



**MAPPING THE ORGANISING FRAMEWORK FOR OCCUPATIONS (OFO)
FOR THE
SAFETY AND SECURITY SECTOR**

Final Report

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1. INTRODUCTION AND BACKGROUND

The Safety and Security Sector Education and Training Authority (SASSETA) was established on 1 July 2005. It is one of the twenty-one Sector Education and Training Authorities (SETAs) established in terms of the Skills Development Act (Act 97 of 1998) as amended. SASSETA's licence has been renewed until 31 March 2020. The SASSETA was further re-established from 01 April 2020 to 31 March 2030 in terms of the Government Gazette issued by the Minister of Higher Education and Training (DHET) on 22 July 2019.

The SETA is classified as a schedule 3A Public Entity in terms of the Public Finance Management Act, (Act 1 of 1999, as amended), and it is accountable to its Board and the Department of Higher Education and Training (DHET). The rest of the Section 1 of this document focuses on SASSETA's scope of coverage, SASSETA's Strategic Plan and Research Agenda, the importance of data in skills development planning, and the problem statement.

1.1 SASSETA'S SCOPE OF COVERAGE

Box 1.1 illustrates Standard Industrial Classification Code (SIC) and sub-sectors, as well as employers (constituencies) covered by SASSETA.

Box 1.1: Sub-sector and Employers covered by SASSETA

SIC Codes	Sub-sector	Constituency
9110A*	Policing	<ul style="list-style-type: none"> The Independent Complaints Directorate (IPID), the Secretariat for Safety and Security, Civilian Secretariat for Police, and The South African Police Service (SAPS).
91301 91302		<ul style="list-style-type: none"> Municipal and Metro Police Services, Traffic Management / Law Enforcement, and Road Traffic Management Corporation (RTMC).
9110B*	Corrections	<ul style="list-style-type: none"> The Department of Correctional Services (DCS) Private correctional services providers
		<ul style="list-style-type: none"> Kutama Sirthumule Correctional Centre. Mangaung Correctional Centre. Judicial Inspectorate for Correctional Services. Correctional Supervision and Parole Boards.
9110D*	Defence	<ul style="list-style-type: none"> The Department of Defence (DOD). South African National Defence Force (SANDF) (SA Navy, SA Air force, and SA Military Health).
9110C*	Justice	<ul style="list-style-type: none"> The Department of Justice and Constitutional Development (DoJCD) National Prosecuting Authority (NPA), and Special Investigations Unit (SIU)
91104	Intelligence Activities	<ul style="list-style-type: none"> The National Intelligence Agency (NIA)
91105		<ul style="list-style-type: none"> The South African Secret Service (SASS)
88110	Legal Services	<ul style="list-style-type: none"> Legal and paralegal services Sheriffs
88111		<ul style="list-style-type: none"> Legal Aid Services
88920	Private Security and Investigation Activities	<ul style="list-style-type: none"> Private security, investigation, and polygraph services

Box 1.1 illustrates that the Safety and Security Sector comprises of seven sub-sector and these are:

- **The Policing sub-sector** which covers public sector employers such the South African Police Service (SAPS), the Independent Police Investigative (IPID), and the Road Traffic Management Corporation (RTMC);
- **The Corrections sub-sector** which incorporates the Department of Correctional Services and privately-operated prisons in Limpopo and Free State provinces;
- **The Defense sub-sector** which includes the South African National Defence Force (SANDF) and all its armed forces;
- **The Justice sub-sector** which encompasses public sector employers such as the Department of Justice and Constitutional Development, the National Prosecuting Authority (NPA) and the Office of the Chief Justice;
- **The Legal sub-sector** which primarily cover private sector employers such private law firms and their regulatory authority, the Legal Practice Council (LPC);
- **Private security sub-sector** which includes employers such as private security companies as well their regulator, the Private Security Regulatory Authority; and
- **The Intelligence Activities sub-sector**, which incorporates the State Security Agency (SSA).

All of the seven sub-sectors constitute Chambers of the SASSETA comprising members nominated by employers and labour unions, and each is chaired by a member of the SASSETA Board. The primary role of the Chambers is to hold the hold the core service delivery programmes of the SETA accountable and advice management and the Board on matters skills development matters affecting their respective sub-sectors.

1.2 SASSETA's Strategic Plan and Research Agenda

SASSETA's Strategic Plan (2015/16 – 2019/20) outlines the following four Strategic Outcome-oriented Goals (SOG), namely:

SOG 1: To provide strategic leadership, technical and administrative support services to SASSETA;

SOG 2: To strengthen and institutionalise planning mechanism for skills planning, monitoring, evaluation and research for the Safety and Security Sector;

SOG 3: To reduce the scarce and critical skills gap in the Safety and Security Sector through the provision of learning programme; and

SOG 4: To strengthen efficacy in SASSETA's discharge of the quality assurance function.

In response to the Strategic Outcome-oriented Goal 2, i.e., strengthening and institutionalise planning mechanism for skills planning, monitoring, evaluation and research for the sector, the Skills Planning and Research Department compiled the Research Agenda for the SETA. The purpose of the Research Agenda is to support a sound skill planning in order to respond to the skills development needs of the Safety and Security Sector. This document also sets out five research focus areas for the SETA for the period: 2020 – 2025, and these are:

- Developing internal research capacity within SASSETA;
- Supporting and developing research networks (i.e. reference group) for the sector;
- Linking SASSETA's post-graduate bursaries holders with certain topics that are of significance in the sector;
- Building a research repository for the sector; and
- Developing systems and processes to improve SASSETA information [management].

In essence, the SASSETA's Research Agenda has been developed to support and the advance the SETA-sector strategy, and to further inform stakeholders about the SETA's research focus areas and priorities for the duration of the Research Agenda (i.e. 2020-2025). On the other hand, SASSETA utilises Workplace Skills Plans (WSPs) data and other data sources to determine and analyse skills gaps (top-up skills), as well as occupational shortages (scarce skills). The said analysis informs the development of the PIVOTAL interventions list, which confirms the key programmes of SETA as captured in the Annual Performance Plan (APP) and the Service Level Agreement with the DHET. The main purpose of this exercise is to improve performance at different workplaces in the safety and security sector.

1.3 IMPORTANCE OF DATA IN SKILLS DEVELOPMENT PLANNING

At the heart of the skills planning mechanism is the data, which includes WSP data as indicated above. Should the data be inaccurate, it will then provide misinformation the process of prioritising skills gaps and scarce skills in the sector. Moreover, the data is dependent on ensuring that jobs are recorded accurately against the sector appropriate Organising Framework for Occupations (OFO) Codes.

1.4 PROBLEM STATEMENT

Over the years, SASSETA have established that

- The process of mapping jobs to occupations in terms of the OFO code is generally technical one;
- Some employers in the sector experience difficulties during the process of mapping jobs to occupations, and at this this is inaccurately done;
- The OFO code classification is not as comprehensive for all employers in the sector, hence some sector specific occupations are not reflected in the classification system; and
- SASSETA does not have a sector specific OFO code manual or handbook to serve as appoint of references for accurately mapping jobs to occupation in terms of the OFO classification system.

1.5 OFO CODE SUPPORT AND CAPACITY BUILDING FOR EMPLOYERS IN THE SAFETY AND SECURITY

In response to the OFO code challenges mentioned above, the Skills Planning and Research Department of the SETA is enjoined to support and build the capacity of stakeholders to apply for the inclusion of omitted sector specific occupations in the OFO classification system. Table 1.1 below illustrates applications for the incorporation of new occupations forwarded by

SASSETA to the DHET on behalf of its stakeholders during the 2017/18 and 2019/2020 financial periods.

Table 1.1: Application for inclusion of new occupations during 2017/18 and 2019/2020

Financial Year	Name of Employer	Name of Chamber	Name of New Occupation
2017/18	Department of Corrections Services (DCS)	Corrections	a) Parole Board Clerk
			b) Community Correctional Manager
			c) Correctional Services Manager
			d) Prison Officer
2019/2020	Road Traffic Management Corporation (RTMC)	Policing	a) Crash Investigator
			b) Driving License Examiner
			c) Motor Vehicle Examiner

Table 1.1 illustrates that SASSETA successfully applied for the incorporation of four new occupations in the OFO Code for the DCS during the 2017/18 financial year. The same table also depicts that the SETA has successfully facilitated a process of including three new occupation in the OFO classification system for the RTMC.

Furthermore, SASSETA embarked on a process of mapping OFO Codes for the entire safety and security sector as a means of supporting employers in the Safety and Security Sector. This process culminated in the development of the OFO Mapping Manual for the sector. The next section of this report focuses on the key terminology and the theoretical background behind the OFO.

2. KEY TERMINOLOGY AND THEORETICAL BACKGROUND OF THE OFO

The framework used to design and construct the OFO is based on the nature and scope of work performed, and the notion of ‘skill’ as a concept. These two areas have been combined in a specific structure in order to determine the appropriate OFO codes.

In order to appreciate the value of OFO codes in the process of skills development planning, as well as in the development of relevant qualifications (including but not limited to occupational qualifications), the concepts of “Occupational Learning System” and “Occupational Qualifications Framework” are also valid. The key terminology is discussed in section 2.1 below.

2.1 KEY TERMINOLOGY

2.1.1 Organising Framework for Occupations

The OFO is a skills-based coded classification system that captures all jobs in the form of occupations. It provides a standardised framework to describe a range of related occupations. The framework enables the identification, articulation, reporting and monitoring of skills demand and supply in the South African labour market. The OFO framework thus provides Human Resource Development (HRD) professionals in the Safety and Security sector, with common terminology to define the numerous occupations and determine the demand and supply of skills required for these jobs.

To align skills development with job requirements, it is necessary to have a thorough understanding of the nature, scope and responsibilities associated with a particular job. The framework provides categories and descriptors of tasks for each of the identified job categories. Therefore, the framework is meant to ensure that all employers in the Safety and Security sector apply a common terminology and classification system to define the variety of jobs in the sector and to express skills needs in relation to specific occupations. This entails the processes of developing job specifications, job profiles or job descriptions.

To sum up, the OFO can be regarded as a *coded occupational classification system*. It serves as a key instrument for identifying, reporting and monitoring skills demand and supply in the South African Safety and Security sector. The purpose of the OFO is to enable a coordinated sector-wide response to labour market trends based on a common language or classification of occupations.

This response can only be meaningful if various employment trends and statistics are reported and analysed in accordance with a coded classification system. Job titles alone cannot serve this purpose due to the variations in use by different employers in the sector. Employees with the same job title in different workplaces, for example, can in fact perform completely different tasks and responsibilities.

2.1.2 Organising Framework for Occupations Code

Organising Framework for Occupations (OFO) code is the unique code allocated to each individual occupation within the Organisation Framework of Occupations.

2.1.4 Classification Criteria

Classification criteria are used to identify the different OFO groups (i.e. major, sub-major, minor and unit) and refers to the two dimensions of skill namely, *skill level* and *skill specialisation*.

2.1.5 Classification Units

Classification units refer to the jobs across different employers in the Safety and Security sector and are reflected as occupations on the OFO.

2.6 Classification Variables

Classification variables are the kind of work done and therefore refer to the tasks and duties of a job or occupation.

2.1.7 Competencies

Competencies are a collection of connected abilities, commitments, skills and knowledge that allow an employee to execute a job effectively.

2.1.8 Job

Job refers to a set of tasks and duties carried out or meant to be carried out, by an employee for a particular employer. It therefore refers to the work performed.

2.1.9 Occupation

An occupation is a set of jobs whose main tasks and duties are characterised by a high degree of similarity (skill specialisation).

2.1.10 Mapping

Mapping refers to the process used to ensure the accurate articulation of the positions on the municipal structure to the occupations of the OFO Framework.

2.1.11 On-the-job-training

On-the-job-training refers to employee training at the place of work while doing the job. An experienced employee usually serves as an instructor using hands-on training often supported by formal classroom training.

2.1.12 Occupational Learning System

The Occupational Learning System recommends a method to skills development that emphasise job focused and occupationally directed learning. Its development and implementation are the responsibility of the Quality Council for Trades and Occupations (QCTO) and is guided by the OFO and enabled through the OQF.

2.1.13 Qualification

A qualification is a formal recognition for the attainment of the required number and range of credits at specific levels of the National Qualification Framework (NQF) as may be determined by relevant bodies.

2.1.14 Occupational Qualifications Framework

The Occupational Qualifications Framework (OQF) provides guidelines for the development of occupationally directed curricula that meet the job-related skills requirements for occupations in the OFO. The OQF defines three curriculum components for occupationally directed qualifications, namely:

- A knowledge component (what one needs to know to do the job effectively;
- A practical component (translating the knowledge into work practices); and
- A work experience component (an integration of knowing and doing in an authentic workplace).

These three curriculum components are developed relative to the occupation descriptors and tasks as defined in the OFO.

2.1.15 Skill

A skill can be defined as the ability to carry out duties and tasks of a specific job. Two dimensions of skill are used to arrange occupations into groups, namely skill level and skill specialisation. Skill level is a function of the complexity and range of tasks and duties to be performed in a job and is measured operationally by considering the following:

- Nature of the work performed: The nature of the work refers to the complexity and range of the work in an occupation in relation to the characteristic tasks and duties identified;
- Level of formal education: Level of education required for competent performance of the tasks and duties of the job; and
- Amount of on-the-job training: Experience (previous or in-service training) in a related occupation required for competent performance of the tasks and duties.

2.1.15 Skill Level

Skill level refers to a function of the complexity and range of tasks and duties to be performed in an occupation.

2.1.16 Skill Specialisation

Skills specialisation can be described as the process of focusing one's occupational concentration on a specific area of expertise.

2.1.17 Technicians and Trades

Technicians refers to different things based on context. In common use, it could refer to an expert in the application of a science or an expert on equipment and its maintenance. It is worth mentioning that "Technicians" and "Artisans" are two different groups of occupations. Although they are interrelated and often referred to as being synonymous in job title naming conventions, it is important to understand the use of these two occupations for the purposes of the OFO codes.

TIP 1: Mapping on the OFO - Technicians v/s Artisans

Often the word "Technician" is used in a job title to refer to someone who is responsible for repairs or activities of a technical nature, for example "**Street Light Technician**". However, this **does not mean that they are a Technician** on the OFO (**Major Group 3**).

For example:

A Street Light Technician is most likely an Electrician, who is an Artisan (Major Group 6).

TIP 2: Mapping on the OFO: Technicians v/s Engineers

Irrespective of the designation provided by an employer in the Safety and Security sector to a specific position, it is necessary to determine the duties and responsibilities of a position before it can be classified as an "Engineer" or a "Technician". Although the qualification requirements are important when distinguishing between technicians and artisans, it is not taken into consideration when considering the OFO code.

Technicians play a support role in professions such engineering. Experienced technicians typically have an intermediate understanding of theory and expert proficiency in certain techniques. Technicians are skilled workers that work with complex systems or perform highly technical mechanical or problem-solving tests.

The work performed by a technician also typically form part of a bigger production or service delivery process. They work in a variety of fields, and the designation of "technician" is usually included in their job title such as "Engineering Technician". Depending on the field, technicians may work independently or under the direction of a professional.

The National Artisan Moderation Body (NAMB) identifies occupations to be listed as “trades” by taking three aspects into consideration:

- a) The first aspect is that NAMB determines a definition;
- b) Secondly NAMB applies the definition to different criteria; and
- c) The third aspect is that NAMB also considers the route to achieve artisan status.

NAMB defines a trade as an occupation where a qualified person applies a high level of practical skills supported by and re-enforced by supporting and practical knowledge. The criteria identified indicates that trades:

- Manufacture, produce, service, install or maintain tangible goods, products or equipment in an engineering and/or technical work environment;
- Use tools and equipment to perform of his duties;
- Measure and do fault finding on process, manufacturing, production and/or technical machinery and equipment to apply corrective or repair actions;
- Apply and adhere to all relevant health, safety and environmental legislation; and
- Have accumulative learning periods covering knowledge, practical and workplace learning that is equivalent to three or more years.

The route to achieve artisan status includes features such as:

- A structured learning programme of *knowledge, practical and work experience*;
- A structured learning programme that must be successfully completed before a final assessment is attempted; and
- A final external summative assessment that must be passed and is known as a *trade test*.

2.1.18 Workplace Skills Plan

Workplace Skills Plan (WSP) is a blueprint developed annually by employers to describe the training and skills development strategy to enable their organisations to achieve their overall objectives and targets. The WSP's are also a key source of information about the Safety and Security sector because it should ideally provide information about the demographics, existing qualifications, and training priorities in the sector for the coming year.

2.2 THEORITICAL BACKGROUND OF THE OFO

2.2.1 The purpose of the OFO Codes in skills planning

In order to understand the OFO Codes in relation to skills planning, it is necessary to explore the benefits thereof. There are at least four major benefits that the OFO directly adds to skills planning. These benefits are highlighted below.

a) Provide information for Sector Skills Plans

It is a requirement for SETAs to use the OFO in the submission of their 5 Year Sector Skills Plans and Annual Updates. Critical and scarce skills are addressed in the SSPs and it is necessary to track skills scarcity on the basis of demand, i.e. how many people are needed to fill jobs and occupations for work and sector operational and productive performance is essential. Tracking how the scarcity is manifested in a sub-sector, sector and across sectors is essential to inform strategies to reduce the scarcity and attain equilibrium in the labour market between demand and supply.

b) Assist with the identification of critical and scarce skills

The Scarce and Critical Skills reporting format has enabled the identification and annual publication by the DHET of a national scarce and critical skills list. This List has also informed the identification of scarce and priority skills targets in the sector. Employers in the Safety and Security sector can use the information to broaden the indicators and drivers of scarce skills that they take into account when developing the annual WSPs. Research done at SETA level has identified a number of common drivers and strategies to address scarcity:

- *Drivers:* Equity considerations, movement out of the sector, retirement
- *Indicators:* High vacancy rates, high replacement rates
- *Strategies:* Bursaries, learnerships, apprenticeships, skills programmes, ISOE and VCET College engagement

c) Identification of common skills development needs

Information at occupational level assist SETAs to identify common skills development needs and interventions.

d) Use of information by employers in the Safety and Security sector

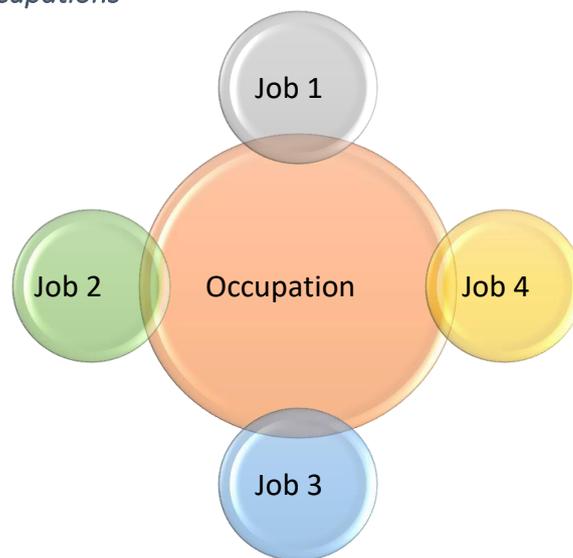
The OFO provides clear definitions and descriptions of jobs as well as the skills needed for an employee to perform optimally. This in turn informs the compilation of WSPs. The OFO further assists employers in the Safety and Security sector to communicate with each other in a common language during the rolling out of WSPs.

2.2.2 The relationship between Jobs and Occupations

A job can be defined as a set of tasks and duties to be carried out by an employee while an occupation can be identified as a set of jobs whose main task and duties are characterised by a high degree of similarity (skill specialisation). The occupations in the OFO represent a category that encompasses a number of jobs, for example, the occupation “General Accountant” also covers the specialisation “Debtors Manager”. An occupation descriptor always either indicates the unique service the occupation renders or the unique product the occupation produces in executing some or all of the related tasks in a specific context.

NB: Jobs are clustered into occupations based on the similarity of *what they do (tasks and duties)*

Figure 2.3: Jobs vs. Occupations



2.2.3 Discourse on what constitutes an occupation

The international as well as local discourse on what constitutes an occupation has been ongoing. The International Labour Organisation (ILO) consolidated the various views and approaches and compiled the International Standard Classification of Occupations (ISCO). Statistics South Africa (Stats SA) adapted this classification system for South Africa which resulted in the South African Standard Classification of Occupations (SASCO).

The SASCO was used for the purpose of conducting the national census data and to track the changes in the occupational profile of South Africa’s workforce. During 2004, **the Department of Labour (DoL)** attempted to link skills demand and supply in the labour market, by using “occupations” as the common denominator for analysis. The SASCO proved a to be a powerful information tool, but it did not provide the detail that was required for effective skills development planning and intervention endeavours.

2.2.3.1 The Australian Bureau of Statistics (ABS) and Statistics New Zealand (SNZ)

An investigation regarding international development was initiated to find a more representative framework at the same time, the Australian Bureau of Statistics (ABS) and Statistics New Zealand (SNZ), initiated a similar comprehensive consultative process. These investigations and consultative processes culminated in 2005 in the Australian and New Zealand Standard Classification of Occupations (ANZSCO). ANZSCO 2005 reflected the occupational environment more accurately and included occupational descriptors. The OFO code was compiled by extending the ANZCO with the incorporation of additional occupations and occupational categories identified through research and consultation.

2.2.3.2 The South African experience in mapping jobs to occupations

The South African experience in mapping jobs to occupations could be traced as far back as 2005. It was during the said period when the then Department of Labour (DoL) adopted the use of the OFO as a tool for identifying, reporting and monitoring scarce and critical skills, and maintained it through an annual updating process. During 2009, the responsibility for the OFO was transferred to the Department of Higher Education and Training (DHET).

2.2.4 OFO Codes in Relation to Occupational Qualification Development in South Africa

After the 2007 review of the NQF, the Occupational Learning System was proposed as an occupationally directed approach to skills development. Certificates and qualifications are developed relative to the occupational groups contained in the OFO. The development and assessment of qualifications are directed by the Occupational Qualifications Framework (OQF), which outlines detailed curriculum requirements for occupationally directed learning.

The intention of the occupationally directed learning approach was to move away from the generic nature of learning fields, towards particular skills development requirements for certain occupations. The Occupational Learning System (OLS) is the responsibility of the Quality Council for Trade and Occupations (QCTO).

The successful application of the OLS requires a clear framework of occupations. In this regard, the OFO is essential to categorise jobs in all economic and service sectors with clear associated descriptors and tasks within each occupational grouping.

The QCTO is responsible for the development and quality assurance of fit-for-purpose occupational qualifications and unit standards as required by the labour market for work and employment purposes.

The purpose of occupational qualifications is the improvement of occupation-specific knowledge, skills and competencies that could contribute to increased productivity and employment rates. It is also important to acknowledge that not all occupations have a direct link to a qualification.

In developing the system for monitoring skills imbalances in the Australian labour market, the National Institute for Labour Studies (2013) used the term “high use” to refer to occupations where there is a high proportion of incumbents in the occupation that have a certain qualification and/or a high proportion of graduates from a certain qualification that enter a given occupation.

It stands to reason that some occupations will have a “higher use” than others with many occupations having a nebulous learning/career pathway. Based on this factor, there is often confusion when course developers attempt to “force” a qualification to match an OFO code. While there is value in aligning qualifications to occupations, it is not a one-to-one relationship and should therefore be given a fair amount of latitude.

Occupations in the OFO are defined by what employees actually *do* and not by their *qualifications*. Employers in the Safety and Security sector should therefore not attempt to match an incumbent’s qualification to the OFO, but rather align their responsibilities (i.e. job-related tasks and activities) to it.

The next section is indented to support employers in the Safety and Security Sector to map jobs to occupations accurately.

3. RESEARCH METHODOLOGY

This section outlines; the data collection methods utilised to execute the study, limitations of the study and recommendations for further research.

3.1 DATA COLLECTION METHODS

Combination of desktop study and primary data collection by means of workshops and meetings with a sample of employers in the Safety and Security sector.

3.2 LIMITATIONS OF THE STUDY

While it is acknowledged that the study is a worthwhile attempt to help employers in the Safety and Security sector to map jobs to occupations accurately, the study utilised a limited sample of respondents, and hence the output is not as comprehensive as initially intended.

3.3 RECOMMENDATIONS ON FURTHER RESEARCH

Noting that the guidelines are not as comprehensive as initially intended, it is recommended that an intensive study incorporating major employers across all the sub-sectors (chambers) of SASSETA should be conducted.

4. GUIDELINES FOR MAPPING JOBS TO OCCUPATIONS IN THE SAFETY AND SECURITY SECTOR

This section provide guidelines for mapping jobs to occupations in Safety and Security by focusing on the structure of the organising framework for occupations; clustering tasks and knowledge; identifying skill levels related to OFO groups; and comparing the skill level of occupational groups, the NQF and the levels referred to in the NSDS

4.1 THE STRUCTURE OF THE ORGANISING FRAMEWORK FOR OCCUPATIONS

The OFO has been constructed from the bottom up, first by analysing all jobs according to similarities in tasks and skills, and then categorising similar jobs into occupational groupings. Lastly, it is constructed by classifying occupations into these occupational groupings at increasing levels of generality.

The OFO is structured according to *five orders of classification* where each subsequent order of classification is derived from the former. Each *major* group has a number of sub-major groups. Each sub-major group - in turn - has a number of *minor* groups and each minor group has a number of unit groups.

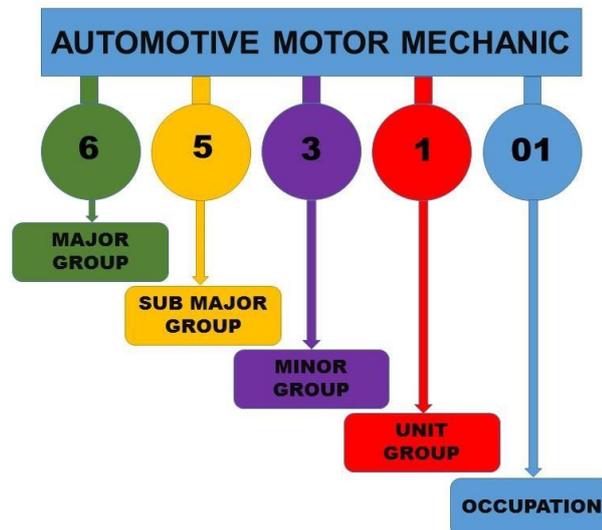
Each unit group has a number of occupations related to it, wherein occupation-specific titles, alternative titles and specialist titles are found. *The 5 orders of classification* are illustrated as building blocks in *Figure 4.1* with each order being represented by a digit (or 2 in the code).

Figure 4.1: Hierarchy of OFO Codes



The practical application of the structure of the OFO can best be described by analysing the actual code given to each occupation. Each code consists of 6 digits as shown in Figure 4.2 where the occupation of Automotive Motor Mechanic is used as an example.

Figure 4.2: Structure of the OFO Codes Using an Example



4.1.1 Major Groups

The first digit of the OFO code reflects the major group of the occupation. Major groups are the broadest level of the classification and are distinguished from each other on the basis of skill level and the broadest concept of skill specialisation. Major groups carry a broad description of the nature of the jobs related to the specific major group as well as an overview of the related tasks. The descriptors for each of the **8 Major Groups** are shown in **Table 2.1**.

NB: Understanding which Major Group a job belongs in is an important check to ensure you have classified your job correctly

Table 2.1: Major Group Title Descriptors

OFO CODE	MAJOR GROUP TITLE	MAJOR GROUP TITLE DESCRIPTORS
1	Managers	Managers plan, direct, coordinate and evaluate the overall activities of enterprises, government and other organizations, or of organizational units within them, and formulate and review their policies, laws, rules and regulations.
2	Professionals	Professionals increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these activities.

OFO CODE	MAJOR GROUP TITLE	MAJOR GROUP TITLE DESCRIPTORS
3	Technicians and Associate Professionals	Technicians and associate professionals perform mostly technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations.
4	Clerical Support Workers	Clerical support workers record, organise, store, compute and retrieve information related, and perform a number of clerical duties in connection with money-handling operations, travel arrangements, requests for information, and appointments.
5	Service and Sales Workers	Service and sales workers provide personal and protective services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets.
6	Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers	Skilled agricultural, forestry, fishery craft and related trades workers apply specific knowledge and skills to construct and maintain buildings, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods and grow and harvest field or tree and shrub crops, breed, tend or hunt animals, produce a variety of animal husbandry products, cultivate, conserve and exploit forests and breed or catch fish.
7	Plant and Machine Operators and Assemblers	Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures. The work mainly calls for experience with and an understanding of industrial and agricultural machinery and equipment as well as an ability to cope with machine-paced operations and to adapt to technological innovations.
8	Elementary Occupations	Elementary occupations involve the performance of simple and routine tasks which may require the use of hand-held tools and considerable physical effort.

Source: www.awsassets.wwf.org.za

Occupational groups are arranged within each major group into Sub-Major Groups, Minor Groups and Unit groups. This division into groups are done on the basis of characteristics of skills specialisation. In *Figure 4.2*, the first digit is 6 which indicates that the occupation forms part of the major group of Skilled Agricultural, Forestry, Fishery, Craft and Related Trade Workers.

4.1.2 Sub-Major Groups

The second digit in the OFO code reflects the sub-major group of the occupation. The sub-major groups are sub-divisions of major groups and are distinguished from each other on the basis of broadly stated skill specialisation.

There are *39 sub-major groups*, each containing a descriptor and tasks. In *Figure 4.2*, the second digit is 5 which indicates that the occupation forms part of the sub-major group of Metal, Machinery and Related Trades Workers.

4.1.3 Minor Groups

The third digit in the OFO code reflects the minor group of the occupation. Minor groups are subdivisions of the sub-major groups and are distinguished from each other on the basis of less broadly stated skill specialisation.

There are *125 minor groups*, each containing a descriptor and tasks. In *Figure 4.2*, the third digit is 3 which indicates that the occupation forms part of the minor group of Machinery Mechanics and Repairers.

4.1.4 Unit Groups

The fourth digit in the OFO codes reflects the *unit group* of the occupation. Unit groups are subdivisions of minor groups and are distinguished from each other on the basis of a finer degree of skill specialisation.

There are *440 unit groups*, each containing a descriptor and tasks. In *Figure 4.2*, the fourth digit is 1, which indicates that the occupation forms part of the unit group of Motor Vehicle Mechanics and Repairers.

1.4.5 Occupations

The last two (i.e. fifth and sixth) digits in the OFO code reflects the *occupation*. Occupations are not part of the actual structure but has been listed as sub-divisions of the unit groups through a consultation process.

Occupations are distinguished on the basis of uniqueness of the output, usually due to a specific application of skills and knowledge in a specific context. Occupations relates to a cluster of jobs which involve the performance of a common set of tasks. There are 1 440 occupations, each containing a descriptor. In *Figure 4.2*, the last two digits are 01 which indicates that the occupation is that of an Automotive Motor Mechanic.

4.2 CLUSTERING TASKS AND KNOWLEDGE

The starting point for developing and understanding the Organising Framework for Occupations is the identification of similar outputs. These “outputs” are embedded in “job descriptions” and not in job titles.

TIP: Identifying an Occupation on the OFO

An individual occupation on the OFO is identified by finding its appropriate code through an examination of:

- Its descriptor;
- Where it appears in the OFO (e.g. unit group, minor, sub-major and major groups);
- Tasks which are described at unit group level;
- Similarity in terms of knowledge base; and
- Alternate titles and specialization(s) linked to it.

NB: Experience has shown that the main reason for mapping jobs to incorrect occupations or not finding a matching occupation, is that not all job titles are reflected on the framework as an occupation, alternative title or specialisation. It is therefore important to interpret the appropriate match in terms of similarity of the criteria mentioned above.

4.3 SKILL LEVELS RELATED TO OFO GROUPS

The OFO, as a skills-based classification system, classifies occupations based on a combination of skill levels and skills specialisation which makes it easy to locate the specific occupation within the framework. Skills have been defined as the ability to carry out duties and tasks of a specific job and skill level was described as a function of the complexity and range of tasks and duties to be performed in a job.

The two main criteria used to classify occupations are skills level and skills specialisation where the concept of a skill is used in the context of competency rather than a description of a task or function.

The skill level of a job is associated with the competent performance of tasks related to the job and the skill level is an attribute of the job or occupations and not of the individual. The skill level of a job can be measured by what is required to perform a set of tasks competently as required for the specific job. This include:

- *Theory*: level of formal education or training;
- *Work experience*: amount of previous experience in a related occupation; and
- *Practical application*: amount of on-the-job training required.

NB: The three dimensions make it possible to compare the skill level of an occupation with the required educational level on the NQF.

Skill level was applied in the determination of the OFO structure at the highest level only and the level of formal education defined in terms of the ISCED-97 is one of the measures used. In the cases where formal education and training requirements were used a part of the measurement of the skill level of an occupation, these requirements were defined in terms of the International Standard Classification of Education (ISCED). The mapping between the ISCO skill levels and the ISCED 97 is provided in *Table 2.2*.

Table 2.2: Mapping between ISCO skill levels and ISCED 97

ISCO-08 Skill Level	ISCED-97 groups
4	6 - Second stage of tertiary education (leading to an advanced research qualification) 5a - First stage of tertiary education, 1st degree (medium duration)
3	5b - First stage of tertiary education (short or medium duration)
2	4 - Post-secondary, non-tertiary education 3 - Upper secondary level of education 2 - Lower secondary level of education
1	1 - Primary level of education

Source: www.ilo.org

4.3.1 Skill Level 1

Occupations at Skill Level 1 typically require the performance of simple and routine physical or manual tasks. They may require the use of hand-held tools, such as shovels, or of simple electrical equipment, such as vacuum cleaners. Skill level 1 generally involve tasks such as cleaning, digging, lifting and carrying materials by hand, sorting, storing or assembling goods by hand. These tasks could be in the context of mechanised operations such as operating non-motorised vehicles.

Many occupations at Skill Level 1 may require physical strength and/or endurance. For some job's basic skills in literacy and numeracy may be required. If required, these skills would not be a major part of the job. For competent performance in some occupations at Skill Level 1, completion of primary education or the first stage of basic education (ISCED Level 1) may be essential. A short period of on-the-job training may be required for some jobs.

4.3.2 Skill Level 2

Occupations at Skill Level 2 typically involve the performance of tasks such as operating machinery and electronic equipment; driving vehicles; maintenance and repair of electrical and mechanical equipment; and manipulation, ordering and storage of information. Many occupations at this skill level require relatively advanced literacy and numeracy skills and good interpersonal communication skills.

For almost all occupations the ability to read information such as safety instructions, to make written records of work completed, and to accurately perform simple arithmetical calculations are essential. In some occupations these skills are required for a major part of the work. Many occupations at this skill level require a high level of manual dexterity.

The knowledge and skills required for competent performance in all occupations at Skill Level 2 are generally obtained through completion of the first stage of secondary education (ISCED Level 2). Some occupations require the completion of the second stage of secondary education (ISCED Level 3), which may include a significant component of specialised vocational education and on-the-job training. Some occupations require completion of vocation specific education undertaken after completion of secondary education (ISCED Level 4). In some cases, experience and on the job training may substitute for the formal education.

4.3.3 Skill Level 3

Occupations at Skill Level 3 typically involve the performance of complex technical and practical tasks which require an extensive body of factual, technical and procedural knowledge in a specialised field. Occupations at this skill level generally require a high level of literacy and numeracy and well-developed interpersonal communication skills.

These skills may include the ability to understand complex written material, prepare factual reports, and to communicate with people who are distressed. The knowledge and skills required at Skill Level 3 are usually obtained as the result of study at a higher educational institution following completion of secondary education for a period of 1 – 3 years (ISCED

Level 5b). In some cases, extensive relevant work experience and prolonged on-the-job training may substitute formal education.

4.3.4 Skill Level 4

Occupations at Skill Level 4 typically involve the performance of tasks which require complex problem-solving and decision-making abilities based on an extensive body of theoretical and factual knowledge in a specialised field. The tasks performed typically include analysis and research to extend the body of human knowledge in a particular field, diagnosis and treatment of disease, imparting knowledge to others, design of structures or machinery and of processes for construction and production.

Occupations at this skill level generally require extended levels of literacy and numeracy, sometimes at a very high level, and excellent interpersonal communication skills. These skills generally include the ability to understand complex written material and communicate complex ideas in media such as books, reports and oral presentations.

The knowledge and skills required at Skill Level 4 are usually obtained as the result of study at a higher educational institution for a period of 3 – 6 years leading to the award of a first degree or higher qualification (ISCED Level 5a or higher). In some cases, experience and on the job training may substitute formal education. In many cases appropriate formal qualifications are an essential requirement for entry into the occupation.

The OFO Major Groups and the four skills levels are mapped in Table 4.3 indicating which skill level is applicable to the different major groups.

Table 4.3: Mapping of the skills levels to the OFO major groups

MAJOR GROUPS	SKILLS LEVEL
1 – Managers, senior officials and legislators	3 + 4
2 – Professionals	4
3 – Technicians and associate professionals	3
4 - Clerks 5 – Service and sales workers 6 – Skilled agricultural, craft and related trade workers 7 – Plant & machine operators, and assemblers	2
8 – Elementary occupations	1
0 – Military occupations	1 - 4

Source: www.ilo.org

4.4 COMPARISON BETWEEN THE SKILL LEVEL OF OCCUPATIONAL GROUPS, THE NQF AND THE LEVELS REFERRED TO IN THE NSDS

A comparison between the skill level of occupational groups, the National Qualifications Framework as well as the levels referred to in the National Skills Development Strategy, are provided in *Figure 4.3* below.

Figure 4.3: Synchronisation of the NSDS Levels, NQF Levels, Skills Levels and OFO Major Groups

NSDS	NQF LEVEL	OFO SKILL LEVEL	OFO MAJOR GROUPS			
HIGH	7-10	4	2 Professionals			1 Managers
	6	3	3 Technicians and Associate Professionals			
INTERMEDIATE	5	2	4 Clerical Support Workers	5 Service and Sales Workers	6 Skilled Agricultural, Forestry, Fishery, Craft & Related Trades Workers	7 Plant and Machine Operators and Assemblers
	4					
ENTRY	3	1	8 Elementary Occupations			
	2					
	1					

Source: NSDS, DHET

It is important to note the formal education and training requirements are only one component of the measurement of skill level and should be seen as indicative only. The most important determinant of skill level is the nature of the tasks performed in a particular occupation in relation to the characteristic tasks defined for each skill level. It is not necessary for individuals to hold qualifications at a particular level in order for their jobs to be classified at a particular ISCO skill level.

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