic or thermal solar.
16. What are the company procedures for documenting observations in logs.
17. What type of evidence can be used in the observation process, i.e. pictures, videos etc.
18. How to document test results in a manner that will enable complete calculations.

EVIDENCE GUIDE

For assessment purposes:

Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of 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:

- 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 **must not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

UA03502

Perform measurements and calculations

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to collect and test the required data to complete calculations to quantify energy usage.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|---------------------------|--|
| 1. Locate and obtain data | 1.1 Confirm the required data according to the scope of work. |
| | 1.2 Locate and identify data using labels, specifications and document logs. |
| 2. Perform calculations | 2.1 Perform calculations according to company and industry requirements. |
| | 2.2 Identify results which appear erroneous and report to the appropriate persons according to company procedures. |
| | 2.3 Identify the causes of errors and carry out corrective action within the limits of own authority. |
| | 2.4 Arrange for retest or re-measurement as necessary in accordance with specifications and the industry. |
| | 2.5 Document, accurately, any assumptions used in your calculations. |
| | 2.6 Use industry averages to estimate values that cannot be found by testing. |

RANGE STATEMENT

All range statements must be assessed:

1. Data

- Length and width of spaces
- kW consumption numbers
- Temperature
- Therms or kW thermal measurements
- Flow rate
- R-Value

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. How to identify required test data.
2. How to locate and identify data using labels, specifications and document logs.
3. What are the company and industry requirements to perform calculations.
4. How to find and use industry data for hours of use and typical consumption.
5. How to mathematically manipulate units of measure for energy to show total annual energy consumption and loss.
6. How to identify results which appear erroneous.
7. What are the organizational procedures for reporting erroneous results and to whom they should be reported.
8. How to identify the causes of errors and what corrective action can be taken.
9. How to retest or re-measure in accordance with specifications and industry.
10. Why it is important to accurately document any assumptions used in your calculations and how to do so.
11. What are the industry averages used to estimate values that cannot be found by testing.
12. What are the company and industry guidelines for documenting and presenting data collected.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of 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:

- 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.

UA03602

Prepare and present energy assessment report

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to prepare and present an energy assessment report. Candidates will be required to summarize data, prepare the report, including recommendations, and communicate the findings to the customer.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

- | | |
|---|---|
| 1. Review information to prepare report | <ul style="list-style-type: none"> 1.1 Collate and document information according to the scope of work, specifications and organizational requirements. 1.2 Calculate estimated costs and identify potential associated reductions in energy use according to organizational and industry standards. 1.3 Summarize information based on organizational and industry requirements. 1.4 Discuss and clarify findings with stakeholders where necessary, prior to preparing the energy assessment report. 1.5 Propose recommendations to address potential challenges and possible energy loss based on results. |
| 2. Prepare and present report | <ul style="list-style-type: none"> 2.1 Prepare the energy assessment report in the required format according to organizational and industry requirements. 2.2 Present the energy assessment report and explain the result and recommendations to the customer clearly and concisely according to organizational requirements. 2.3 Confirm that the customer understands the results and recommendations and provide opportunities for questions and clarification. |

- 2.4 Use effective **communication strategies** to communicate with customers, respond to questions and comments promptly, and in a positive and sensitive manner.
- 2.5 Acknowledge feedback from customer and, where necessary, provide follow up within the limits of your own authority.
- 2.6 Maintain and store reports safely and securely according to organizational procedures and industry requirements.

RANGE STATEMENT

All range statements must be assessed:

1. Stakeholders:

- Customers
- Authority having jurisdiction (AHJ)
- Installation and engineering team
- Procurement personnel
- Utility company
- Relevant government authorities
- Fire service

2. Communication strategies:

- Active listening
- Questioning
- Probing
- Non-verbal communication (body language, facial expressions, tone of voice etc.)

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the company and industry requirements, scope of work and specifications for collating and documenting information and how to do so.
2. How to calculate and estimate costs and identify potential associated reductions in energy costs.
3. How to summarize information and propose recommendations.
4. Why it is important to discuss and clarify findings with stakeholders prior to preparing the energy assessment report.
5. Who are the stakeholders.
6. What types of construction techniques can be used to reduce energy loss.
7. How to propose recommendations to address potential challenges and possible energy loss based on assessment results.
8. How to prepare an energy assessment report and what is the required format for displaying energy data.
9. Why it is important to present the energy assessment report and explain the results and recommendations to customers.
10. Why it is important to confirm that the customer understands the results and recommendations and to provide opportunities for questions and clarifications and how to do so.
11. What are effective communication strategies and how to use them.
12. How to respond to customers' questions and comments promptly and in a positive and sensitive manner.
13. Why it is important to acknowledge feedback from customers and provide follow up where necessary.
14. What are the limits of your own authority in providing follow up to customers.
15. What are the company procedures and industry requirements for maintaining and storing reports safely and securely.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of 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:

- 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.

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, taped or filmed.

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 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, 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. They need to be competent to assess to national standards in the area under assessment.

NVQ

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 that is expected of persons working in the industry or sector which the NVQ covers.

NVQ Coordinator

Within each approved centre offering NVQs, there is a centre contact who has overall responsibility for the operation and administration of the NVQ system.

Observation

Observation of the candidate carrying out his/her 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

This could be items produced during the normal course of work, which can be used for evidence purposes such as reports, menus, promotional literature, training plans, etc.

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.

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 Play

Role plays are simulations where the candidate is asked to act out a situation in the way he/she considers 'real' people would behave. By using role-play situations to assess a candidate, assessors are able to collect evidence and make a judgement about how the candidate is most likely to perform. This may be necessary if the range specified includes a situation in which the candidate is unlikely to find himself/herself in the normal course of his/her work, or where the candidate needs 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 a candidate's work which occurs infrequently or is potentially hazardous; for example, dealing with fires.

By designing the simulated situation, briefing the candidate and observing his/her performance, the Assessor will be able to elicit evidence which will help him/her judge how a candidate is **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, simulation etc. (see note in glossary).

Underpinning Knowledge

Underpinning knowledge indicates what knowledge 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 three 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).