



GUIDELINES

FOR

DEVELOPING

NATIONAL OCCUPATIONAL STANDARDS

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1. Introduction

Occupational standards are precise descriptions of what an individual is expected to be able to do in his/her work role. They are defined in terms of ideal benchmarks against which competence is assessed and certification granted.

The criteria for national occupational standards allow a flexible approach to the format and expression of national occupational standards.

The criteria are intended to enable designers of national occupational standards and developers of national vocational qualifications to meet the needs of employers and other potential users.

2. Occupational competence expressed as outcomes

The concept of occupational competence lies at the heart of National Vocational Qualifications (NVQs). Occupational standards need to be designed so that all aspects of competence in the occupational role are covered. This is important if NVQs are to promote a flexible, adaptable workplace capable of responding to the needs of the economy in an increasingly competitive international environment.

Jobs are seldom performed in isolation and are rarely simply procedural. People need to be able to communicate effectively with colleagues, organize and prioritise their work activities, respond to contingencies and make decisions, solve problems and apply ethical judgements. It is the ability to integrate these demands when performing in the work environment that defines the occupationally competent individual. NVQs therefore need to be built around broadly based standards to ensure that individuals can cope with changes in their working pattern.

National occupational standards and NVQs are expressed in outcomes. This is the required end result for the assessment of competence. In this way, defining what has to be achieved rather than prescribing how it should be achieved provides the necessary flexibility through allowing competence to be demonstrated in a number of ways. This is a fundamental characteristic of NVQs and the national occupational standards on which they are based.

3. Roles and responsibilities of agencies involved in the development of occupational standards

The Technical and Vocational Education and Training Council is the regulatory body responsible for coordinating the development of national occupational standards in Barbados.

Standards setting bodies also known as industry lead bodies are representative of a defined industry sector or a recognized occupational group. The industry lead bodies comprise persons who are considered to be knowledgeable of the particular industry or occupational sector.

The industry lead body is responsible for defining national occupational standards and must ensure that they are kept up to date.

The TVET Council and the industry lead body are jointly responsible for full consultation with the occupational sector. This will ensure that:

- all relevant employment interest have been taken into account, including employers, representatives of employees and other relevant parties;
- the national occupational standards have acceptability within the occupational group, industry sector, profession, commerce or public service and also consultation with small, medium and large sized enterprises.

As part of its recommendations for NVQs, the industry lead body has responsibility for proposing qualification titles, levels and structures. This includes taking a strategic view of the qualification needs of the sector. The industry lead body also has responsibility defining a general assessment strategy.

4. Analysis of the occupational sector

National occupational standards must be based on a thorough analysis of the characteristics of the occupational sector. This is a key part of the development process.

The standards setting body needs to take a longer term view of the sector reviewing existing qualification provision, and identifying labour market and qualification needs. An analysis of the sector (sometimes called occupational mapping) provides a picture of the occupational area to be covered, its scope and boundaries. It identifies which standards and qualifications need to be developed, how these relate coherently to each other and to the NVQ framework and should include information about the following.

The types of occupations within the sector and any anticipated changes in employment patterns.

This should include information on:

- the main occupations within the sector and the numbers of people employed in these occupations;
- the distribution of the occupation;
- the rationale for any differences in the structure of the occupational area in terms of balance between large, medium and small firms;
- the changes in technology, working practices and market conditions.

Opportunities for progression and clarification of the typical career routes open to individuals including the role played by qualifications.

Gathering together and interpreting this information provides the foundation from which the standards setting body can evaluate whether there is a sustainable case for standards development in the sector and, if so, in which areas.

It will provide the necessary rationale to support the development of any new national occupational standards and establish priority areas for standards development. It should also indicate the nature of any specialist technical groups needed for the development of national occupational standards.

The links between the sector and other related sectors, including opportunities to work with other standards setting bodies to identify common competencies.

Each standards setting body must work to develop standards which are appropriate to the sector's needs. An increasingly important aspect will be the analysis of the opportunities to use common units. This will prevent duplication in a nationally based unit framework. It will involve working with other standards setting bodies. It is important that links are acknowledged and duplication of effort is avoided, and that the boundaries of activity between one occupational area and another are recognised.

The relationship between the standards and the main roles and responsibilities of occupations identified within the sector.

National occupational standards tend to be written in such a way that they are broader than specific job titles frequently used within the sector. Clear links between standards and the occupations within the sector should be specified so that users can understand how their work is reflected in the national occupational standards for their sector. Consideration should also be given to:

- which aspects of competences are central to and characterise the occupational area, and are therefore required by all candidates;
- where optional units are needed to provide the required flexibility for the purposes of progression;
- where specialisms or career routes indicate the need for additional units to be available.

The role played by key organisations including trade unions, employers' organisations and any professional or statutory bodies within the sector.

This will help to give an indication of where and how national occupational standards may be used within the sector, and which organisations should be consulted during the development of the standards. Furthermore, clear evidence of long term demand for the standards and support from national employment interests for the development and subsequent use of national occupational standards should be provided.

There are a number of ways in which the analysis of the sector can be achieved including:

- desk research covering analysis of existing manpower, labour market information, learning and development materials, research materials and job descriptions;
- analysis of qualifications already available in the occupational area and their uptake;
- surveys, interviews, practitioner working groups, critical incident analyses, seminars and conferences.

The balance between methods used will depend on how cohesive or disparate the area of employment is and the availability of existing detailed analyses.

The analysis of the occupational area is not static and the nature of occupations can change with employers seeking new skills and knowledge. The process of developing standards, therefore requires review and revision with opportunities for feedback to allow appraisal and reworking. This will ensure that standards cover all the aspects required in the occupation and that all components of occupational competence are covered.

During the analysis of the occupational sector it is vital that the standards setting body checks that there is continuing employment support for the development of national occupational standards and subsequent NVQs.

Once the analysis of the occupational sector is complete the standards setting body will be in a position to advise the Standards Approval Committee on the need for development of new national occupational standards, and NVQs in the sector.

5. Characteristics of national occupational standards

This section provides more detail about the criteria for the national occupational standards.

National occupational standards must:

identify the main roles and responsibilities within a defined occupational area.

The analysis of the occupational sector will have identified the main roles and responsibilities within occupations. This must be translated into a unit format expressed in outcomes which specify the skills, knowledge and understanding required to perform competently to the standards required in employment.

National occupational standards must:

take the form of units based on the occupational roles and responsibilities identified.

National occupational standards will be endorsed by the Technical and Vocational Education and Training (TVET) Council in the form of units. These units will form the basis of NVQs approved by the TVET Council, with the detailed quality assurance arrangements, assessment and recording documents developed by the awarding body.

All units should be expressed in terms of outcomes. A unit should group together the outcomes into a complete statement of competence which has value and meaning in employment, which individuals or members of a team can achieve. It should clearly state in detail the competence and the level of skills, knowledge and understanding required. The language and style of presentation will be for the occupational sector to determine.

There are a number of different categories of units: these are mandatory, optional, additional, and common units:

Mandatory units

Mandatory units are those which are considered essential for all candidates to achieve if they are to perform effectively in an occupation.

Optional units

Optional units can be used to provide flexibility and breadth to the occupational competence and can be developed to form clusters. Any rules of combination for clustered units should be clear.

Additional units

Additional units can be developed to reflect particular specialisms in an occupation or for reasons of career or professional development. These units do not usually form part of the requirement for an NVQ but can provide added value for employers and candidates.

Common units

Common units are national occupational standards which describe competences found in two or more occupational areas. Before setting out to develop new units, a standards setting body is required to review existing national occupational standards to ensure that appropriate units do not already exist. There are several reasons for this:

- it is not economic to duplicate development work already undertaken;
- having the same competence described in the same way in all sets of national occupational standards lends coherence to the standards and qualification system;
- an individual holding a common unit will be able to claim credit for it against all NVQs containing the unit.

Importing an unchanged unit from one set of standards can, however, cause problems. In such cases there may be a good case for tailoring the national occupational standard so that the unit is fit for purpose within the new qualification. If this situation occurs then the importing standards setting body would need to confirm with the originating sector that the competence described in the national occupational standard remains the same.

For a unit to be common, assessment must be consistent across the qualifications in which it appears. If the assessment contexts provided in different sectors are very dissimilar, then the direct transfer of credit may not be justified.

The advantage of using common units need to be balanced against the particular needs of the occupational sector. Factors to be considered include:

- whether individuals are likely to want to use the unit for credit transfer (for example common units may be required for the purposes of progression);
- whether the level and scope of performance required by the unit is the same (and likely to remain the same) in each occupational sector;
- whether the required knowledge and understanding and its breadth and depth is the same (and likely to remain the same) in each occupational sector.

5.1 Knowledge and understanding

National occupational standards must:

show the outcomes of competent performance including the essential knowledge and understanding required.

The application of knowledge and understanding is fundamental to the concept of occupational competence and is one of the defining characteristics of national occupational standards.

Knowledge and understanding is used to describe what people need to know and understand if they are to perform competently. This description includes knowledge of relevant facts and opinions, theories and principles. More importantly it covers the application of knowledge which underpins competent performance. This may be heavily dependent on a large and complex knowledge base, such as that of a professional discipline. However, in expressing knowledge and understanding it is essential that standards setting bodies concentrate on the critical aspects of knowledge and understanding, specifying that which is essential to support the transfer of competence to new situations and different contexts.

Specifications of knowledge and understanding are essential to an effective definition of competence performance. Work on this aspect should, therefore, proceed in conjunction with the definition of competent performance. It is probably not possible to describe all the knowledge and understanding required until the standards have at least reached draft form.

Therefore, national occupational standards should be seen as draft until the process of describing the knowledge and understanding has been carried out, allowing for improvement through the knowledge description process.

Areas of knowledge and understanding which are integral to competent performance will be identified during the analysis of roles and responsibilities. The form, scope and application of knowledge and understanding will influence the expression of the national occupational standards to produce a mix of:

- knowledge of relevant facts, theories and principles;
- how knowledge is applied in competent performance.

The essential knowledge and understanding needs to be made clear and written at a level of detail that will encourage consistency of interpretation. Where possible, links with the knowledge requirements in other units should be made. In some cases it may be helpful to identify an overarching body of knowledge which a qualification covers. It is important, however, to ensure that for the purposes of assessment and certification each candidate can achieve each unit separately.

Clear specifications of knowledge and understanding include:

- covering aspects of performance e.g. safe and healthy work practices;
- covering the different circumstances in which the standards need to be met;
- ensuring that performance can be transferred to an appropriate variety of situations;
- indicating where the creative use and combination of knowledge should be sought.

Knowledge and understanding specifications should not:

- relate specifically to a single organisation's requirements;
- lead to inconsistent interpretation, especially with respect to assessment;
- be long lists of that which is desirable rather than essential.

5.2 Standard of performance

National occupational standards must:

show the standard of occupational competence to be reached for the stated outcomes. In this context competence means the ability to apply knowledge, understanding, practical and thinking skills to achieve effective performance, to the standards required in employment. This includes solving problems and being sufficiently flexible to meet changing demands.

In order that a candidate's competence can be assessed against the national occupational standards, the standards need to outline clearly the quality of performance required for the outcomes contained in the units. They must enable users to distinguish accurately between competent and non-competent performance. Therefore, national occupational standards must be:

- clear, unambiguous and concise;
- relevant and essential;
- a basis for the consistent assessment of competence.

5.3 Breadth

National occupational standards must:

include relevant technical, planning and problem solving skills, the ability to work with others, the ability to apply knowledge and understanding and other skills which will enhance flexibility in employment and promotional opportunities;

ensure that the competence is broad enough to give flexibility in employment and be capable of adaptation to meet new and emerging occupational patterns.

In order that national occupational standards cover all aspects of occupational competence, they must include all relevant skills required for a modern and flexible workforce. Many of these skills are covered by the generic units.

5.4 Statutory and legal requirements

National occupational standards must:

include any statutory or legal obligations.

Complying with the law is an essential component of competent performance. A competent individual must understand and be able to work within legal constraints. The most obvious areas in which legal requirements will influence statements of competence are the:

- requirements and responsibilities imposed on individuals and organizations such as health and safety or age constraints;
- legal constraints affecting specific occupational practice, such as confidentiality, and the giving of advice or disclosure;
- implications of someone not complying with legal requirements.

Thinking through legal implications early in the process of defining competence will contribute to the quality and breadth of the final national occupational standards.

5.5 Health and safety

National occupational standards must:

include any health and safety requirement.

National occupational standards need to cover any hazards associated with the workplace and the nature of the risk involved. It is important that the national occupational standards identify clearly and specifically the health and safety requirements. Aspects of health and safety may be embedded within units or be contained in separate units, depending on the needs of the sector.

As standards are tested for their adequacy in the course of the development process, health and safety issues should be examined comprehensively. They should be seen as integral to competence and be expressed in terms of ‘safe performance’.

5.6 Environmental aspects of competence

National occupational standards must:

include any relevant environmental aspects which are critical to competence.

Care and concern for the environment is now a key issue both globally and locally. There are signs of growing demands from employers and employees, and the wider community, for increasing positive environmental action.

National occupational standards need to ensure that all relevant environmental aspects have been covered. In some occupations, particularly high risk areas, the views of environmental regulators are important and should be sought.

5.7 Ethics and values

National occupational standards must:

include any relevant occupational characteristics which are ethical, creative or value based

The national occupational standards should seek to capture all the various occupational demands which may be identified as creativity, ethics and values. This involves making explicit the characteristics of effective performance which are subsumed under these broad terms.

Ethics and values in the context of national occupational standards refer to the ethical framework for the occupational role. It is important to address this issue early in the standards development process. It normally involves two stages:

- identifying the possible issues for consideration. This may be approached through agreeing a framework of ethical principles for the occupational area;
- integrating these issues into national occupational standards.

Methods of identifying ethical issues may vary considerably between sectors, therefore a number of sources will need to be considered including:

- mission statements, written codes of practice, ethical guidelines and procedural guides, statements of entitlement and charters etc;
- complaints received from the public about services;
- case studies;
- quality assurance procedures;
- client and stakeholders needs, rights and expectations.

5.8 Language

National occupational standards must:

be written in plain language and in a format which is easily understood by those who will use the standards.

Consistency of assessment of occupational competence can be enhanced through a shared understanding of the national occupational standards. It is important that the language of the standards is acceptable to the people who will use them, that is, employers, assessors and candidates. The national occupational standards should be expressed in a language and style that makes sense to the above users. It is also important to make sure that the meaning of words used to describe the competence is clear and unambiguous.

5.9 Avoiding unfair discrimination

National occupational standards must:

be free from any overt or covert discrimination against an individual either in the wording or content.

Standard setting bodies should ensure that the standards promote equality of opportunity and access to NVQs.

Equal opportunities principles should be clearly specified within the national occupational standards, reflecting both legislation and the principles of NVQs.

National occupational standards should embody equality of opportunity in their design. There are two aspects to this:

- national occupational standards should be free of any requirement or wording that discriminates in an unjustified way against candidates;
- national occupational standards should be free of any requirement which has the effect of unfairly discriminating against any individual. This reflects current legislative requirements and society's concern with promoting equality of opportunity.

5.10 Basis for assessment

National occupational standards must:

provide a satisfactory basis for assessment

The national occupational standards should be written in a way which enables the awarding body to develop the detailed assessment instruments and guidance for an NVQ. The standards setting body need to ensure that the requirements for performance evidence, knowledge and understanding are clearly identified, and that the language of the standards is understandable by users in order to be used for assessment purposes.

The general principles for assessment of occupational competence must also be clearly stated. This includes the acceptability of simulation and the conditions under which it should be used, information on occupational expertise of assessors and verifiers, and how independent assessment or other equally effective external quality control on assessment is to be achieved.

5.11 Support from the occupational sector and potential users

National occupational standards must:

meet the needs and have the support of all significant groups of employers and potential users.

If they are to achieve their main purpose, national occupational standards must have the support of all significant groups of employers and potential users within an occupational sector. It is therefore, important that consultation with the sector on draft standards includes all the relevant organisations, including trade unions, professional bodies, and a variety of types of companies. The consultation should cover the expression, presentation and format of the standards.

National occupational standards must:

reflect best employment practice, benchmarked against international standards where appropriate.

National occupational standards should describe best employment practice. In achieving this, standards setting bodies should seek to ensure that their standards are comparable to those in the country or countries which are reputed to be known, for example, to produce the best goods and services in this sector. This will involve identifying links between standards here and in the country of best practice.

Reference: Developing national occupational standards for NVQs, 1999, QCA.