GUIDELINES FOR DETERMINING NATIONAL OCCUPATIONAL STANDARDS

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List of Abbreviations and Acronyms

CPD   Continuous Professional Development

NOS   National Occupational Standards

ZAQA   Zambia Qualifications Authority

ZQF   Zambia Qualifications Framework

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1.0 INTRODUCTION

1.1 Introduction to this Guide

The Zambia Qualifications Authority Act No.13 of 2011 was enacted by the Government of the Republic of Zambia; *"to provide for the development and implementation of a national qualifications framework; establish the Zambia Qualifications Authority; provide for the registration and accreditation of qualifications; provide measures to ensure that standards and registered qualifications are internationally comparable; and provide for matters connected with, or incidental to, the foregoing".*

The National Qualifications Framework provides for the classification, accreditation, publication and articulation of quality assured national qualifications. The Zambia Qualifications Framework (ZQF) is therefore used for the development and classification of qualifications according to a set criteria and levels of learning achieved.

National Occupational Standards (NOS) are statements of the standards of performance individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding. National Occupational Standards (NOS) are core parts of an occupation which are generally observed when analysing the same occupation in different contexts.

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.

NOS are *National* because they apply to and can be used in every part of Zambia where the functions are carried out. NOS are *Occupational* because they describe the performance required of an individual when carrying out the functions in the workplace, i.e. in their occupation as a plumber, police officer, production engineer, etc. NOS are *Standards* because they are statements of effective performance for the things individuals do and the outcomes they achieve which have been agreed by a representative sample of employers and key stakeholders; and are approved by ZAQA.

NOS are developed to help employers in all sectors to quantify the skills, knowledge and understanding needed to perform at all levels of the respective sector. Each set of NOS

provides a statement of effective performance which can then be measured. NOS shall provide Zambia a wide, demand-led, evidence-based benchmark of competent performance which underpins vocational learning and development, apprenticeships and qualifications across all sectors and occupations in Zambia. They encompass the employability of skills for self-management and organisation of work, thinking through and solving problems, working with others, communicating effectively and understanding the business.

NOS shall be used by Quality Assurance, Awarding and Professional Bodies as benchmarks to develop qualifications in various sectors. They shall also be used by organisations to support human resource management and organisational development processes. In some sectors, demonstration of competence against NOS shall be required in order to run a business or practice a craft or profession.

This guide is intended to assist anyone who is developing and reviewing National Occupational Standards (NOS). It provides:

    1.1.1   useful background information on National Occupational Standards (NOS) and their development.

    1.1.2   the importance of National Occupational Standards.

    1.1.3   guidance on how NOS relate to qualification development.

    1.1.4   practical advice on how to use NOS in the development of Qualifications.

    1.1.5   Quality Criteria for developing NOS,

1.2 The Importance of National Occupational Standards

For many occupational areas, qualifications are very critical at different levels on the ZQF. Qualifications are designed to provide knowledge, skills and competencies for people in employment, those seeking employment, and for those who wish to further their studies.

Relating the design and structure of qualifications and NOS will ensure that the qualifications are fit for purpose and serve the needs of candidates, employers and the economy. It is very important that everyone involved in the design and development of qualifications is aware of NOS at every stage of the qualification's life cycle. This includes:

    1.2.1   Qualification Managers and Qualification Officers

    1.2.2   Qualification Design Teams

    1.2.3   Consultants

1.2.4   Evaluation Panel members

1.2.5   Validation Panel members

1.2.6   Qualification Support Teams

1.3 Roles and Responsibilities of Agencies Involved in the Development of Occupational Standards

The Zambia Qualifications Authority is the regulatory body responsible for coordinating the development of national occupational standards in Zambia. Standards setting bodies such as industry-led bodies (e.g. Skills Advisory Groups) are also representatives of a defined industry sector or a recognized occupational group. The industry-led bodies comprise persons who are considered to be knowledgeable of the particular industry or occupational sector. The industry-led body is responsible for defining national occupational standards and must ensure that they are kept up to date. The ZAQA and the industry-led body are jointly responsible for full consultation with the occupational sector. This will ensure that:

1.3.1.   all relevant employment interests have been taken into account, including employers, representatives of employees and other relevant parties;

1.3.2.   the national occupational standards are acceptable within the occupational group, industry sector, profession, commerce or public service in consultation with small, medium and large sized enterprises.

2.0   INFORMATION ON NATIONAL OCCUPATIONAL STANDARDS

2.1 Key features of National Occupational Standards

National Occupational Standards specify the standards of performance that people are expected to achieve in their work. The knowledge, skills and competencies needed to perform effectively are agreed by employers and employee representatives. All National Occupational Standards must therefore:

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

2.1.2   reflect best employment practice — describing both existing and emerging practice

2.1.3   describe what is essential for successful performance

2.1.4   specify what an individual needs to know and understand to perform their job

2.1.5   describe what an individual should achieve, not how they should do it

2.1.6   include relevant technical, planning and problem solving skills, the ability   to work with others and use information technology (Core/Key Skills)

2.1.7   include any statutory or legal obligations

2.1.8   include any health and safety requirements

2.1.9   include any relevant environmental aspects which are critical to the competence

2.1.10 capture defining occupational characteristics such as ethics, values and creativity

2.1.11 be written in plain language and in a format that makes sense to the people who will use them

2.1.12 be free from any overt or covert discrimination against any sector of the community

2.1.13 provide a satisfactory basis for the design of assessment

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

2.1.15 distinguish clearly between occupational standards and qualifications

2.2 Need for the Occupational Standards

Occupational Standards serve a number of different purposes for different players in education and training as well as within the labour market. The different purposes include:

2.2.1   **To direct curriculum development:** There is more emphasis on training to be closer to and reflecting needs within the labour market. The drawing up of occupational standards for a diverse range of jobs serves to direct curriculum development. Rather than having education dictating skills within the labour market, occupational standards will drive the content and skills in training programmes targeted at particular occupations;

2.2.2   **To specify competences which workers need to possess:** Occupational Standards serve to help both employers and employees to know what their job entails and what knowledge, skills and competencies they should possess;

2.2.3   **To help certify workers:** Occupational Standards recognise competences which are not usually considered within traditional educational training institutions. They provide the opportunity for workers to validate their learning as part of their work experience and obtain certification;

2.2.4 **To help employers carry out skills-audit:** Occupational Standards allow and facilitate the process of skills-audit carried out by employers. Employers are thus in a position to know what knowledge and skills the workforce possesses;

2.2.5 **To direct professional development within the workforce:** Employers wishing to validate their workers' competences can utilise Occupational Standards to identify what workers are already able to do and what additional skills and knowledge they need to acquire in order to obtain full certification. This knowledge thus helps direct investment in continuous professional development within an enterprise to the benefit of both the employers and employees;

2.2.6 **To facilitate the recruitment process for employers:** As more and more training courses are based on occupational standards, employers are in a better position to know the competences which applicants bring. The match between employee's skills and those required within the enterprise will be easier to achieve;

2.2.7 **To set quality standards within sectors and occupations:** The setting of Occupational Standards ensures that a certain level of competences for the different occupations is respected. This is an aspect of quality assurance within the sector;

2.2.8 **To facilitate the validation of informal and non-formal learning:** Validation of informal and non-formal learning needs to be carried out against some form of standard. Occupational Standards allow this comparative assessment to be done;

2.2.9 **To allow government to take stock of skills capacity at national level:** As the opportunities for certification of occupations gain momentum, and more and more workers put themselves forward to validate their learning, the easier it will be for governments to map the skills and competences of the workforce at national level;

2.2.10 **To promote mobility of workers within the Zambian labour market and beyond:** The existence of Occupational Standards will provide a reference point for worker skills and competences available locally and to the international market.

2.3 The Development of National Occupational Standards

National Occupational Standards are industry-led. Employers in a given sector work with professional or trade bodies to develop the standards. The sector may be supported by a technical consultant who is experienced in developing occupational standards. The consultant will help to define relevant standards of competence through extensive consultation and workshops with people who actually do the job. This means the foundation of the NOS is the workplace itself i.e. the development is rooted in what people actually need to be able to do and know in their jobs.

2.4 The Contents of National Occupational Standards

2.4.1   Occupational Standard Code:

The meaning and the procedure for assigning the code shall be specified; it shall contain information about all the basic properties of the occupation; usage of the code shall be consistent in the NOS;

2.4.2   Basic properties of occupation:

2.4.2.1 Name of an occupation;
2.4.2.2 Reference level of applicable qualifications, additional requirements;
2.4.2.3 Class of applicable qualifications;

2.4.3   Elements of an occupation:

2.4.3.1 Description of an occupation such as jobs within an occupation; types of jobs within an occupation; work places for the jobs within an occupation; types of institutions offering the jobs; description of desirable competences; specific legal requirements and guidelines for the development of the occupation;
2.4.3.2 Descriptions and names of all main responsibilities, activities, operational procedures and required competences; professional development opportunities.

2.4.4   Elements of the occupational standard quality assurance:

2.4.4.1 Justification of the introduction of the occupational standard (overview of the labour market, individual and society's needs);
2.4.4.2 Period of validity of the occupational standard (when it is necessary to carry out a new analysis and compile a new occupational standard);
2.4.4.3 Authors of the occupational standard proposal and the date of the proposal;
2.4.4.4 Competent authority for approving the occupational standard and the date of approval.

2.5 The Use of National Occupational Standards

National Occupational Standards are developed to help employers in all sectors to quantify the skills, knowledge and understanding needed to perform at all levels of the respective sector. Each set of NOS provides a statement of effective performance which can be measured.

Awarding, Quality Assurance and Professional Bodies will use NOS to inform the development of qualifications.

2.5.1 Organisations can use National Occupational Standards to:

2.5.1.1 plan personnel requirements
2.5.1.2 develop job descriptions and person specifications for staff and volunteers
2.5.1.3 design and implement recruitment and selection processes
2.5.1.4 design, deliver and evaluate training
2.5.1.5 quality assure the performance of staff and volunteers across the organisation
2.5.1.6 achieving indicators for external accreditation.
2.5.1.7 use common standards of performance and quality in partnerships with other organisations and agencies
2.5.1.8 demonstrate the competence of the organisation when applying for funding or tendering for projects
2.5.1.9 provide links to the requirements of professional bodies

2.5.2 Managers can use National Occupational Standards to:

2.5.2.1 induct staff and volunteers
2.5.2.2 identify individual development needs
2.5.2.3 plan appropriate development and training
2.5.2.4 coach and mentor individuals
2.5.2.5 delegate responsibilities to staff and volunteers
2.5.2.6 ensure that individuals and teams achieve their objectives
2.5.2.7 use nationally agreed criteria to carry out performance reviews fairly and consistently

2.5.3 Individuals can use National Occupational Standards to:

2.5.3.1 develop their self - confidence and enhance their personal and professional effectiveness
2.5.3.2 track their skills against the requirements of a specific occupational area
2.5.3.3 ensure best practice at work
2.5.3.4 comply with statutory requirements
2.5.3.5 receive constructive and objective feedback from their manager and others

2.5.3.6 build a bridge from unpaid to paid work
2.5.3.7 gain a nationally-recognised qualification

Appendix 1 gives a guide on the detailed use of NOS.

2.6 Benefits of using National Occupational Standards

The benefits associated with using NOS include:

2.6.1 **Flexibility**: NOS can make a valuable contribution to almost any human resource development purpose. Based on discrete functions and expressed as modules, they can be used independently or in combination to meet a wide variety of needs. Irrespective of whether NOS are used to support management activities or support personal development needs, time invested in familiarising oneself with NOS is well spent because of the vast array of activities NOS can support.

2.6.2 **Dependability**: Because NOS are developed through national consultation with the respective sector, employers can be certain that the standards described have widespread acceptability and represent a nationally agreed benchmark, expressing competent performance throughout the industry/sector.

2.6.3 **Cost Effective**: the economic gains from using NOS are easily recognised. NOS can be adapted to meet distinct needs, without implication. NOS have the ability to speed up any activity related to the development of human resources, from conducting self-appraisals to writing job descriptions and providing formal appraisals. The resource expenditure they save in terms of both time and money is therefore potentially immeasurable.

2.6.4 **Convenience:** All accredited NOS shall be published on the ZAQA website.

2.6.5 **Recognising Achievement:** The modular nature of NOS means the NOS can be used to recognise individual performance by indicating when an employee has reached the required level of competence. As NOS also underpin qualifications, the additional benefit is that by working towards meeting the criteria specified in a standard, individuals can also be simultaneously working towards obtaining a qualification.

2.7 Standards Setting Bodies

National Occupational Standards are developed by an occupational sector via a standard-setting body which may be a professional/trade body or union which will represent a profession or industry.

3.0 THE ROLE OF NOS IN QUALIFICATION DEVELOPMENT

3.1 Qualifications

As providers of education and training can only meet skills needs if they respond to individual sectorial requirements, qualification developers have to research and reflect a sector's requirements.

Qualifications should have clearly stated general and specific outcomes, which lay out the knowledge, skills and values that the qualification seeks to develop, and indicate how it will prepare the candidate for work and study. These outcomes should be developed after research on the NOS for the occupational area(s) that the qualification is based on.

It is essential that elements of the qualification are developed in line with the current NOS for the occupational areas. However, not every element will be able to be aligned to NOS, and any one element might only partially relate to the NOS. However, within the qualification, each element contributes to the whole, and this will strengthen the link between the qualification and the NOS.

3.2 The Personnel Involved in Qualification Development

Personnel involved in the development, maintenance and review of qualifications must play a part in ensuring that NOS have been given due consideration. All personnel involved shall have different experience and knowledge of NOS, thus relevant training/information will have to be given. For example, it may be that an employer representative on a Validation Panel will be very familiar with NOS, but a representative from a higher education institution may need more background information.

3.3 Life-Cycle of Qualifications

It is important that NOS are considered at every stage of the qualification life-cycle. This includes:

      3.3.1   **Research**: Since a major success factor of any qualification is its relevance to the market, relevant research must be carried out in the National Occupational Standards for the qualification area.

      3.3.2   **Development:** During this stage it is important that proposals from qualification developers reflect the research on NOS and have taken them

into account. Consultation on the proposals should include clear communication about NOS so that interested parties can give feedback in an informed way.

3.3.3 **Validation:** Reference to NOS should be made in the appropriate sections of the proposal document, but particularly in the outcomes of the Qualification section, which should be based on an analysis of the market research and the needs of the employment sector. Members of the Validation Panel may require background information on NOS, depending on their experience.

3.3.4 **Implementation:** The validated document for the qualification shall be the main reference documents during implementation.

3.3.5 **Maintenance:** An important aspect of maintenance is keeping up-to-date with any changes in the occupational sector(s) relating to a particular qualification. This includes changes to NOS, which in turn will impact on the timing and extent of any subsequent review of a qualification.

3.3.6 **Review:** Changes to NOS and views from stakeholders are crucial to any review process and/or decision to review a qualification.

4.0 PRACTICAL GUIDANCE ON USING NATIONAL OCCUPATIONAL STANDARDS

The Manager responsible for NOS, supported by others involved in development or review shall:

4.1.1 Identify the appropriate sector representatives for the qualification area. It is important to note that not every qualification will have its own occupational area. Some will be cross-sectorial, and some qualifications that are of a more general nature may not have immediate obvious links to occupational areas;

4.1.2 Establish a national contact in the relevant sector. Making contact and setting up an automatic flow of information from the sector representative is an important task. Ensuring that regular interaction takes place is important for all sector players;

4.1.3 Obtain up-to-date research information for the occupational sector. This can be done by using the matrix of sector skills. An important aspect is to consider 'skill shortages' and 'skill gaps'. 'skill gaps' refer to a situation when employers judge an employee not to be fully proficient in their job. A 'skills shortage' exists when a vacancy is considered hard to fill

because applicants lack the necessary skills, qualifications and/or experience. Clearly, those involved in designing qualifications need to be aware of these aspects and the forecasts of national skills requirements in the national development plan;

4.1.4   Obtain up-to-date copies of National Occupational Standards from relevant authorities;

4.1.5   Identify NOS, issues and relevant sector evaluations which may affect the design of the Qualification. Feed this into the design of the Qualification;

4.1.6   Draw up a brief for the stakeholders which clearly state the NOS to be considered;

4.1.7   Decide on how mapping will be undertaken at qualification level. This could be the responsibility of the qualification design experts or a consultant.

5.0 STANDARD OF PERFORMANCE

5.1 Competence

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.

5.2 Quality of Performance

In order that a candidate's competence can be assessed against the national occupational standards, the standards need to clearly outline 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:

5.2.1   clear, unambiguous and concise;

5.2.2   relevant and essential;

5.2.3   a basis for the consistent assessment of competence.

6.0 STATUTORY AND LEGAL REQUIREMENTS

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:

6.1 requirements and responsibilities imposed on individuals and organizations such as health and safety or age constraints;

6.2 legal constraints affecting specific occupational practice, such as confidentiality, and the giving of advice or disclosure;

6.3 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.

7.0 UNFAIR DISCRIMINATION

7.1 National Occupational Standards shall be free from any form of unfair discrimination, either in the wording or content.

7.2 Standard Setting Organisations shall ensure that standards promote equity and access to national qualifications.

8.0 NATIONAL OCCUPATIONAL STANDARDS QUALITY CRITERIA

The National Occupational Standards (NOS) quality criteria shall provide criteria, guidance and quality assurance arrangements. They shall be designed to ensure the continuing availability of relevant, up-to-date NOS of consistent quality, accessible to users in a common format. They shall not cover the development of qualifications formulated by general guidance issued by ZAQA. The quality criteria shall not merely focus on what is required to produce quality NOS but shall also take a broader, whole-system approach designed to deliver the right NOS to meet the needs of sectors and occupations. They shall also ensure that NOS are used effectively, both to develop the skills people need and to deliver significant business benefits, such as productivity, cost-reduction, profitability, quality, risk-reduction, safety and continuity of employment.

The NOS quality criteria shall clearly state what standards setting organisations must do to ensure that quality NOS are available and that their full benefits are realised.

Explanatory Notes are also provided to ensure common understanding and interpretation of the quality criteria. The glossary clarifies the meaning of technical terms which are used throughout the document.

The NOS shall assure individual competence in NOS development and implementation functions and shall further underpin the integrity of the system. The NOS quality criteria shall be kept under continuous review to ensure that they are effective in assuring the quality of NOS. Detailed in the following table are specific quality criteria with explanatory notes:

Quality Criteria	Explanatory Notes
8.1 National Occupational Standards (NOS) may only be developed and maintained by recognised Standards setting organisations.	**Standards setting organisations** The development and maintenance of National Occupational Standards (NOS) shall be the responsibility of Standards setting organisations.
8.2 Standards setting organisations are required to meet all the quality criteria as required for NOS.	**Meeting the Quality Criteria for NOS** Standards setting organisations shall have systems in place to ensure they consistently meet, and are able to show that they meet, all the quality criteria as required for NOS.
8.3 All personnel working in the NOS system must be competent in the functions they are carrying out or develop their competence under supervision.	**Competent Personnel** All personnel, wherever they are working in the NOS system, must either: ● provide evidence that they are competent against the relevant NOS covering the functions they are carrying out in the NOS system; or ● be working towards demonstrating their competence in the functions they are carrying out under supervision. Personnel working on NOS projects are **not** expected to be competent in sector- or occupation-specific functions. Sectorial or occupational expertise shall be provided by subject matter experts from the relevant sector/occupation.
8.4 Each standards setting organisation shall report to the Zambia Qualifications Authority on an annual basis to demonstrate its compliance with the quality criteria as required for NOS.	**Annual Reporting** Standards setting organisations have responsibility to ensure they comply with the NOS Quality Criteria. They need to demonstrate their compliance in an annual report to the ZAQA which is accountable to the Government of Zambia for determining occupational standards. If a standard setting organisation's annual report fails to demonstrate compliance with the criteria for National Occupational Standards, ZAQA will agree a time-limited improvement plan with the standards setting organisation.
8.5 Each standards setting organisation shall gather and maintain up-to-date Zambia-wide labour market information about the sector/occupation it covers.	**Analysis of Sector/Occupation Needs** The standards setting organisation's labour market information shall include: 8.5.1 the size and profile of its sector/occupation, subsectors and geographical location of organisations and workers; 8.5.2 the link between the sector/occupation and other sectors/occupations;

Quality Criteria	Explanatory Notes
	8.5.3 key trends, developments and drivers within the sector/ occupation; 8.5.4 the types of occupations within the sector and anticipated changes in employment patterns; 8.5.5 opportunities for progression and typical career routes; 8.5.6 learning opportunities and qualifications within the sector/occupation. The foregoing data may be usefully presented as an occupational map prior to NOS development.
8.6 Each Standards Setting Organisation must identify, prioritise and make the business case for developing any new or revised NOS and/or support needed to implement NOS within its sector/occupation.	**Business Case for National Occupational Standards** In order for a standards setting organisation to make informed decisions on efficient NOS development and implementation, each standards setting organisation should identify, prioritise and make an evidence-based business case for: 8.6.1 developing new or revised NOS ; 8.6.2 translating NOS into other languages; 8.6.3 providing support to promote and implement NOS in its sector/occupation.
8.7 Each standards setting organisation must ensure that its NOS are informed by relevant employers in Zambia and take account of the needs of other key stakeholders.	**Key Stakeholders** NOS describe the standards of performance required in the workplace and must therefore be informed by consensus of a representative sample of relevant employers in Zambia as to what constitutes good practice. NOS should also take account of the views of other key stakeholders, such as: 8.7.1 trade associations; 8.7.2 professional bodies; 8.7.3 trade unions; 8.7.4 statutory bodies; 8.7.5 other Standards setting organisations whose footprints cover sectors/occupations where the same or similar functions are carried out; 8.7.6 awarding organisations/bodies;

Quality Criteria	Explanatory Notes
	8.7.7 education and training providers.
8.8 Standards setting organisations must publish their plans to review NOS or develop new NOS on the ZAQA National Occupational Standards Database.	**Publishing NOS Development Plans** In order that other Standards setting organisations and other stakeholders may be aware of planned developments, Standards setting organisations should publish on the ZAQA website their intention to review their NOS or develop new NOS.
8.9 National Occupational Standards shall be derived from an analysis of the functions which have to be carried out in order to achieve the key purpose of the sector, occupation or area of work.	**Job Functional Analysis of an Area of Work** National Occupational Standards shall be derived from job functional analysis – an accurate and detailed separation of the functions which have to be carried out in order to achieve the key purpose of the sector, occupation or area of work. Sometimes, the area to be covered by the job functional analysis is a whole sector or occupation. Often, however, the focus is on a smaller area, such as a particular industry, discipline or cross-sector area of work.
8.10 Job functional analysis shall start from a definition of the key purpose of the area of work.	**Key Purpose** Job functional analysis starts with a key purpose – a concise, yet comprehensive statement of what everyone involved in the area of work is

Quality Criteria	Explanatory Notes
	working towards, the common goal that everyone is ultimately trying to achieve. The development of an agreed key purpose ensures that the area of work being analysed is a coherent reflection of the thinking of the stakeholders involved.
8.11 Job functional Analysis shall identify all the functions which need to be carried out to achieve the key purpose and disaggregate these until discrete functions, which can be carried out by an individual, have been identified.	**Disaggregated Functions at Various Levels** The job functional analysis methodology asks the question: "what should happen to achieve the key purpose?" in order to identify the functional key areas. The job functional analysis methodology then asks the question: "what should happen to achieve the outcomes of these key areas?" in order to identify areas of competence. The job functional analysis methodology continues to ask the question: "what should happen to achieve this outcome?" until discrete functions which can be carried out by an individual have been identified. These discrete functions are indicative of the functions which need to be covered by NOS. The job functional analysis methodology should identify both the *technical functions* specific to the occupation and *transferable functions* that apply to many occupations and make individuals employable in many sectors. Examples of transferable functions might include: plan and manage own work; work as a member of a team; communicate with stakeholders; take decisions; contribute to health and safety at work; contribute to improving quality.
8.12 The outcome of job functional analysis is a job functional map which shall show all the functions which need to be carried out to achieve the key purpose and the	**Functional Map** A functional map is a representation of the results of the job functional analysis, showing the different relationships between the various functions identified. The number of levels of disaggregation in the functional map will depend on the size and nature of the sector, occupation or area of work being analysed.

Quality Criteria	Explanatory Notes
relationship between these functions.	Also, some parts of the functional map may need to be disaggregated to more levels than others.
8.13 Prior to the development of a National Occupational Standard, work shall be carried out to identify if similar NOS already exist, or are under development, which may cover the functions identified in the functional map.	**Identification of Existing NOS** In order to prevent proliferation of NOS covering the same or similar functions and to maximise the transferability of competence from one sector to another, it is important that the standards setting organisation developing the NOS checks on the NOS batabase, on other Standards setting organisations' websites and, if necessary, directly with the standards setting organisation concerned to see if NOS already exist which may cover the functions identified in the functional map or whether another standards setting organisation is currently in the process of developing relevant NOS. In particular, these NOS may cover transferable functions, such as: plan and manage own work; work as a member of a team; communicate with stakeholders; take decisions; contribute to health and safety at work; contribute to improving quality. Existing or draft NOS which are potentially relevant should be evaluated by the standards setting organisation developing the NOS and its stakeholders to see whether they do indeed describe the standard of performance required by the sector, occupation or area of work covered by the functional map. If they do, they may be imported or suitably tailored, with the agreement of the originating standards setting organisation. If the NOS are still in development, it may be possible to influence the content of the NOS so that they can be imported without any tailoring. Where there are no existing or draft NOS which adequately describe a function, a new NOS may need to be developed to cover this function.
8.14 Prior to development of new or revised NOS, work shall be carried out to identify and engage with other sectors/ occupations where the same or similar functions are carried out.	**Identification of Common Functions** In order to prevent proliferation of NOS and to maximise the transferability of competence from one sector to another, it is important that the standards setting organisation developing or revising NOS identifies any other sectors or occupations where the same or similar functions are carried out. The standards setting organisation should engage with Standards setting organisations covering other sectors/ occupations where the same or similar functions are carried out to ensure that, wherever possible, a single common

Quality Criteria	Explanatory Notes
	NOS is developed which meets the requirements of all contexts where the function is carried out.
8.15 National Occupational Standards shall specify the standard of performance an individual must achieve when carrying out a function in the workplace, together with the underpinning knowledge and understanding.	**National Occupational Standards** NOS shall be derived from a job functional analysis of the occupational area. Each NOS shall cover a single function which can be performed by an individual. Whilst NOS may contain other components, it is essential that each NOS specifies the standard of performance an individual must achieve when carrying out the function in the workplace, together with the underpinning knowledge and understanding. Compliance with these criteria shall ensure that all NOS are presented in a common format, whilst allowing considerable flexibility in their content and presentation to meet the needs of different sectors/occupations.
8.16 National Occupational Standards shall comprise the following *mandatory* components: unique reference number; NOS title; NOS overview; performance criteria; specification of knowledge and understanding; technical data.	**Mandatory Components** Although they may be called by various names in NOS developed by different standards setting organisations for presentation to their sectors/occupations, each NOS shall contain the mandatory components.
8.17 National Occupational Standards may also contain the following *optional* components: scope/range; values; behaviours; skills; glossary; links to other National Occupational Standards; external links.	**Optional Components** Additionally, a NOS may contain one or more other components, at the discretion of the standards setting organisation developing the NOS. These optional components may be called by various names in suites of NOS developed by different Standards setting organisations for presentation to their sectors/occupations.
8.18	**Unique Reference Number**

Quality Criteria	Explanatory Notes
Each National Occupational Standard shall have a unique reference number comprising: an allocated prefix indicating the organisation which has developed the NOS; a suffix indicating the position of the NOS in the functional map or suite.	ZAQA shall issue a three-letter prefix to each standards setting organisation for its entire NOS. The standards setting organisation is then responsible for developing a unique suffix for each NOS indicating the position of the NOS in the functional map or suite.
8.19 Each National Occupational Standard shall have a unique, concise title which clearly and accurately describes the function.	**NOS Title** The title of each NOS should be unique, i.e. there should not be another NOS with the same title. The title shall be as concise as possible whilst clearly and accurately describing the function it covers. A NOS title should start with an active verb (e.g. "Encourage" not "Encouraging") which accurately describes the nature of the function, followed by the object of the verb (e.g. "innovation"). It may be necessary to add further information to the title to more closely define the context(s) in which it may apply (e.g. "in your area of responsibility"). In the Management & Leadership Standards, for example, *Encourage innovation in your area of responsibility* applies in a narrower context than *Encourage innovation in your organisation.*
8.20 National Occupational Standards shall have an overview which clearly and concisely describes what the NOS is about and who it is for.	**NOS Overview** An overview is provided for information purposes only and should not be used for assessment purposes. An overview may therefore be amended without affecting the performance and/or knowledge and understanding demands of the NOS. The aim of the overview is to rapidly indicate to the reader what the NOS is about and who it is for. It should therefore be as clear and concise as possible and should not seek to provide a summary of the full content of the NOS.
8.21 National Occupational Standards shall have performance criteria that	**Performance Criteria**

Quality Criteria	Explanatory Notes
clearly and concisely specify the standard of performance required when carrying out the function.	Performance criteria answer the question: "what does an individual need to do or ensure happens in order to carry out the function to a satisfactory standard?"
	Taken together, the performance criteria should be capable of distinguishing between satisfactory and unsatisfactory performance in the function covered by the NOS. Whilst mundane aspects need not be covered, the performance criteria should cover all the aspects which are critical to carrying out the function to a satisfactory standard.
	Each performance criterion must be achievable by a competent individual when they are carrying out this function.
	Each performance criterion should start with an active verb in the second person singular and be able to follow the introductory phrase: "You must be able to...".
	Each performance criterion should clearly and concisely specify what the individual carrying out the function needs to do or ensure happens and the standard of performance that is satisfactory.
	Performance criteria also need to cover likely contingencies which may arise. For example, "when the query is outside your area of responsibility, refer it promptly to the relevant department". Clearly, an individual shall only need to perform to a contingency performance criterion if that contingency arises, but, whether the contingency arises or not, they need to know what to do in such circumstances. Contingency performance criteria, like the foregoing example, sometimes have a conditional phrase or clause ("when the query is outside your area of responsibility") before the main verb ("...refer it promptly to the relevant department").
	NOS are often divided into "elements" which describe various sub-functions identified in the job functional analysis. For example, the function *Plan, organise, monitor and evaluate activities in your area of responsibility* may be divided into four elements, *Plan...Organise...Monitor... Evaluate...*

Quality Criteria	Explanatory Notes
	Performance criteria may be called by other titles (such as "Outcomes of effective performance", "Performance indicators" or "Performance standards") in suites of NOS developed by different Standards setting organisations for presentation to their sectors/ occupations.
	For some NOS, the performance criteria are contained in a separate document. This is permissible as long as:
	8.21.1 there is clear reference to the separate document containing the performance criteria;
	8.21.2 it is made clear that competent performance requires an individual to *both* meet the performance criteria *and* possess the underpinning knowledge and understanding.
8.22 National Occupational Standards shall specify of the knowledge and understanding an individual must possess in order to perform consistently to the required standard.	**Knowledge and Understanding** The specification of knowledge and understanding in a NOS answers the question: "what does an individual need to know and understand in order to perform this function consistently to the required standard?" The specification shall comprise only the knowledge and understanding which is essential for effective performance of the function covered by the NOS.
	The level of detail to which knowledge and understanding is specified will depend on the nature of the function being performed and is the responsibility of the standards setting organisation developing the NOS to determine with its stakeholders.
	Knowledge and understanding items may be grouped together in sections (e.g. consistent with the element titles or divided into different areas of knowledge, such as "legislation and policies" or "knowledge of the work context"). Knowledge and understanding may be called by other titles (such as "Knowledge" or "Underpinning knowledge and understanding") in suites of NOS developed by different Standards setting organisations for presentation to their sectors/occupations. For some NOS, the knowledge and understanding

Quality Criteria	Explanatory Notes
	specification is contained in a separate document. This is permissible as long as: 8.22.1 there is clear reference to the separate document containing the knowledge and understanding; 8.22.2 it is made clear that competent performance requires an individual to *both* meet the performance criteria *and* possess the underpinning knowledge and understanding.
8.23 　National Occupational Standards shall contain the required technical data.	**Technical Data** Each approved NOS must have the following technical data: 8.23.1 the name of the standards setting organisation which has developed the NOS; 8.23.2 the version number; 8.23.3 the date the NOS was approved; 8.23.4 the date by which it is anticipated the NOS shall be reviewed (flexible in line with emerging sector/ occupation needs and priorities); 8.23.5 the validity of the NOS, i.e. "current" – a NOS currently in use and not in the process of being revised, "under revision" – a NOS which is being revised, "legacy" – a NOS which has been superseded, but which is still used within qualifications; 8.23.6 the status of the NOS, i.e. "original" – a new NOS, "imported" – a NOS imported from another organisation's suite without changing anything, "tailored" – a NOS imported from another organisation's suite with minor amendments to make it relevant to the new context but without changing the demands of the NOS;

Quality Criteria	Explanatory Notes
	8.23.7 where the status is imported or tailored, the name of the originating organisation and the unique reference number of the original NOS must be indicated.
	As well as the foregoing technical data, NOS may have the following additional technical data: 8.23.8 the place of the NOS in a functional map;
	8.23.9 the occupations to which the NOS applies.
8.24 A National Occupational Standard may have statements specifying its scope or the range of variables that have a critical impact on the quality of performance required.	**Scope/Range** Scope or range shall only be used where different circumstances or situations have a critical impact on performance. Scope or range should not be used simply to provide illustrative examples or clarify the meaning of a term or phrase (which can be achieved in a glossary). Sometimes, in order to show that they are fully competent, an individual needs to show that they can cope with all items in the scope/range. Example 1: a driver of an emergency vehicle would need to show that they could handle all types of "Conditions: daylight, night-time, dry, wet, clear, foggy". At other times, the individual may not need to show that they can cope with all items in the scope/range. Example 2: depending on where they were based, a driver of an emergency vehicle may not need to show they can handle all parts of the scope/range "Road types: side road, main road, motorway". The terms "scope" and "range" are used interchangeably in suites of NOS developed by different Standards setting organisations for presentation to their sectors/occupations, although, technically, "range" specifies all the conditions which *must* be met (see Example 1 above) and "scope" indicates the different variables an individual *might* have the deal with (see Example 2 above).
8.25 National Occupational Standards may have specifications of the values that underpin the function and which an individual is expected	**Values** Examples of values include: "respect confidentiality, and inform individuals, families, carers, groups and communities about when information needs to be shared with others", "promoting equality, diversity and anti-discriminatory practice" or "good practice requires reflection and a continuing search for improvement".

Quality Criteria	Explanatory Notes
to demonstrate when performing the function.	How values are expressed in NOS is left to the discretion of the standards setting organisation developing the NOS.
8.26 National Occupational Standards may have specifications of the behaviours that an individual is expected to demonstrate when performing the function.	**Behaviours** Behaviours, as they are expressed in NOS, tend to be generic and transferable to a wide range of contexts; they often include behaviours linked to employability skills. Examples of behaviours include: "make time available to support others" or "clearly agree what is expected of others and hold them to account", "take timely decisions that are realistic for the situation". How behaviours are expressed in NOS is left to the discretion of the standards setting organisation developing the NOS.
8.27 National Occupational Standards may specify the professional, technical, managerial and/or interpersonal skills required to perform the function.	**Skills** These may include the technical skills specific to the function described and/or employability skills transferable to a wide range of contexts. Examples of skills include: "analysing", "listening", "time management". How skills are expressed in NOS is left to the discretion of the standards setting organisation developing the NOS.
8.28 National Occupational Standards may contain a glossary with explanations of the key words or phrases used in the NOS.	**Glossary** How the glossary is presented is left to the discretion of the standards setting organisation developing the NOS.
8.29 A National Occupational Standard may indicate how it links to other National Occupation Standards.	**Links to other NOS** How the links to other NOS are presented is left to the discretion of the standards setting organisation developing the NOS.
8.30 National Occupational Standards may indicate how the NOS links to other documents and systems.	**External Links** NOS may indicate how the NOS links to other documents and systems (such as professional standards, codes of practice, pay and grading systems, collective bargaining agreements, licenses to practice, Core Skills and Key Skills).

Quality Criteria	Explanatory Notes
	How external links are presented is left to the discretion of the standards setting organisation developing the NOS.
8.31 Each National Occupational Standard shall be specified in such a way that it may be used in every part of Zambia where the function is carried out.	**Zambian Standards** NOS are cross cutting in Zambia, not just a single discipline resource. It is important that NOS shall be used in every part of Zambia where the function is carried out. Care should be taken to ensure that NOS align with legislative, regulatory, policy and institutional requirements across Zambia to which they apply. This may require the standards setting organisation developing the NOS to use generic terminology, rather than referring to specific laws, regulations or institutions.
8.32 Each National Occupational Standard shall meet the requirements of all the sectors/occupations where the function is carried out.	**Single standards to cover common functions** Where the same function is carried out in more than one sector/occupation, NOS should be developed in consultation with the Standards setting organisations covering the other sectors/occupations to ensure that, wherever possible, a single common NOS is developed which meets the requirements of all contexts where the function is carried out
8.33 Each National Occupational Standard shall specify current effective practice in the function as evidenced by research and agreed by representatives of the sector/occupation(s) involved.	**Evidence-based Standards** Standards setting organisations developing NOS shall provide evidence to show that the NOS specify current effective practice in the function. This evidence may include: 8.33.1 findings of research into effective practice in the function; 8.33.2 outcomes of consultations or deliberations with a representative sample of employers, practitioners and/or subject matter experts to agree definitions of effective practice in the function; 8.33.3 empirical studies of the effectiveness of the NOS, or drafts of the NOS, in practice.
8.34	**Standards Free From Unfair Discrimination**

Quality Criteria	Explanatory Notes
National Occupational Standards shall be free from direct or indirect unfair discrimination against an individual or group of individuals.	Standards setting organisations shall ensure that both the content and the wording of NOS are free from direct or indirect unfair discrimination against an individual or group of individuals.
8.35 The wording of each National Occupational Standard shall be concise, clear and appropriate for the individuals carrying out the function.	**Clear, Concise Standards** Great care shall be taken to ensure that the wording of each NOS is as concise as possible and is clear and appropriate to the individuals who carry out the function.
8.36 Where there is an existing NOS which accurately describes the standard of performance required of individuals when they carry out a function in the functional map, this NOS may be imported into a new NOS suite.	**Importing National Occupational Standards** Any existing NOS or NOS in development which potentially cover the functions in the functional map shall be identified. Potential NOS shall be carefully reviewed by the standards setting organisation and its stakeholders to see whether they accurately describe the standard of performance required of individuals when they carry out these functions in the context of the new sector/occupation. If a potential NOS accurately describes the standard of performance required of individuals when they carry out the function and the language is clear and meaningful to those carrying out this function in the new sector or occupation, the potential NOS shall be imported into the new suite without any amendments (i.e. all components – both mandatory and optional – are imported and the content remains exactly the same, without any changes to the wording, additions or deletions). A NOS which has been brought in from another NOS suite without any amendments is known as an "imported NOS". An individual who has demonstrated their competence in imported NOS is also deemed to be competent in the original NOS, and vice versa.
8.37 Where a NOS accurately describes the standard of performance	**Tailoring National Occupational Standards** It is sometimes the case that a potential NOS from another suite accurately describes the standard of performance required of individuals when they carry

Quality Criteria	Explanatory Notes
required of individuals when they carry out a function but the wording is unclear, ambiguous or not meaningful to those carrying out this function in the new context, this NOS may be tailored for use in the new NOS suite.	out this function in the new context, but the wording is (a) unclear or ambiguous or (b) not meaningful to those carrying out this function in the new context. In these cases the NOS may be tailored for use in the new context <u>as long as any changes made do not change the demands of the NOS in terms of the standard of performance or knowledge and understanding required</u>. Examples of tailoring include: 8.37.1 rewriting the NOS overview section to ensure that users in the new context understand what the NOS is about and who it is for; 8.37.2 rewording performance criteria or knowledge and understanding items to make them more understandable to those carrying out the function, <u>without changing the demands of the NOS</u>;
	8.37.3 changing words which may have a specific meaning in one context but not in another (e.g. client/customer, service user/patient, product/service, business/ organisation).
	A NOS which has been brought in from another NOS suite and amended <u>without changing the demands of the NOS</u> is known as a "tailored NOS". An individual who has demonstrated their competence in a tailored NOS is also deemed to be competent in the original NOS, and vice versa. Changes to the title of the NOS are not permitted under the tailoring process. If the title needs to be changed it becomes a new NOS. Also, if the changes made are so significant that they change the demands of the NOS, it becomes a new NOS.
8.38 Imported NOS and tailored NOS may be reformatted to present them in a format which is familiar to those carrying out the function in the new context.	**Reformatting National Occupational Standards** Imported NOS and tailored NOS may be reformatted in order to present them in a format familiar to the new sector or occupation <u>as long as all the components of the original NOS are retained and the originating standards setting organisation has agreed to the reformatting</u>.
8.39	**Process for Importing or Tailoring NOS**

Quality Criteria	Explanatory Notes
The originating standards setting organisation shall be informed of any intention to import its NOS. Where tailoring is involved, the originating standards setting organisation must agree that the tailoring has not changed the demands of the NOS.	A standards setting organisation considering importing or tailoring a NOS shall inform the originating standards setting organisation at an early stage in order that any issues regarding the impact of proposed rewording on the demands of the NOS may be fully discussed and agreed. Where the intention is to import a NOS (i.e. without any changes to the wording, additions or deletions), written permission must be obtained from the originating standards setting organisation. Where a NOS has been tailored for use in another sector or occupation, the originating standards setting organisation must agree <u>in writing</u> that the tailoring has not changed the demands of the NOS. The originating standards setting organisation should maintain a record of which of its NOS have been imported or tailored and by which standards setting organisation.
8.40 After it has checked to ensure all relevant quality criteria have been met, the standards setting organisation shall submit new and revised NOS for approval to ZAQA.	**Gaining Approval for NOS** Standards setting organisations are responsible for the quality of the NOS they develop and shall have appropriate quality assurance systems in place. When the standards setting organisation is satisfied that new or revised NOS meet all the relevant quality criteria above, it shall send them to ZAQA for approval and/or recommendations for amendments. Once NOS have been approved, the standards setting organisation shall upload them onto the ZAQA NOS Database. The NOS are then freely available for other Standards setting organisations and other stakeholders to use.
8.41 Standards setting organisations shall keep their NOS under continuous review to ensure that they are relevant and up-to-date, revise NOS which need revising and delete NOS which are no longer required.	**Maintaining the Relevance and Currency of NOS** Standards setting organisations are responsible for ensuring their NOS remain current and relevant for their sector/occupation(s). Standards setting organisations shall keep their NOS under review to ensure they continue to describe good practice in their sector/ occupation(s) and take account of any social, economic, technological or legislative developments. Where NOS need revising, the standards setting organisation shall plan to revise them as part of its business planning process.

Quality Criteria	Explanatory Notes
	Where a NOS has been superseded by a new or revised NOS but it is still used in a qualification(s), it shall remain on the ZAQA NOS Database and the validity field should be changed from "current" to "legacy" Where NOS are no longer required or have been superseded by new or revised NOS, the obsolete NOS should be deleted from the ZAQA NOS Database.
8.42 As part of its business planning process, each standards setting organisation shall plan how to ensure NOS are used effectively by stakeholders in its sector/occupation for both skills development and business outcomes.	**Planning the Implementation of NOS** NOS may be used for both skills development purposes (e.g. training and development, qualifications, apprenticeships, continuous professional development (CPD)) and to deliver business outcomes (e.g. productivity, cost-reduction, profitability, product/service quality, risk-reduction, safety and continuity of employment). Each standards setting organisation shall consider both these aspects in its business planning.
8.43 In addition to their NOS being available on the ZAQA NOS Database, Standards setting organisations may make their NOS, and products and services based on their NOS, available through their own websites and/or other media.	**Providing Access to NOS and NOS-based Products and Services** As a minimum, Standards setting organisations must provide access to their NOS via the ZAQA NOS Database. However, Standards setting organisations may also provide access to NOS in their sector/occupation format on their websites and make available a range of other NOS-based products, services and support to meet needs of the sector/occupation.
8.44 Each standards setting organisation shall lead the promotion of NOS and/or NOS-based products and services to stakeholders in its sector/occupation in ways that are consistent with agreed overarching guidelines.	**Promotion of NOS** The Zambia Qualifications Authority shall develop, in partnership with Standards setting organisations and other relevant stakeholders, overarching guidelines for the promotion of NOS. To ensure messages are consistent and not conflicting, each standards setting organisation shall ensure that its own promotional activities for NOS and/or NOS-based products/services are aligned with these overarching guidelines.
8.45	**Gathering Information on the Use of NOS**

Quality Criteria	Explanatory Notes
Each standards setting organisation shall gather information about who is using NOS and NOS-based products/ services for what purposes.	The first level of evaluation is knowing who is using NOS and for what purposes. This provides quantitative data to gauge the depth (what percentage of organisations are using NOS and NOS-based qualifications/products/services) and breadth (how widely they are using NOS, i.e. for what range of purposes and for which range of staff) of market penetration. It also provides a database for gathering feedback on the NOS and developing case studies of how NOS are being used.
8.46 Each standards setting organisation shall record feedback from users of NOS and NOS-based products/ services.	**Recording Feedback on NOS** The second level of evaluation is gathering and analysing feedback from users on the NOS and NOS-based products/ services and using this feedback to inform changes and developments.
8.47 Each standards setting organisation shall develop meaningful indicators and collect data to measure the impact of NOS and NOS-based products/services on skills development and business outcomes.	**Evaluating the Impact of NOS** The third level of evaluation is measuring the impact of NOS on both skills development and business outcomes in the sector/occupation. This involves establishing measures and working with users to quantify the benefits and costs of using NOS and NOS-based products/services. Understanding the potential benefits and costs is essential to making the business case for the development and implementation of NOS and NOS-based products/services.

GLOSSARY OF TERMS

Term	Explanation
Awarding Body	An organisation recognised by ZAQA for the purpose of awarding accredited qualifications.
Behaviours	The behaviours that an individual is expected to demonstrate when performing a function.
Competence	See "Occupational Competence".
Continuous Professional Development (CPD)	The systematic maintenance and improvement of knowledge, skills and competence undertaken by an individual throughout their working life.
Employer	An individual or organisation which deploys human resources, whether under a contract of employment, a volunteer agreement or through a third-party supplier arrangement, to achieve its objectives. Employers may include sole-traders, freelancers or professionals working in partnership.
Function	An activity necessary for achieving the key purpose of the sector, occupation or area of work, which can be carried out by an individual worker. Functions are identified through job functional analysis and form the basis of NOS.
Job Functional Analysis	An analysis of the functions which have to be carried out in order to achieve the key purpose of the sector, occupation or area of work.
Functional Map	A representation of the results of the job functional analysis, showing the relationship between the different functions identified.
Glossary	Explanations of the key words or phrases used in the NOS.
Imported NOS	A NOS which has been brought in from another NOS suite without any amendments.

Job	A set of tasks and duties performed or meant to be performed by one person including for an employer or in self-employment.
Key Purpose	A concise yet comprehensive statement of the common goal that everyone involved in a sector, occupation or area of work is working towards.
Knowledge & Understanding Items	Statements which together specify the knowledge and understanding an individual needs in order to perform to the required standard.
Knowledge & Understanding Specification	The knowledge and understanding an individual needs in order to perform to the required standard.
Legacy NOS	A NOS which has been superseded by new or revised NOS, but is still used in qualifications.
Mandatory Component	A component which must appear in a NOS.
National Occupational Standard (NOS)	A statement of the standard of performance an individual must achieve when carrying out a function in the workplace, together with a specification of the underpinning knowledge and understanding.
	NOS are *National* because they can be used in every part of Zambia where the function is carried out.
	NOS are *Occupational* because they describe the performance required of an individual when carrying out the functions in the workplace, i.e. in their occupation (as a plumber, police officer, production engineer etc.).
	NOS are *Standards* because they are statements of effective performance which have been agreed by a representative sample of employers and other key stakeholders and approved by the Zambian NOS Panel.
ZAQA **NOS Database**	The central database containing all current NOS, developed by all Standards setting organisations.
NOS Overview	An overview which describes what the NOS is about and who it is for.
NOS Title	A title of a NOS.
Occupation	A kind of work performed in a job.

Occupational Competence   The application of knowledge and skills to perform consistently to the standards required in the work context.

Optional Component   A component which may appear in a NOS, but which is not mandatory.

Original NOS   A NOS developed by a standards setting organisation without direct reference to any existing NOS.

Performance Criteria   Statements which together specify the standard of performance required when carrying out a function.

Qualification   An award granted for successful completion of a programme of study and is the formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved pre-determined learning outcomes to pre-determined standards.

Range   Statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required (synonymous with "Scope").

Reformatted NOS   An imported NOS or tailored NOS which has been reformatted in order to present it in a format familiar to the new sector or occupation whilst retaining all the components of the original NOS.

Scope   Statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required (synonymous with "Range").

Sector   An area of economic activity.

Skills   The professional, technical, managerial and/or interpersonal skills required to perform the function.

Stakeholder   An individual or organisation with a legitimate interest in the NOS.

Suite of National Occupational Standards   Set of related NOS which cover all the functions required for a sector, occupation, area or work.

Tailored NOS	A NOS which has been brought in from another NOS suite and amended, with agreement of the originating standards setting organisation, without changing the demands of the NOS.
Technical Data	Each NOS must include certain mandatory technical data, such as: the name of the standards setting organisation which has developed the NOS; version number; the date of approval; the indicative date for review; the status of the NOS (original, imported, tailored); and, where the status is imported or tailored, the name of the originating standards setting organisation and the unique reference number of the original NOS. It may also include additional technical data, such as: the place of the NOS in a functional map; the occupations to which the NOS applies.
Values	The values that underpin a function and which an individual is expected to demonstrate when performing the function.
Worker	Any individual who is carrying out the function described in the NOS. The worker may be an employee, a formal volunteer or an informal worker (such as a family member or informal carer).
Workplace	Any location where the function described in the NOS is carried out. This may include formal workplaces (such as factories, offices, hospitals, construction sites, and retail units), public areas (such as streets or open countryside) and private property (such as people's homes).

APPENDIX 1

SOME USES OF NATIONAL OCCUPATIONAL STANDARDS

Performance Management
1   linking business objectives to team and individual objectives
2   setting standards for achievement
3   planning and implementing changes in people's roles and performance
4   monitoring the outcomes of people's performance
5   assessing the added value that people's performance contributes to the business
6   reviewing and rewarding performance
7   giving structured and constructive feedback to people on their performance
8   benchmarking to identify the nature and level of future standards

Assurance of Product and Service Delivery
1   a quality specification for work processes and outcomes
2   structuring and 'loading' production systems
3   monitoring work processes
4   guaranteeing customer service standards by licensing job holders
5   specifications for contract tendering
6   judging potential suppliers'/contractors' competence
7   monitoring contract delivery/compliance
8   evidence of competence for compliance with international standards

Organisation Development
1   specifying the competence needs of an organisation
2   auditing the competence of an organisation
3   comparing the organisation's skills profile to the level of competitors' competence
4   benchmarking key areas of competence with the best in that area
5   assessing the consequences of change for the organisation's competence
6   assessing the organisation's capacity to cope with change
7   determining the structures and systems needed to enable people to exercise their full competence
8   reviewing and assessing the distribution of authority and autonomy
9   linking training and development policy and strategy to business objectives

Recruitment and Selection
1   identifying the performance requirement of a role/job
2   identifying the performance requirement of an anticipated/future role/job
3   preparing recruitment specifications
4   preparing job advertisements
5   a format for collecting information from referees
6   a format for giving advance information to job candidates
7   an interview checklist for selectors
8   specifying induction and initial training

Job Design and Evaluation
1   developing job specifications
2   regular updating of job/role descriptions
3   monitoring the pattern of role/job responsibilities in parts or the whole of an organisation
4   job design and redesign
5   criteria for job evaluation
6   criteria for job grading
7   criteria for payment and reward systems

Labour Market Analysis & Planning
1   identifying trends in skill requirements
2   analysing and quantifying skills availability within labour markets
3   monitoring national and local skill supply shortages and gaps
4   providing training/learning guarantees
5   highlighting links and routes between current and emerging jobs/occupations
6   identifying transition points between declining and emerging occupations/ roles
7   identifying factors which promote unfair exclusion in occupational and career structures
8   developing strategies for changing occupational and career structures

Identifying Training Needs
1   developing a strategic view of future learning requirements
2   identifying individual learning needs
3   a format for planning individual learning and development
4   identifying group/organisational learning needs
5   identifying previously acquired competence
6   coordinating different Human Resources Development processes

Structuring Learning Programmes
1   linking training to strategic economic needs
2   increasing the relevance and credibility of training/learning programmes
3   allowing new learners to see the 'whole picture' in a simple format
4   broadening the scope and relevance of traditional skills training
5   identifying learning opportunities in the work environment
6   integrating on and off-the- job training provision
7   sequencing training activities
8   developing learning contracts
9   developing specific learning objectives
10   developing knowledge content
11   specifying learning processes to meet needs
12   specifying the outcomes and targets required from external training providers

Delivering and Evaluating Learning Programmes
1   evaluating and selecting learning resources against organisational requirements
2   integrating different kinds of training and development
3   a format for structured learning in the work environment
4   identifying progression routes for learners
5   providing clear goals for learners
6   evaluating individual/group training programmes
7   monitoring external training providers

Assessing Achievement
1   identifying assessment opportunities
2   specifying assessment methods and processes
3   a specification for formative assessment
4   a specification for internal assessment and appraisal
5   a format for joint review of learner progress
6   a format for individual review of progress/achievement
7   criteria for recording achievement
8   a basis for self-assessment
9   a basis for peer/group assessment

Industry Regulation
1   assessing compliance with regulators' competence requirements
2   assessing the relevance of qualifications to regulators' requirements

Careers Guidance and Counselling
1   a basis for information/advice for people entering a first career/job
2   a basis for information and advice for people changing to new careers/jobs
3   assessing aptitude and potential for careers/occupational areas
4   identifying common and potentially transferable skills in different careers/ occupations
5   analysing local and national career opportunities in outcome terms
6   a framework for career planning and review
7   a framework for monitoring and evaluating the career progress of groups of people (e.g. school leavers)

Development of Publicly Funded Training Regimes
1   assessing requirements for national and local training provision
2   developing assessable outcomes for national targets
3   assessing funding requirements for national training programmes
4   allocating funding for national training programmes
5   monitoring the success of publicly funded programmes

Public Recognition/ Certification of Competence
1   a coherent system for publicly recognising competence
2   providing coherence for national provision of qualifications
3   development of formal assessment systems
4   a specification for summative assessment for public certification

5   monitoring and assessing priorities for the development of new qualifications
6   providing criteria for equivalence between national and international qualifications

Management Information
1   a database of the competence of employees (local/national)
2   evaluating the cost effectiveness of the organisation's training budget
3   tracking the progress of individuals towards qualifications
4   evaluating the effectiveness of the organisation's employment policies and strategies

Regulating Professional and Occupational Qualifications and Institutions
1   profiling the membership requirements of a professional body
2   defining the institutions requirements for central processing units
3   relating and harmonising professional requirements with other professional bodies
4   mutual recognition of vocational qualifications
5   identifying and describing new and emerging occupations and professional groups
6   assessing the relevance of professional qualifications to the demands of industry standards

APPENDIX 2

SOME OCCUPATIONS RECOMMENDED TO HAVE NATIONAL OCCUPATIONAL STANDARDS

a. Extractive
b. Mining
c. Aviation
d. Information and Communication Technology
e. Librarians and Related
f. Engineering
g. Science
h. Health
i. Teaching
j. Legal
k. Business and Statistical
l. Architects, Town Planners and Surveyors
m. Public Service
n. Quality and Customer Care
o. Production
p. Finance
q. Hospitality
r. Agriculture
s. Sports and Fitness Occupations
t. Media
u. Social Work
v. Transport
w. Artistic and Literary Occupations
x. Records
y. Communications
z. Secretarial and Related Occupations
aa. Textile and Garment Trades
bb. Food Preparation Trades
cc. Animal Care Services
dd. Cosmetology and Related Occupations
ee. Construction

EXAMPLE OF A NATIONAL OCCUPATIONAL STANDARD

Part A:

Job Title: Physiotherapy Technologist

Other Possible Title: Physical Therapy Technologist

Occupational Std. Code: ZAQA/PT/0001

Target Curriculum and Qualification: Diploma in Physiotherapy

Economic Sector(s) in which the job is mainly practised:

a) Hospitals
b) Clinics
c) Rehabilitation centres
d) Continuing care facilities
e) Mental Health facilities
f) Children's treatment centres
g) Home care agencies
h) Sports Injury clinics
i) Leisure industry

Part B:

1.0   Job Purpose:

To offer physiotherapy services designed to improve and or maintain clients' abilities to function independently.

2.0   Main Roles/ Responsibilities for the job holder; and Tasks/ Activities:

   2.1   Participate in collaborative team and patient/client care related activities
      2.1.1   Schedule rounds as well as adhoc meetings to ensure timely flow and progression of the ongoing care and discharge.
      2.1.2   Patient/client and family conferences
      2.1.3   Staff meetings and committees
      2.1.4   Programme planning, research, continuous quality improvement initiatives, staff education, safety initiatives and accreditation
   2.2   Implement treatment plans designed by physical therapist for individual clients and groups
   2.3   Perform lifts and transfer, and help patients to correctly position themselves
   2.4   Prepare and apply hot or cold packs, hydrotherapy and wax treatment

2.5 Assist patients with activities such as stretching, individual exercises, posture re-education and gait re-education.

2.6 Administer electrotherapy treatment such as ultrasound, interferential treatment, transcutaneous electrical nerve stimulation (TENS) and electrical muscle stimulation

2.7 Measure patients for walking aides (i.e. canes, walkers) and educate patients on their use

2.8 Apply braces or artificial limbs and instruct clients in the use of crutches, canes and walkers

2.9 Lead or participate in group exercise or activity classes

2.10 Monitor patients during treatment, individual activities and exercise classes, and report patient performance

2.11 Perform postural drainage, percussions and vibration for treatment of respiratory conditions and teach deep breathing exercise

3.0 Equipment, Tools and Consumable Materials (What equipment, materials And tools are needed to perform this job)

3.1 Equipment

3.1.1 Hydrotherapy equipment
3.1.2 Electro therapy equipment
3.1.3 Heat and Cold therapy equipment
3.1.4 Shoulder wheel
3.1.5 Shoulder pulley set
3.1.6 Shoulder abduction ladder
3.1.7 Rowing machine
3.1.8 Exercise tables
3.1.9 Massaging table
3.1.10 Massager
3.1.11 Grip exerciser
3.1.12 Exercise boards
3.1.13 Cycle exerciser
3.1.14 Ankle exerciser
3.1.15 Heel exerciser
3.1.16 Hip circumductor
3.1.17 Walking bar
3.1.18 Wheel chairs
3.1.19 Training stairs
3.1.20 Hydrometer
3.1.21 Dynamometer
3.1.22 Bolster pillows
3.1.23 Computer
3.1.24 Printer

3.2 Tools/Consumables

      3.2.1   Screw drivers
      3.2.2   Saw blade
      3.2.3   Gigili wire saw
      3.2.4   Pipe cutter
      3.2.5   Canula
      3.2.6   Walking canes
      3.2.7   Connectors
      3.2.8   Platinum wire
      3.2.9   Needles
      3.2.10 Dialysis membrane
      3.2.11 Test tubes
      3.2.12 Athletic tape
      3.2.13 Elastic badges
      3.2.14 Plastic gloves
      3.2.15 Binding and tubing racks
      3.2.16 Iodine flask
      3.2.17 Blood lancets
      3.2.18 Thermometers
      3.2.19 Quadriceps boots
      3.2.20 Nylon brushes
      3.2.21 Alarm clock timer
      3.2.22 Teflon tapes
      3.2.23 Hip joint
      3.2.24 Knee joint
      3.2.25 Bond paper
      3.2.26 Toner
      3.2.27 Pencil
      3.2.28 Folders
      3.2.29 Box files
      3.2.30 Paper clips

4.0   Quality of Process and Product/Service (When is the job holder judged to have performed his/her job well? – What performance indicators are used?)

4.1   Quality of Process

      4.1.1   High professional and ethical standards maintained
      4.1.2   Compliance with physiotherapists' code of conduct and work ethics
      4.1.3 Ensuring of the safety of patients/clients during therapy/treatment
      4.1.4 Number of services offered to clients

4.2   Quality of Product/Service

      4.2.1   Positive feedback from clients

4.2.2   Consistency in service delivery
4.2.3   Documented evidence of products and services provided meeting required standards

5.0   Dilemmas/Challenges and complexities for Job holder

5.1   Dilemmas/Challenges (that the job holder faces in his/her work)

5.1.1   Inadequate resources to carryout therapies
5.1.2   Long working hours

5.2   Alternative Choices (Solutions) to dilemmas and complexities

5.2.1   Create innovative ways of resource mobilisation
5.2.2   Effective planning

6.0   Parties involved/interacting with the Job holder

6.1   Internal/within the organisation

6.1.1   Supervisors (physiotherapists)
6.1.2   Co-workers
6.1.3   Support staff

6.2   External/outside the organisation

6.2.1   Patients/clients
6.2.2   Patients' relatives
6.2.3   Health inspectors
6.2.4   Non-Governmental Organisations
6.2.5   Faith Based Organisation

7.0   Working Conditions/Environment

7.1 Ambulatory areas
7.2 Homes
7.3 Adverse weather conditions
7.4 Hospitals and clinics

8.0   **Physical demands on the body**

8.1 Fatigue due to long working hours
8.2 Walking long distances
8.3 Working while standing for extended periods
8.4 Working in awkward positions
8.5 Lifting heavy loads

8.6 Pulling/Pushing heavy equipment
8.7 Crouching
8.8 Stretching/reaching
8.9 Manual dexterity

9.0   Abilities of the job holder (skills)

9.1   Good communication skills
9.2   Good interpersonal skills
9.3   Organisation and administrative skills
9.4   Excellent problem solving and troubleshooting skills
9.5   Ability to work long hours
9.6   Adapting to different environments
9.7   Computer skills
9.8   Planning, organisation and time management skills
9.9   Leadership abilities
9.10   Ability to operate work related equipment
9.11   Attention to detail
9.12   Conflict management skills
9.13   Communication skills
9.14   Problem solving abilities
9.15   Ability to work independently and as part of a team
9.16   Ability to deal with people who are under physical and emotional stress
9.17   Counselling skills
9.18   Entrepreneurial skills

10.0   Required Knowledge

10.1   Knowledge of physiotherapy practice
10.2   Knowledge of ethical behaviour with patients and team members
10.3   Knowledge of anatomy and physiology

11.0   Important Values/Attitudes

11.1   Honesty
11.2   Dedication
11.3   Gender sensitivity
11.4   Courtesy
11.5   Patience
11.6   Tolerance
11.7   Tact
11.8   Sensitivity
11.9   Encouraging
11.10 Empathetic
11.11 Sobriety
11.12 Initiative
11.13 Confidentiality

11.14 Integrity
11.15 Flexibility
11.16 Non stereotyping
11.17 Punctuality
11.18 Self-motivation
11.19 Critical thinking
11.20 Active listening
11.21 Team-player

12.0 Practicing Licence and Requirements (If any)

Yes

13.0 Employment patterns
13.1 Salaried Employment Career Pathway

Can start from Physiotherapy Technologist to Chief Physiotherapist

13.2 Entrepreneur/Self-Employed Career Pathway

13.2.1 Consultant
13.2.2 Private practice

14.0 National Employment Outlook and related Policy/Investment Trends

14.1 Salaried Employment Career Pathway

14.1.1 Decentralisation policy (e.g. Creation of new districts)
14.1.2 Construction of new hospitals
14.1.3 Employment growth resulting from the growth of the hospitality industry and sports sector.

14.2 Entrepreneur/Self-Employment Career Pathways
14.2.1 Formation of physical training facilities i.e. Gymnasium
14.2.2 Formation of care facilities i.e. hospice/Nursing home

15.0 Medical/Physical Requirements

15.1 Sound mind
15.2 Must be physically fit